
# A STUDY FOR INTERACTIVE CUSTOMER SERVICE ON THE INTERNET IN THAILAND

By

Ms. Preeyanuch Chumpolkulvong

Submitted in Partial Fulfillment of the Requirements for
the Degree of Master of Science
in Information Technology
Assumption University

August, 2000

# A STUDY FOR INTERACTIVE CUSTOMER SERVICE ON THE INTERNET IN THAILAND

By

**Ms. Preeyanuch Chumpolkulvong**



**Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science In Information Technology Assumption University**

August,2000

# The Faculty of Science and Technology

## Thesis Approval

| | |
|---|---|
| Thesis Title | A study for interactive customer service on the Internet in Thailand |
| By | Ms. Preeyanuch Chumpolkulvong |
| Thesis Advisor | Dr. Wisanu Tuntawiroon |
| Academic Year | 2/1997 |

---

The Department of IT, the Faculty of Science and Technology of Assumption University had approved this final report of the **twelve** credit course, **IT7000 Master Thesis**, submitted in partial fulfillment of the requirements for the degree of Master of Science in Information Technology.

Approval Committee:

| | |
|---|---|
| (Dr. Wisanu Tuntawiroon)<br>Advisor | (Prof.Dr. Chidchanok Lursinsap)<br>MUA Representative |
| (Dr. Prong Kongsubto)<br>Committee | (Dr. Thotsapon Sortrakul)<br>Committee |

---

Faculty Approval:

| | |
|---|---|
| (Dr. Thotsapon Sortrakul)<br>Director | (Asst.Prof.Dr. Pratit Santiprabhob)<br>Dean |

August, 2000

# ACKKNOWLEDGEMENTS

I would like to acknowledge the contributions made by a number of people who helped me in conducting this thesis. First, I would like to express my deepest gratitude to my advisor, Dr.Wisanu Tuntawiroon, who devoted his valuable time to give precious guidance, constant encouragement and tried to understand what I wanted throughout my thesis study. His immense patience and availability for comments even amidst of his heavy pressure of work deserve grateful appreciation. His dedication to work, invaluable advice and guidance throughout this study made its completion possible.

I wish to express my sincere thanks to those who helped my by providing data and giving me their valuable time to interview them and do questionnaires.

I also wish to acknowledge my indebtedness to my friends, classmates whose sincere cooperation and moral support extended to me to complete my studies at Assumption University, ABAC.

Finally is my parents, brothers and relatives who have nurtured and provided mental support throughout my life, without which it would have been impossible to carry out my studies at ABAC.

# ABSTRACT

To survive in the fierce competition era of business, response to rapid economic, technological and social changes, computer technology will play a more important role in the business. Companies have to focus on technological tools to increasing customer satisfaction and commitment. Hence, Customer service department plays a key role in keeping the customer aware of the organization's product and service offer.

This thesis aims at studying the customer service on the Internet by determining the factors in the service types important to customer expectation and customer satisfaction, with a view of incorporating the customer's satisfaction requirements as design guideline when developing and designing a more effective information technology.

This thesis intend to guide a decision making for Customer service on the Internet to aid in evaluating the appropriateness relative to customer service in businesses in Thailand. Use of this guideline will assist to select customer service types, which are appropriate to companies needs.

# TABLE OF CONTENTS

# LIST OF FIGURES

# LIST OF TABLES

# CHAPTER 1

# INTRODUCTION

## 1.1 Introduction

There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things.

This statement drives home some fundamental points that are important to the operating success of an organization in a new business environment, which is more global, open, competitive and dynamic within a more open and volatile geopolitical order. To succeed in this environment and organization needs to be more open networked and information based. This calls for new goals for information technology to be more open to both the users and the customers in an open, networked and interactive system.

And right now the World Wide Web coming, the Internet was going to change the way we communicate with clients and trading partners. Analysts predict, however, that in the coming years many companies will shift significant portions of their existing telephone customer support to the Web.

## 1.2 Background of the thesis

Currently, customer service has been developing till it becomes a self-profit center for many businesses. Most of businesses turn to customer service in order to increase business efficiency and productivity, which allows companies to react to customer's demands more accurately and confidently than what they had before. This is the major reason that makes customer services a major force in relationship enhancement between customers and sellers. There are many types of customer

services to be considered in each environment depending on the key factors and types of services.

More demanding customers are requiring higher levels of service, the increased importance of customer service (in part due to competitors seeing service as a competitive weapon to differentiate themselves); and the need to build closer and more enduring relationships with customers. Customer service revolution will also benefit from increased employee productivity, customer satisfaction, revenue opportunities and market competitiveness.

Presently, the number of Internet users in the Asian-Pacific, excluding Japan, is recorded at 13 million last year – a jumps of over 50% from 1997. This number is expected to increase to 17 million Internet users by the end of 1999 and it will reach 57 million by 2003. (Based on International Data Corporation (IDC) figures). [20] The trend of using the Internet is dramatically increasing. Hence, only businesses that can fulfill the customer service role will gain more advantages and business opportunities than the competitors. In order to position yourself as a market leader during the coming decade, business must provide best-in-class customer service solutions. Companies must keep investing in technology to improve their competitiveness. It also must look for opportunities to leverage the Internet in order to streamline its operations and make business more proactive.

## 1.3 Statement of Problem

Nowadays, customer service department is considered as one of top-rank departments in an organization. The customer service on Internet is gradually becoming important for business operators especially whose businesses basically rely on Internet.

As a result of my study and inquiry, we find that there are only a few options for customer services on Internet in Thailand i.e. E-mail and FAQ. These existing services are not sufficient to support the skyrocket demand in the country. Furthermore, these services cannot create better image and uniqueness for the organizations. In other words, they don't bring any new information technologies to the market including end users.

In other countries, there are wide varieties of customer service on Internet such as callback, faxback, textchat, VoIP, etc. The situation is much different in Thailand. The organizations have not yet awared of its advantages and importance, and lack knowledge of these technologies. People understand that telephone call, which is already adequate for the demand, is the only efficient customer service device. Another problem is they cannot define the technologies that best suit their needs because they rely too much on the outcome from other countries. In fact, the non-performing technologies in other countries do not mean they are ill performed in Thailand, and vice versa, depending on the different environments.

Hence, this study can make a better understanding in customer services on Internet and ease the decision making on choices of technology to Thai users. Furthermore, this is also a device for cost and time saving for organization in the initial stage of their development to professional customer services.

## 1.4 Objectives

This study evaluates the extent to which customer service types is used and the benefits it gives to business, this study attempts:

1. To determine the basic customer service on the Internet types that are important to the business in Thailand
2. To purpose the varies customer service on the Internet types that are important to customer satisfaction
3. To develop critical factors for guiding customer service on the Internet
4. To develop a guideline for business to choose type of customer service on the Internet

## 1.5 Scope of thesis

For this study on the customer service on the Internet types expected by customers and their importance to customer satisfaction, as well as the critical factor for determine the customer service types, the thesis is delimited to:

1. The customer service types: the major services to be studied within Internet are:
   1.1 E-mail
   1.2 Frequently Asked Question (FAQ)
   1.3 Callback
   1.4 Faxback
   1.5 Textchat
   1.6 Voice Over Internet Protocol (VoIP)
2. The critical factors in the determining customer services types should be considered in
   2.1 Technical Factor
   - Ease of implementation and Maintenance
     That is included in the hardware, software, multimedia, and implementation

2.2 Economical Factor

- Setup cost
- Usage cost

2.3 Support Factor

- Service areas
- Number of customer

2.4 Beneficial Factor

2.4.1 Customer satisfaction

- Reliability
- Time
- Information updating
- Comfortable

2.4.2 Business satisfaction

- Difference from competitors
- Increase in channel of distributions

3. The study is based on Thai's behavior and Thai's paper
4. The sample population that has 150 sets and continuous transactions with any specific sample in the one who often gets the information by the Internet and well-known in the Internet
5. The method for decision making to select the customer service types

5.1 Analyze Needs & Consideration for each types of customer service on the Internet

5.2 Establish Critical Factors for customer service on the Internet selection

5.3 Guideline for each customer service on the Internet to develop them in Thailand

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Introduction

The Internet has garnered a great deal of hype and media attention in the past two years. Some of it has been alarmist and some of it has been utopian. But the descriptions of the Internet as a whole new way to communication that will change the way to do business have been right on the money.

It would be a crime to ignore a new way to communicate with the customers. Even so, most companies are building World Wide Web sites in order to communicate to their customers instead of with them. The majority of Web sites are created to provide an electronic brochure, essentially the Internet version of a sales pitch, a sort of online television ad. People can get the specific information they're interested in, but here is a little thought given two-way communication.[15]

The Internet offers a whole new way to establish rapport with customers. Answering customer questions, solving their problems, and selling them additional products can now be computerized.

In today's companies, the most channels for customer service is the phone and also have only a few options for customer service on the Internet i.e. E-mail and FAQ. And while customer service on the Internet are necessary and will continue to be an expected channel of communication, a great number of those requests can be better handled with other customer service types. Customer service on the Internet not only increases efficiency and save money, it's often a better way to serve your customers.

## 2.2 Definition of Customer Service

- Customer Service may be defined as responding to the needs and problems of the customer. In situations where products are similar, the level of customer service provided by a company and its sales force may be the decisive issue. In addition, customer service is likely to be the key in developing long-term customer relationships. [17]
- Customer Service is being available to all answer all questions is an admirable philosophy for any business, and objective entrepreneurs should strive to achieve. [10]
- Customer Service is about being there when the customer wants something, needs something, or just wants to gripe about something. Being there means staffing the phones, answering the mail, and populating the front counter. Being there can also mean an electronic presence, a computer that can answer questions, take requests, schedule shipments and provide sophisticated solutions to customer problems twenty-four hours a day. [18]

Customer service continues to require an ever-increasing investment. As products become more complex and performance expectations increase, industry must allocate more resources to provide customer satisfaction. Equipment must operate with a high degree of reliability, and hard and soft technologies must be blended to meet the customer's requirements. Customer understanding of the product is probably the single most important factor in maintaining a satisfactory relationship, and this implies that the customer must understand the limitations of the product. Educating the customer requires using of technology; whether the education is delivered through some technical means or by word of mouth, hard technology is involved. Soft technology relates to the process by which the

customer is educated and how the organization can determine whether the learning experience was sufficient to allow the customer to take advantage of the product benefits. Very few experiences in life are more frustrating than receiving a piece of equipment and not being able to make use of it because of a minor flaw in the system.[7]

There are other processed in customer service that require clear delineation.

1. Managing the buyer/seller relationship after delivery
2. Keeping the customer informed if, as, and when problems occur
3. Working with the customer to optimize benefits to the business
4. Providing feedback on performance and customer attitude after installation
5. Observing operations to determine future product needs
6. Observing customer needs and desires

## 2.3 Customer Service on the Internet

On the other hand, we can call the customer service on the Internet to

- Web-based customer service that gives limited access to web users outside the company via the Internet. It can deliver information products to customer on demand and provide powerful visually-driven interactive customer assistance. [5]
- Web-based customer service that companies provide an end-to-end solution for online customer service. [14] Web center that gives your customer a choice of how they would most prefer to interact with the company. Customer can choose self-help; FAQ, automated e-mail response, or live, web-based interaction with a company representative. If none of these channels prove satisfactory, customers can schedule a time for a phone callback. When the agent calls, the customer and agent can share in a browser sync session while talking together on the phone. If all else fails, the customer can still use the traditional call center, and a record of their Web

session can be delivered to the agent along with the incoming call. These options allow customers to select the communication channel that best works for them and encourages reliance on less expensive web-based technologies.

## 2.4 Benefits of Customer Service on the Internet

The Internet and commercial online services can help business build relationships with customers by creating online support center that answer people's question. Companies that respond to customer's queries quickly can build loyalty that lasts for a lifetime By creating a customer service, the companies can benefit from: [12]

- Increased loyalty from customers: Consumers who are get technical support quickly will remain happy and might see no reason to switch products.
- Reduced returns from customers who experience problems: Consumers who can't get support quickly can become frustrated with your product and return it for a refund.
- Reduced bad word of mouth: studies have shown that happy customers tell three friends, while unhappy customers tell eleven! One way to reduce bad word of mouth is to have good customer support that helps dissatisfied customers before they unleash a torrent of ill will.
- Faster response to customer questions: Some companies with small support staffs are overburdened and can't respond to customer's questions in a timely manner. By using frequently asked questions or faxback, they could answer people's questions faster. With the use of libraries of stored text files, customers might be able to find what they need without speaking to a support rep. Or using of voice over Internet protocol. Customers can be able to talk with the support reps at once after companies closed.

- Lower support costs: Customers can find information that addresses frequently asked questions. Service reps won't have to return expensive phone calls. Toll-free phone numbers won't be used as much. Question can be answered in a batch, thus making more efficient use of service reps. Questions can be delegated effectively to people who have the right degree of skill to answer.
- Market research: Customer complaints about certain features might lead to development of new products or features, thus aiding research and development.
- Profit Center: If support centers generates a significant amount of traffic, company might actually make money from the arrangement contracted with the commercial online service.

## 2.5 Practical Considerations for creating customer service on the Internet

There are several questions that online marketers should address in creating a plan to create an online customer service:

- Online services: Which online service should be used? Many hardware and software companies have customer service centers on each major online service because their customers use only one service. Plan to do the same. This might add to your costs, but you will guarantee a wider area of coverage for your customers and create more opportunities for positive interactions between the consumer and the company. Associations and companies that are not in the computer business might limit their online participation to one major system. This choice can be used which online service offers them the best terms, or which service is currently used by most of its members.
- Manpower: The support center will need to be staffed by competent professionals who not only know the ins and out of the product but can build rapport with people

online. This is important as people who call support centers are frequently angry and frustrated because they can not get the product to work properly. Consequently, their messages might be caustic. Support staffers must be able to deal with the situation by diffusing the anger, solving the problem and building bridges to positive communications with the consumer. The company can not afford to have one angry customer tell his experiences to thousands of people online.

- Content: Online libraries can store a grate deal of technical information. Having consumers find this information by themselves can help the company save a grate deal of time and expense. This can be accomplished by carefully organizing the information by the appropriate classifications. For example, a software company can have these file folders: product, installation, usage, printing, upgrade, common errors, error codes explained, how do I accomplish task x? and many others. Material can be cross-referenced. The material should be hyperlinked so that consumer can jump from one area to another with ease.
- Cost: The budget for an online support center will vary by company. While planning the budget, don't think of it as a drain on expenses. Instead, think of it as a way to save money by unburdening other forms of support-telephone, mail and fax. Also, think of the benefit in positive customer relations. Finally, create ways to turn the support center into a profit center by encouraging messages that create sales opportunities for new product versions, complementary products and long-term support and training contracts for large companies.

## 2.6 Types of Customer Services on the Internet

There are many Information Technology types, which used for supporting the customer service. In this study, I study in the 6 types as follow:

### 2.6.1 Frequently asked questions (FAQ)

- FAQ should be very straightforward because customer service people deal in frequently asked questions for a living. The companies know which questions are asked most often and also know the answers. FAQ can help the customer get a better feel for faster answers. FAQ must be easy to find on the site and easy to read like all of the web documents. FAQ must be easy to navigate which customers don't spend their time looking. [18]
- FAQ is the most helpful resource on a Web site. The most common questions and their answers are collected and made available for electronic retrieval. At any time of the day or night, from anywhere around the world, customers and would-be customers can find solutions to the problems they are facing at that very moment. [9]

*Advantage*

- Easy to implement the system to the existing system
- Easy for customer to use the service
- Requires no additional system to support the service
- Fast accessibility to the service
- Can serve some common questions from customer with out additional costs.

*Disadvantage*

- Requires periodic update the service
- Non interaction to customer
- Inflexible service to customer
- Low customer satisfaction
- Ineffective solution to customer service

### 2.6.2 E-mail

- Electronic mail allows a computer user to type a message and sends it to another computer. The message arrives in seconds, and the recipient can edit and send it back. An e-mail message can be sent to multiple individuals. It can be electronically stored or printed. It takes the art of written communications and accelerates it to the speed of light. [19]
- E-mail is a key communications application of the Information Age. It enables people or mail-enabled applications to exchange revisable multimedia information, workflow, and electronic data interchange transactions. This exchange can occur with anyone, anytime, anywhere with speed, ease-of-use, intelligence, and security and at a low cost. [3]
- E-mail is the most universal application on the Internet and commercial online systems. It is the first online tool people use and, for many, the only tool they will ever use. [12]
- Electronic mail allows multiple-access communication delivered exclusively on a computer network. With E-mail, a person can send letters to anyone connected to the system. When a message is sent, it enters an individual's "mail-box" The receiver, when connected to the network, is notified that he has mail. The receiver can then read the mail, send a reply, edit the mail, or forward the letter to another person. [21]

*Advantage*

- The ability to send and receive messages very quickly.
- The ability to conduct paperless communication.
- The ability to communicate to millions of people, worldwide.
- The ability to work with others on the same task.

- The ability to connect to the network from any location that has a telephone line (using a portable computer and a modem). Recently, it became possible to connect to the networks with wireless technologies.
- The ability to send messages to many users in a very short time.
- The ability to trace any correspondence (who sent, to whom, when, and soon)
- The ability to rapidly access information stored in databases from many locations.

*Disadvantage*

- The inability to conduct fact-to-face communication.
- Most E-mails are not very user friendly.
- It is necessary to know how to type.
- It may involve problems of confidentiality and privacy.

### 3.3 Callback

It is the kind of services that look like the voice messaging but it's different in the case of the customers want companies to call back them for more information's or the customer haven't had a multimedia applications to talk with the support reps while online over the internet.

When potential customers visit the Web site and want to talk to a live person, they click on the Instant Call button. A form personalized with the company graphic appears, and customer is prompted to enter their name, email address and the phone number at which they would like to be called back. The customer then clicks the "Call Me Now" button (customers also have the option to request a call later--from one

minute to 24 hours--should they be unable to receive calls while connected to the Internet).[23]

- When the person browsing your site decides to make a call, he/she clicks on a Call me button. This takes the browser to a call request form, where the user is prompted for a telephone number. When the user submits this form, your web site posts a request to the WebCallback web site containing your company's account identification and the phone number of the browsing party.[9]

*Advantage*

- Increase impulse buying
- Helps answer questions about products or services
- Reduce concern about credit card use
- Gives customers " the personal touch"
- Helps customers navigate web sites easily
- Directs customer calls to specific people or departments
- Provides access to customers worldwide

*Disadvantage*

- Increase expenditure in the case of hiring the operator for supporting customer online
- Requires additional system to handle this service which means increasing of expenditure

### 2.6.4 Faxback

It is the interactive telecommunications service that would allow the customers to interrogate (or at the least, simply request) any of several thousand documents that the

companies had in the information base. The customers could receive the information on their fax machines anywhere in the world, at any time. In essence, the millions of fax machines in the world would be transformed into remote printers.

- Allows a surfer to fax a web page from any browser. Allows companies to provide Fax on demand service from the web or telephone, Pages to be faxed can be loaded easily by non-programmers Web site owners can provide free fax on demand of any page on their domain by adding a link to Autofaxback with the sentence " Fax our pages for free" the surfer is required to copy and paste the URL of the page and enter the destination fax number. [22]
- Visitors simply select documents from your web site that they wish to receive via fax. The Web page Fax collects information like fax number, contact name and requested documents and submits the data to the fax server by immediate delivery. [6]

*Advantage*

- Increase customer service with low additional costs
- Reduce long distance call costs since fax is being used
- No additional expenditure required for the hiring of operator
- Information can be prepared before deliver to customer so the correction can be checked first
- Increase customer service channel

*Disadvantage*

- One way communication can cause customer fear of no respond
- Time consuming process to prepare the document compare with call back

### 2.6.5 Text chat

- More recently, businesses have begun to embrace chat for use in customer service, virtual business meetings, and other applications. In the same year Web-based chat software hit its stride, and now many sites offer chat communities and exclusive site services or as enhancements to other content. [24]
- It is the services that Internet browser who do not have multimedia PCs and wish to remain connected to the Internet while communicating with a customer service representatives, now have the option to request an Internet Text Chat session. When using the Text Chat button, the text chat window will appear. Once the request has been popped to the representative's screen, the chat session is automatically initiated. [ ] Additional features would be helpful, like sharing files and viewing the same documents at the same time: something like an electronic whiteboard.
- Chatting can range from one-on-one conversation to a group conference. Depending on the E-mail software, the chatting format may differ. Users might each be given their own windows, where whatever they type appears immediately to all participants. Other chats read like a play script; once a person types a line, it appears on the screen preceded by his or her name. [8]

*Advantage*

- No more multimedia PCs required
- More suitable in the business that is using the technical word, referable data
- Better image for supporting interactive customer service
- Being completely accessible. Web-sites never close. People can communicate with an online operator 24 hours a day, 7 days a week
- Reduce number of incoming telephone calls to the office
- No workload because the companies can immediately connected.

- Comfortable, people can now contact sales reps immediately. Most feel that it is an inconvenience when at home on a phone-line connection, to disconnect from the internet to contact a traditional call center

*Disadvantage*

- Typing is more complicate than talking
- Increase expenditure in the case of hiring the operator for supporting customer online

### 2.6.6 Voice Over Internet Protocol (VOIP)

- It is the brand new computer technology. The enterprise world has a growing interest in this technology, it will be a while before it is implemented on a widespread basis. [13]
- If Internet browser want to speak to a live customer service representatives while maintaining continue their Internet connection. Any Web browser with a properly configured workstation can now use Voice Over Internet Protocol (VOIP) to communicate with agents and continue to use the internet to receive information from the agent during the call browser can submit a direct call request using their multimedia PCs and the software which is support to activate an Internet-originated telephone call. Business can use Voice over Internet Protocol to take advantage of the existing call center infrastructure to voice-enable the Website. This combination enables a customer, with a single phone line Web connection, to speak to a business representative without terminating the internal connection.[1]
- The customer can talk to the agent while they are online on the Internet, simply by pushing a button of their screen. The agent can pull up the same screen the customer is

having trouble with and walk them through the process, all without ever losing their connection. [16]

*Advantage*

- Better image for supporting interactive customer service
- Being completely accessible. Websites never closes. People can communicate with an online operator 24 hours a day, 7 days a week
- Comfortable, people can now contact sales reps immediately. Most feel that it is an inconvenience when at home on a phone-line connection, to disconnect from the internet to contact a traditional call center
- No workload because the companies can immediately connected.
- Reduce number of incoming telephone calls to the office

*Disadvantage*

- Increase expenditure in the case of hiring the operator for supporting customer online
- Low quality of service since the IP network does not support the type of service.
- Requires additional software need to handle this service.

# CHAPTER 3

# METHODOLOGY

In this thesis, a method was done using three methods (Basically, three methods are employed to find out facts and findings, which are: document-based study, exploratory survey, and data analysis. In and attempt to find out all possible customer service types for being the part of the business in Thailand.

## 3.1 Document-based Study

This process is conducted to identify the characteristic of customer service types and their pros and cons of each service. This method will allow findings the characteristic of customer service types for business in Thailand.

## 3.2 Exploratory Survey

Two major methods will be utilized to collect the customer satisfaction required and to determine the different customer service types that influence customer satisfaction which basically boils down to determining the performance attributes. The two major methods are:

### 3.2.1 Individual and focus group survey:

In the case of respondents who chose to answer the questionnaire, they are the ones who have the necessary knowledge about Internet and services.

### 3.2.2 Questionnaire Survey

A close-ended questionnaire structured, as performance attributes based on the customer satisfaction as expounded will be the sole survey instrument used as the 150 performance attributes. The completed questionnaire is presented in Appendix A.

The questionnaire is designed by using Likert Type Format. [11]

### 3.3 Data Analysis

Analyzed data will be used to propose alternatives on how different we can utilize customer services types in Thailand. An organization can use the final result of this study as a decision tool to appropriately select customer service types.

# CHAPTER 4

# DATA ANALYSIS

## 4.1 Customer Service in Thailand

Nowadays, customer service starts taking more important roles in doing business in Thailand according to the increase in "Call Center" implementation. In addition, companies that already implemented call center keep developing their systems to enhance their capabilities and effectiveness to serve their customers better. However, call center currently implemented offers a limited type of services such as IVR (interactive voice response), Fax-on-demand (FOD), Voice messaging, Auto Dialer and Internet-based services which are FAQ, and E-mail.

Call center service offered today is mostly provided by big organization. For instance, Banks, ISPs, Telecommunications, Mobile phone companies, and some government organizations.

Now, the number of Internet users inThailand is increasing everyday; therefore, it is a good prospect for a company to provide Internet-based service support. To provide the Internet-based service support, the company can increase its customer loyalty, build relationship with customers and be competitive in the business industry. By implementing these services, the company needs to take several factors into account, for example, the number of customers using the Internet, the amount of transaction in a day, the amount of incoming e-mails, products and services, cost of service implementation, ease of service implementation, advantages in providing service, together with the area in providing service. The company will use these factors to analyze and make the decision if it should implement the service.

In next several years, business in every industry will eventually recognize the importance of providing service through the Internet since the sales, shopping and

service activities has dramatically been shifted to on-line, so called e-business or e-service.

At the moment, some companies realizing the importance of Internet-based service support have started implementing services. These services are proved to play a vital role for business in the new millenium since the company that has its website can simultaneously provide Internet- based service support.

**4.2 Types of Customer Service on the Internet**

Generally, the process of customer service on the Internet is computer-to-computer basis in which customers can immediately ask for service. For examples, FAQ service is a kind of service that a customer will use his or her computer to get questions and answers from the information in the company's computer. However, E-mail, Faxback and Callback are the services that need to wait for response from customer support representatives. Meanwhile, customers can get immediate service from companies in terms of textchat and VoIP services. And the key is that all of these services are basically done via the Internet. Companies can answer their customers' questions by answering in the form of different services through the Internet and telephone line. Therefore, it is obvious that the Internet technology has critically taken an important role in doing business; including sales through on-line shopping, marketing, advertisement, and even customer service.

### 4.2.1 FAQ ( Frequently Asked Question )

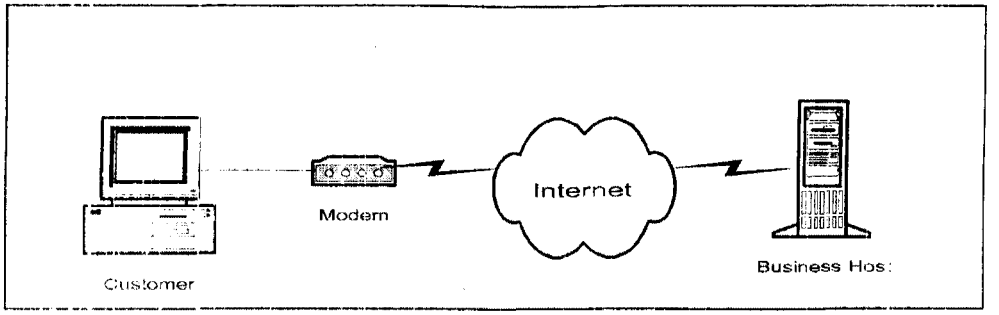


**Figure 4.1 Feasibility of FAQ implementation**


**Figure 4.2 Flowchart of FAQ**

FAQ (Frequently asked questions) is one of the most universal applications for customer service on the Internet. Customers can access to the company's website which will provide questions and answers for customers to simply read and understand it. Generally, these questions and answers will be the frequently asked questions, which will be generic and easy to understand for a customer's self-reading. This service is considered the most basic Internet-based service support and companies that have their own website should provide this service to their customers.

To get FAQ service, customers just simply connect to the Internet and go to the company website and then click the pointer on the FAQ feature. Customers will see a set of questions and answers posted in the website one by one. Or the company might post all the questions together and let customers click on the question customers want to see the answer and this will link customers to see the answer of that particular question

To implement the FAQ service, the company does not need to have additonal specific software or multimedia tools. Basically, most of the web-developing softwares provide this feature and are capable of linking in the webpage. Therefore, the FAQ service is simply a webpage in the company website that provides a set of quesitons and answers for customers to read them.

According to the FAQ usage, we see that FAQ is very helpful for businesses to reduce the number of incoming phone calls, e-mails from customers sent in to ask for service. At the same time, customer service department can avoid answering same questions from a number of customers. By employing FAQ service, customers can find out the answers themselves, so companies do not need to hire more customer support representatives to take care of customers. Most of the tasks of FAQ service will be generally information update. Therefore, companies can save their budgets or cost on callback, faxback to an extent. Since some questions asked by customers are not too technical or difficult to understand, FAQ service is the most fit service to be served in this case.

There is no additional cost to implementing FAQ service except the cost of updating the information on questions and answers on the web. To improve FAQ service the company can use e-mails sent by customers asking questions to modify FAQ pages. However, providing FAQ service will not really help create the company image since it is offered by almost every company that has its own website.

FAQ service can serve multiple customers which could be thousands or more than that at the same time. This will depend on the size of the company's network infrastructure. However, the major problem of FAQ service is the mismatch between questions a customer has and questions provided in FAQ or unclear answers. So, this is the important issue that customer service needs to take into consideration.

Strengths

1. Easy to implement and maintain
2. Be able to support multiple customers at the same time
3. No implementation costs and ongoing costs
4. Easy for customer to use the service
5. Fast accessibility to the service
6. No additional multimedia application to support this service
7. No additional software to handle this service

Weaknesses

1. Require periodic information update
2. Non-interactive communication to customers
3. Inflexible service for customers because of limited information posted
4. Low customer satisfaction
5. No differentiation from competitors

### 4.2.2 E-mail (Electronic mail)

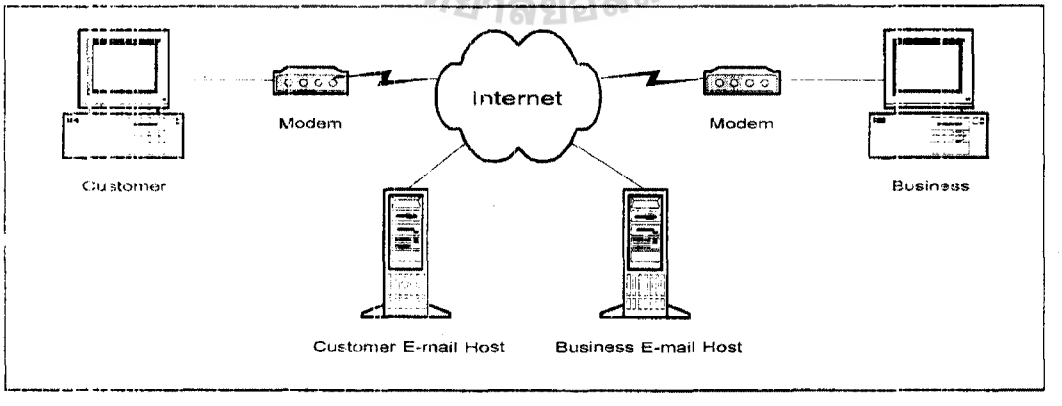


**Figure 4.3 Feasibility of E-mail implementation**

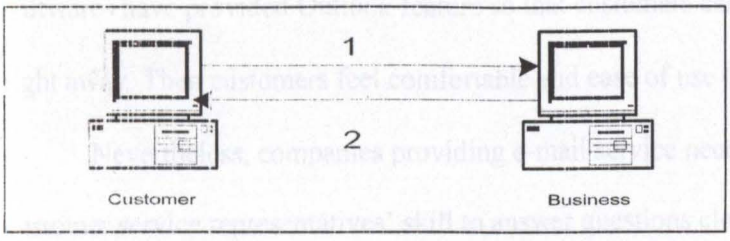


**Figure 4.4 Flowchart of E-mail**

E-mail is another Internet-based service support that is mostly used today. E-mail is simply similar to the regular mail sent to the post office but it is instead sent to Internet e-mail host which will take only seconds for a recipient to receive it. In addition, the recipient can edit e-mail received and send it back to the sender easily.

Another good thing of e-mail is the companies can even e-mail the files in other formats, for example, binary files-software, graphics, data, text, animation, speed music, or video –as you like. To their customers.

The key process of e-mail is just e-mail account. Users (senders and receivers) need to get e-mail accounts which represent their addresses. According to a survey, some big companies that have their own websites in Thailand will have customer support representatives to answer all incoming e-mails by 24x7. Normally, there will be 2-3 customer support representatives on duty to respond approximately 50 e-mails each day.

To provide e-mail service, there is no usage cost. The company can just connect to the Internet then check and answer incoming e-mails. And there is no complication to implement this since companies need to implement and maintain e-mail host system for in-house use. Companies just need to have enough storage capacity in their servers to store incoming e-mails and customer service representatives will answer questions to customers without using additional multimedia tool. Also, making links from the company's website to e-mail is much easier now since most of the web creator

softwares have provided Outlook feature so that customers can e-mail to companies right away. Then customers feel comfortable and ease of use to get the service.

Nevertheless, companies providing e-mail service need to concern about customer service representatives' skill to answer questions clearly and attain customer satisfaction. Therefore, customer service representatives need to carefully read and understand what customers ask and answer questions precisely in a short time.

Strengths

1. Any kind of files, i.e., text, photo, sound files can be sent via e-mail
2. No additional multimedia application needed to support this service
3. No ongoing costs for using this service
4. Easy to use. It is a basic service for customers

Weaknesses

1. People who want to use e-mail service need to have e-mail accounts
2. There is waiting time for customer service representatives to reply e-mails. Sometimes it takes a long time for customers to receive answer, especially when the server is down.
3. No differentiation from other competitors

### 4.2.3 Callback

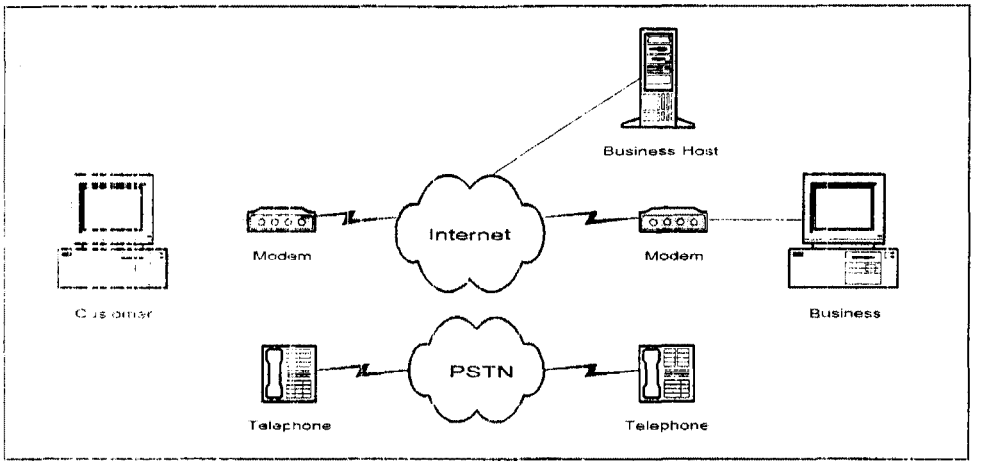


**Figure 4.5 Feasibility of callback implementation**

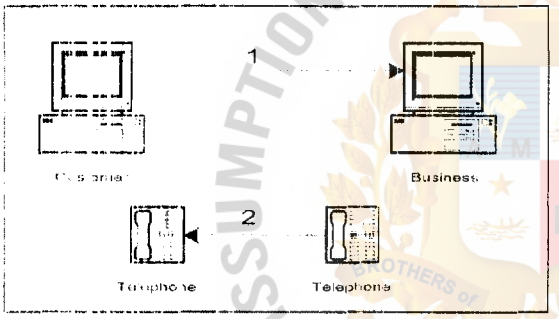


**Figure 4.6 Flowchart of callback**

Callback is another Internet-based service support where potential customers visit the company's web site and want to talk with a customer service representative; they click on the callback button. A form personalized with your company graphic appears, and customers are prompted to enter their names, e-mail addresses and the phone numbers at which they wold like to be called back. Companies will call them back as soon as possible. Callback uses the Public Switch Telephone Network to ensure reliability and quality. However, IP telephony is not yet ready for prime time due to lack of standards, equipment and reliable bandwidth.

The major problem in callback service is the limited telephone lines. There might be customers demanding for callback service more than the number of telephone lines companies have. As a result, customers have to wait for service. So, companies planing to offer callback service have to well manage the service time and waiting time associated with the number of customers otherwise it could make customers unsatisfied with delayed service.

Strengths

1. Provide an easy alternative for customers who want to ask for the service without having to leave their browser or disconnect their Internet browser ( in the case of having 2 telephone lines)
2. Differentiate your business from the competition by providing a simple cutting-edge solution to a basic customer need.
3. Reduce e-mail volume to the business. Because business can support the other service to the customer.
4. No additional multimedia application needed to support this service (in case that customer service representatives do not use headsets)

Weaknesses

1. Require additional software need to handle this service
2. Increase usage cost for calling back to customers

### 4.2.4 Faxback

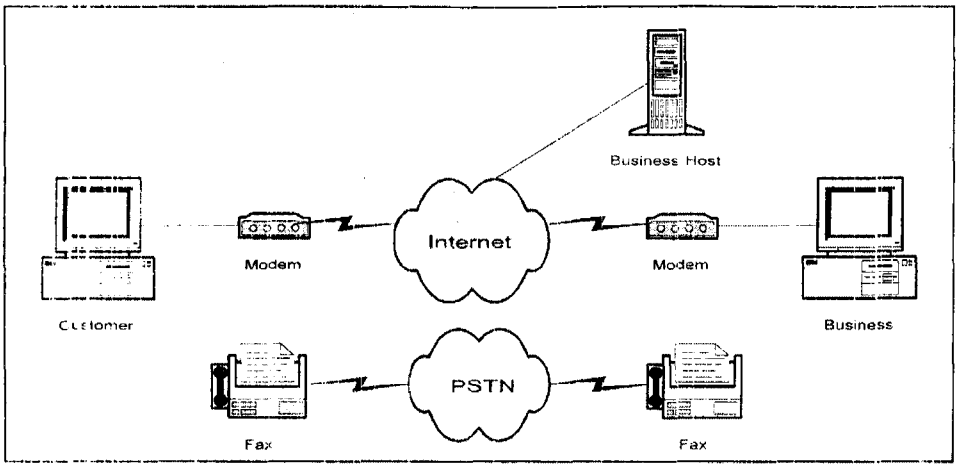


**Figure 4.7 Feasibility of faxback implementation**

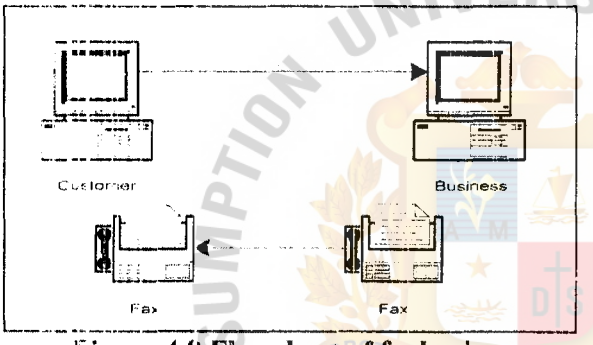


**Figure 4.8 Flowchart of faxback**

Faxback is the service that allow the customers to interrogate (or at least, simply request) any of several thousand documents that the companies have in the information base. Customers could receive the information on their fax machines.

The process scenario of Faxback is similar to what Callback does. To receive Faxback service, customers need to fill in the form provided identifying name, address, fax number and information needed companies to fax back. Meanwhile, companies can keep records of all customers by using this method. After customer service representatives receive the information from the Internet, they will fax back the information requested by using fax machine as soon as possible. However, due to the rapid change in technology now, companies can write their own proprietary software which allows the system to poll the information from the database and immediately fax

back to customers. By using this method, companies suppose to provide a set of information on the webpage so that customers can choose information they want.

Implementing faxback service is quite similar to callback. In other words, there are a couple methods for companies to implement faxback service. For example, companies may want to keep records of all customers requesting for faxback service, so they need to have their own software which will enables companies to receive the form customers filled in text file format. Also, the agent will be able to detect if information is from a new customer.

Regarding operation cost for faxback, there will be an additional usage cost in sending fax back to customers. Nevertheless, there is no multimedia tool required for this service.

Nowadays, there is a company in Thailand offering this service by using proprietary software that allows the system to automatically poll the information from the database and fax back to customers. However, most of companies offering this service will implement it through regular telephone lines or call center. They will basically have IVR system which will automatically allow customers to choose several options for faxback service. For example, a customer may want to get a user's manual for a certain product, then he or she can just press the number that is already set to poll the user's manual information from the database and it will be faxed to customers in seconds. To implement faxback service, companies should provide service to certain limited area to avoid long distance or international calls. But companies can also avoid this problem by faxing via the Internet network. Still, there could be a problem regarding the service which provides a set of information for customers to choose. Since this might not what customers want. On the other hand, there might be some

Voice Over Internet Protocol (VoIP) to communicate with customer support and continue to use the internet to receive information from the during the call. The Internet browser can submit direct call request using its multimedia PCs and software which supports activate an Internet-oriented telephone call. Business can use Voice Over Internet Protocol to take advantage of existing call center infrastructure to enable voice on the website. This combination enables a customer, with a single phone line web connection, to speak to a customer support representative without terminating the Internet connection.

The implementation process of VoIP is similar to textchat in terms of connection. Customers can just click on "Talk to us" button on the company's webpage and talk to a customer support representative. Customer do not need to disconnect the Internet for making call to the company. The difference between VoIP and textchat is that VoIP requires to use multimedia accerssories, like microphone and speaker for conversation.

To implement this service, it requires to have a customized software to support it. The company might have a programmer to write the program which allows customers to use this service directly from the company's webpage. And customers will have all the necessary multimedia accessories, for example, speaker, microphone which have specifications complied with the company's VoIP software. In addition, companies might use other softwares that are familiar to users, like Netmeeting, mediaring, etc. to use for voice communication. If customers still do not have the software, the company will provide the link for customers to download it before using the service. The program used in this service is the program that tells customers what IP address the customer support representative is using. As a result, customers know

To implement callback service, companies can either implement this themselves or let the specialized Database Company to do it. Mostly, companies will ask customers to fill in the form on the webpage and the information will be sent to the company's database. Companies could do this by writing their own proprietary software that will pool the information into their own database. And customer support representatives will be able to access the database and also know if there is a new customer registered in the database.

The other way to do this is to let the Database-storage Company taking care of customers' record. Companies will access the database of the storage company by calling into the storage company which there will be a line connection setup for information polling. And companies will be charged in term of minutes that companies connect to the storage company's database. To offer this service, there is an additional cost in this service which might be local call or long distance call. Also, customer service representatives might need headsets rather than regular telephones to communicate with customers.

In Thailand, there is a website providing this kind of service. They will have their own program which will enable them to send customers' record to companies via e-mails. According to the survey, there are several big companies that are interested in offering this service feature. But this will base on domestic service only due to the high potential cost for long distnce calls which might not worth doing it. However, voice communication over the Internet is not approved by Communication Authority of Thailand (CAT) because the maximum bandwidth on a regular telephone line can go up to 56 Kbps upstream and 64 Kbps downstream only. Therefore, there will be an interruption for voice communication on the Internet.

delay due to time consuming in customizing information in case that companies open this option for customers to request whatever they want.

Strengths

1. Provide an easy alternative for customers who want to get for the information without having to leave their browser or disconnect their Internet browser ( in case of having 2 telephone lines)
2. Differentiate your business from the competition by providing a simple cutting-edge solution to a basic customer need.
3. Reduce e-mail volume to the business because the company can support the other service to customers.
4. Reduce number of incoming telephone calls to the office
5. No additional multimedia application to support this service

Weaknesses

1. Require additional software to handle this service
2. Increase usage cost in faxing back to customers
3. Time consuming to prepare documents for faxback
4. Information is limited within database ( in case that information provided is only on the webpage)
5. Require periodic update the service ( in case that information provided is on the company's webpage)

### 4.2.5 Textchat

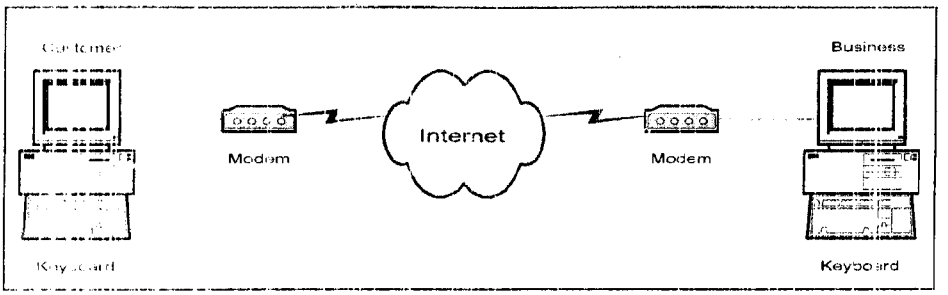


**Figure 4.9 Feasibility of textchat implementation**

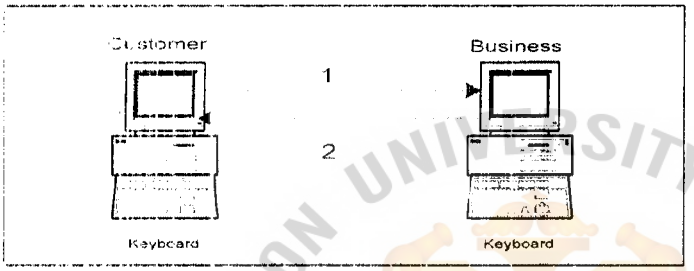


**Figure 4.10 Flowchart of textchat**

Textchat is the service that customers who do not have multimedia PCs and wish to remain connected to the Internet when communicating with a customer service representative, have the option to request an Internet Textchat session to ask questions from companies.

The textchat service scenario is to allow customers to chat with us concerning the company's products while being on the company's webpage. Customers can simply click on "chat with us" button and customers can chat with a customer support representative without disconnecting telephone line to make a call to the company.

Implementing textchat service requires a special software to support this service. The programmer will write the program to customize the company's needs. Basically, there will be a small window apart from the main browser window to let customers chat with customer support representatives. Customers do not need to have multimedia accessories or software to download to use textchat service. Looking at the quality and effectiveness of textchat service, we will see that textchat service is quite

more appropriate to use as the interactive service support rather than VoIP because of the low quality of voice over the Internet.

Chat service on the Internet in Thailand is mostly chat café that let people to talk and have chat room for converstation on particular topics. And there is still no business website that use chat service for commercial purpose. However, according to the survey, most organizations have interest in providing textchat service because of low implementation cost as well as customer satisfaction in terms of interactice service session.

The possible problem for textchat service is the waiting time for customers to chat with customer support representatives. There might be over demand from customers. However, the programmer can write the program to support switching so that customer support representatives can switch from a customer to another customer. Companies that want to provide textchat service might need a separate team from other kinds of service to support textchat since customer support representative might chat with friends rather than customers. Therefore, it is a big issue in hiring high responsible and service-minded personnels to get this service on.

For international service, we see that textchat service will absolutely be one of the best service which could reduce usage costs from faxback or callback. Companies do not need to make international calls to customers abroad. Also, customers do not need to hang up and call the company's call center.

Strengths

1. No multimedia PCs required
2. More suitable on the business that is using technical word, referable data
3. Better image for supporting interactive customer service

4. Comfortable, people can now contact customer support representatives immediately. Most customers feel that it is inconvenient to disconnect from the Internet and call the company.
5. Reduce number of incoming calls
6. Reduce e-mail volume to the office
7. Deal with customers instantly when they are ready to contact to the companies

Weaknesses

1. Require a customized software to handle this service
2. Typing is more complicated and it is more difficult to explain than speaking

### 4.2.6 VoIP (Voice Over Internet Protocol)

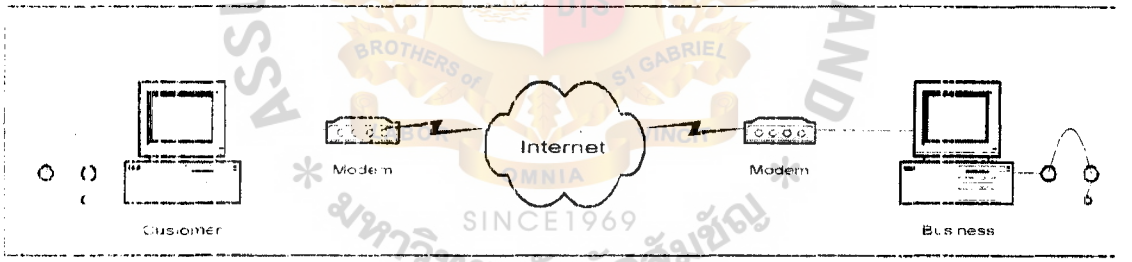


**Figure 4.11 Feasibility of VoIP implementation**

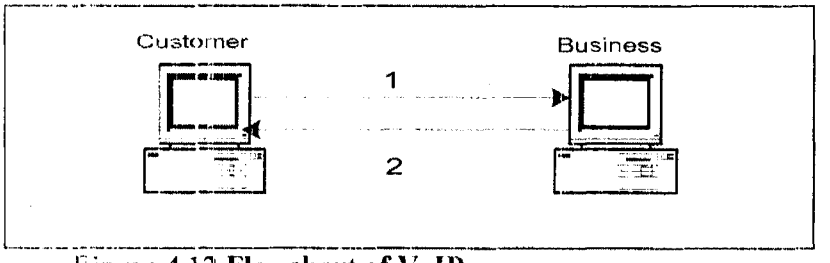


**Figure 4.12 Flowchart of VoIP**

VoIP is another kind of Internet-based service that customers can talk to the company's customer support representatives while maintaining their Internet connection. Any web browser with a properly configured workstation can now use

which IP address they will communicate with. This case occurs when business does not have their own server and they connect to the ISP via a dial-up connection.

In Thailand, it still does not have any companies providing VoIP service for commercial purpose. Most of them will be regular chat between friends. According to the survey, most companies in Thailand do not have interest in implementing VoIP service because the low quality of voice over the Internet and the legal issue as well as the high implementation costs. The other thing is this service will base on one-to-one service (a customer service representative can support only one customer at a time and a few customer knows how to use it.

However, if this service is applicable internationally, it will be able to reduce usage costs from other services, such as faxback, and callback. There wil be no international call charge. And it is comfortable for customers to use this service without disconnecting the line to call the company's call center.

The possible problem from this service is the complication in downloading the software for voice communication. Customers need to have a certain level of computer knowledge to download the software, install and launch the program to use the service. Again, the quality of voice over the Internet in Thailand is not acceptable since the delay will be over the human response time; therefore, it is quite annoying for customers to use this service.

Strengths

1. Better image for supporting interactive customer service
2. Comfortable, people can now contact customer support representative immediately. Most customers feel that it is inconvenient to disconnect from the internet to contact the company's call center

3. Reduce number of incoming calls
4. Reduce e-mail volume to the office

Weaknesses

1. Low quality of service since the IP network is basically based on the best attempt to deliver voice packets.
2. Require additional software to handle this service
3. Require additional multimedia application to use in this service

**For the figures above, the connections are based on the regualr telephone line and web hosting service. The following figure is for the business who has its own leased line and web server.**

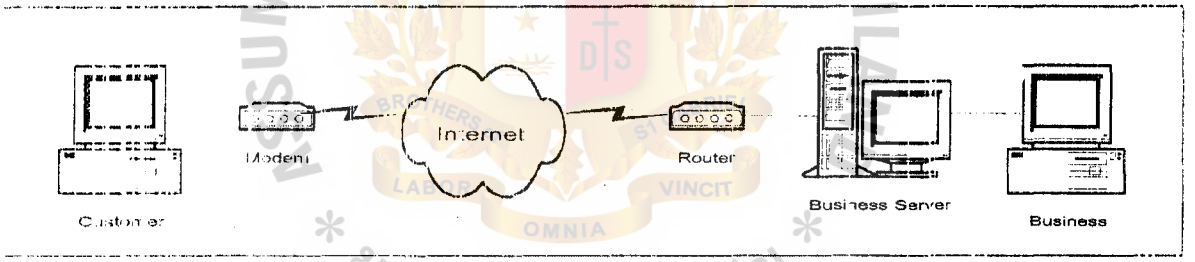


**Figure 4.13 Feasibility of network connection by implementing leased line**

## 4.3 Critical Factor for Customer Service on the Internet in Thailand

### 4.3.1 Technical Factor

4.3.1.1 Ease of implementation and maintenance

Ease of implementation and maintenance is one of the most important factors to be considered in selecting the type of Internet-based customer services. There will be several factors to take into consideration as follows:-

- Hardware necessary to use for a particular service
- Software needed to implement a particular service, including the complied software that customers need to install for using the service. This software could be a proprietary or shared software.
- Multimedia tools or accessories that need to use as a part of service

### 4.3.2 Economical Factor

The cost factor is another important issue to be considered in selecting customer service on the Internet because this factor will specify investment breakdown for implementing a particular type of customer service on the Internet. Cost factor can be separated into 2 parts:

4.3.2.1 Setup cost

This is basically the initial outlay cost that a company needs to use for installation, and assembly cost for service building blocks. It also can include the followings:-

- Software costs
- Hardware costs
- Multimedia costs
- Maintenance costs

4.3.2.2 Usage cost

This is basically the cost in service implementation in addition to the setup cost. On the other hand, this could be referred as variable cost in callback and faxback service, making calls to customers.

### 4.3.3 Support Factor

The support factor is another significant issue to take into account for Internet-based service selection because this factor is the external

environment that the company has to concern about. The company has to consider how the external environment supports or influences each Internet-based service.

4.3.3.1 Service Areas

Service areas is the identified areas that the company wish to offer a particular service. For example, the company might separate local and international customers. It is necessary for separating the types of customer service on the Internet. Example FAQ, E-mail, Textchat, VoIP could offer services to customers across the world while no usage cost is applied. But if the company supports callback, faxback service across the entire world, this could cost the company a lot for international calls. Hence, it might not worth it.

4.3.3.2 Number of customers

The number of customer is involved in selecting types of customer service in several aspects:-

- The number of customers that the company can serve at a time. For example, FAQ service is the service that customers themselves will read the information on the webpage. And this could allow a huge number of customers to read it at the same time. E-mail is another example that the company can serve multiple customers at a time. On the other hand, the company couldn't serve multiple customers at the same time if it provides callback, faxback or VoIP service since these services need to have a customer support representative conversate with only one customer at a time. Therefore, this could cause service delay if there is high arrival rate in service queue.

- The number of customers that the company has the potential to pay for usage costs. We can see that the company can provide FAQ, E-mail by avoiding usage cost. But the company has to pay for usage cost for callback and faxback service. Thus, to provide faxback, callback service. the company might have the limited budget so it is difficult to reach customer satisfaction in offering these services due to operation cost.

### 4.3.4 Beneficial factor

4.3.4.1 Customer Aspects

Generally, companies want to get customer satisfaction for the service they provide. To gain customer satisfaction, companies can create the company image. customer loyalty. and be competitve to other competitors. The significant factors that help companies to gain customer satisfaction can be divided into 4 catgories:-

4.3.4.1.1 Reliability

Reliability is the main issue to make customers have trust on the company's products or services. Each Internet-based service could differently make customers rely on the company. The followings are the causes that make customers have a good attitude towards the company:-

- Companies can build reliablilty and image to the company by offering special add-on services in addition to telephone call, FAQ, and e-mail. The additional services like callback and faxback could show how efficient service and readiness the company has provided.

- Influence on making a decision to purchase product or service from the company because customers feel that the company is trustable due to add-on services.
- Also, companies can build reliability by offering interactive service. Once customers find the problem, they can contact the company and talk to a customer support representative immediately while they cannot do that for FAQ, E-mail and Faxback services, for example. Therefore, this could create customer satisfaction.

4.3.4.1 2 Time

The response time is another significant issue that effect customer satisfaction on the company. This could be divided into 2 categories:-

- Responding time: This is the time in which customers wait for service after requesting it. Therefore, if customers have to wait for service more that they expect, this certainly could cause service unsatisfaction. Regarding the interactive service, the company has to respond as quick as possible while customers could be more patient in e-mail, faxback or callback servies.
- Service hour: Generally, customers will have different preferences on getting service. This could probably happen in case that the company has customers in different countries. Therefore, it might not enough for companies to provide service only during local office hours. However, operation cost will be involved if the company wants to provide service by 24x7. The company might want to

conduct a survey and find out which time frame is the most suitable for the company to provide the service.

4.3.4.1.3 Information Update

This is one of the critical factors in providing Internet-based service support nowadays, especially FAQ service. Since the technology keeps changing all the time, the information today maybe out-of-date for tomorrow. Thus, companies really have to update information and new things in their website. It is obvious that if the company's webpage is still the same, customer loyalty toward the company's website will decline.

4.3.4.1.4 Comfortability

Comfortable service and ease of use can create customer satisfaction. We can divide this into 2 categories:-

- Ease of registration process:- Most of the time, companies will require customers to fill in a 7-8 page form to request for service. And this is considered annoying to customers. Companies should ask for generally personal information instead of full-detailed information from customers. The basic information that companies might need to know is name, last name, telephone number and address. Or there might be a multimedia accessory quick test for VoIP service to make sure that the accessory is complied to the company's VoIP software and hardware.
- Ease of use:- Naturally, VoIP service requires customers to have an additional multimedia accessory. And it might be complicated for customers and make them change to use other services instead.

4.3.4.2 Business Aspects

4.3.4.2.1 Make differentiation from competitors

This factor is basically to create customer satisfaction by providing add-on services. Since simple FAQ, e-mail services cannot differentiate the company from other competitors. This could create the better image and reliability to the company. Meanwhile, companies provided FAQ could simply make difference and create value to their company's website by updating the company's website from time to time. Also, the company can bring the popular information to post it on its website to draw customers' attention, while companies might find their niche in e-mail service by seeking qualified customer support to answer questions perfectly.

4.3.4.2.2 Increase in channel of distribution

Due to the rapid increase in Internet users, companies can use customer support service on the Internet to easily reach customers in case that they have new products launch. By providing these Internet-based services, companies can return service to customers promptly. Therefore, this could help customers make decision in purchasing the company's products.

In fact, this is happened according to the survey. Moreover, it also can reduce the amount of work, incoming e-mails regarding sales and inquiries to an extent.

## 4.4 Critical Success Factors (FAQ)

### 4.4.1 Technical Factor

4.4.1.1 Ease of implementation and maintenance

**- Easy to implement and maintenance (Level 1)**

It is easy to implement if the administrator has computer-programming and basic telecommunications knowledge.

The implementations for FAQ are:

Hardware

To implement FAQ service, it is actually not different at all from a WebPages upload since FAQ is basically the information on the WebPages. The company can implement this by renting a space from the web-hosting company, if they have limited budget. At the meantime, the company can have their own server and administer it by themselves. However, by doing this, the company needs to have high speed connection line rather than a dial-up one which could be an ISDN, T1, DSL, cable, etc.

- In case of the company has their own server, they still need to have other main components to connect to the Internet world. Basically, they need to have a telephone line, router, leased line to 24-hourly connect to ISP's (Internet Service Provider) companies who have backbone network to connect to other routers across the world. Then, customers can get information when they connect to the Internet anywhere on earth by accessing the information on the company's server.
- In case of the company rents a space from the web-hosting company, basically, the company needs to have their own computer to create the

WebPages and upload these files to the web-hosting company, if not hiring a web developer to do it. Therefore, when customers want to access the information, they will send their request to the web-hosting company's server to get the information directly there instead of accessing the company's server in the first case.

Software

- Generally, if the company has their own server on site, they need to have the web developer software to create the WebPages, other than using Notepad in creating HTML code. There are several web development software's that make WebPages making much more easier now, for example, Dreamweaver, Flash, Macromedia, Fireworks, etc.
- In case of renting space from a web-hosting company, the company still need to create their WebPages themselves by using web development software that were already mentioned. A possible difference between renting space from web-hosting and having own server might be that the company renting space from a web-hosting company might need to have FTP (File Transfer Protocol) program in order to upload all the files to the web-hosting company. The FTP programs could be FTP itself, or CuteFTP which can be downloaded from free on the Internet.

Multimedia

No multimedia software and hardware are required for this service

Implementation

FAQ service is easy to implement since it is just like a page of the website. The essential step in doing FAQ is to prepare the right and up-to-date information to post it on the web and keep updating it from time to time. After finishing doing the FAQ page, the companies just upload it onto the server by using file transfer software.

Maintenance

The cost of maintenance is approximately estimated to be 15% of the annual setup cost.

**4.4.2 Economical Factor**

4.4.2.1 The setup cost is the basic cost that the company has to pay if they have their webpage on line.

**- Low setup cost**

In case of having own server

| Cost | Baht |
|---|---|
| server 1 set | 100,000 |
| Leased line 64 Kbps (start-up fee) | 40,000-70,000 |
| Leased line 64 Kbps (per month) | 40,000-70,000 |
| Monthly fee (per month) | 100 |
| Router | 10,000-100,000 |
| Web development softwares | 3,000 |
| Maintenance cost | 15% per year |

In case of renting space from a web-hosting company

| Cost | Baht |
|---|---|
| PC 1 set | 25,000 |
| Modem 56K (Internal / External) | 800 / 2,800 |
| Monthly fee (telephone service) | 100 |
| Connection fee | 3 baht / unit call |
| Web Hosting fee | 2,500-5,000 |
| Web Hosting (per month) | 1,500-5,000 |
| Web development software | 3,000 |
| - FTP | FREE |
| Maintenance cost | 15% per year |

***Table 4.1 Cost of FAQ***

4.4.2.2 Usage cost

**- No usage cost**

There is no usage cost or cost in providing FAQ service because everything is on the server in which customers will find the information themselves.

**4.4.3 Support Factor**

4.4.3.1 Service areas

**- International service areas**

Due to no usage cost, the cost of implementing FAQ service is very cheap. There is almost no additional spending to offer FAQ service. And the service can cover customers worldwide.

4.4.3.2 Number of customer

- **Unlimited customer to provide service at a time / Unlimited number of customer served in terms of service cost**

Actually, a server can handle a certain no. of customers accessing it. The number of people who simultaneously can access the server and look up the information depends on the quality of the server that the server can handle 100,000 customers at the same time. However, the number of people that could be served by FAQ service is many more than one of other services. However, a certain number of customers can access the company server or the web-hosting company's server, which the company rents a space. It depends on the server how many customers they will let customers access to it, if not concerning about the link and router. And also unlimited the number of customer in terms of service costs because of the more customer is required, no usage cost incurred.

**4.4.4 Beneficial Factor**

4.4.4.1 Customer satisfaction

4.4.4.1.1 Reliability

**- Medium level of reliability on FAQ service**

Generally, FAQ service is so simple that almost every company that has their website on-line provides this service. It is obvious that this service cannot create the company image to customers. According to the survey, 34% of respondents agree that FAQ service can moderately increase the company image, while minorities commented differently.

| FAQ | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 4 | 2.7 | 2.7 | 2.7 |
| Low | 25 | 16.7 | 16.7 | 19.3 |
| Moderate | 51 | 34.0 | 34.0 | 53.3 |
| High | 34 | 22.7 | 22.7 | 76.0 |
| Highest | 36 | 24.0 | 24.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.2 The level of increasing of company image from FAQ service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry agrees that FAQ service can moderately increase the company image.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| FAQ | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 0 | 0.38 | 1.47 | 2.79 |
| Low | 3.3 | 1.67 | 5 | 5.88 | 15.85 |
| Moderate | 9.91 | 11.67 | 6.92 | 7.35 | 35.85 |
| High | 5.19 | 5 | 6.15 | 5.88 | 22.22 |
| Highest | 5.66 | 6.67 | 6.54 | 4.41 | 23.28 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.3 The level of increasing of company image from FAQ service by implementing the normalization method***

FAQ service cannot really encourage respondents to make decision on purchasing a company's product when comparing with other Internet-base services. The reason is that respondents cannot really respond to the company but self-service. In addition, this service is simply added to the company's

WebPages, so most of the companies will provide this service. Obviously, there is no difference for respondents out there if the company provides FAQ service.

As the result of the survey, to provide this service, majority of 34.7% accept that it moderately encourages respondents to make purchase decision, while 26% of them said that they will be strongly encouraged by the service.

| FAQ | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 6 | 4.0 | 4.0 | 4.0 |
| Low | 26 | 17.3 | 17.3 | 21.3 |
| Moderate | 52 | 34.7 | 34.7 | 56.0 |
| High | 27 | 18.0 | 18.0 | 74.0 |
| Highest | 39 | 26.0 | 26.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.4 The level of influence on respondents decision making to purchase a product from a company providing FAQ service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry accepts that FAQ service can moderately encourages respondents to make purchase decision.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| FAQ | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 0 | 1.15 | 1.47 | 3.56 |
| Low | 2.83 | 6.67 | 3.85 | 8.82 | 22.17 |
| Moderate | 9.91 | 8.33 | 7.7 | 8.82 | 34.76 |
| High | 4.25 | 5 | 5.38 | 1.47 | 16.1 |
| Highest | 7.08 | 5 | 6.92 | 4.41 | 23.41 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.5 The level of influence on respondents decision making to purchase a product from a company providing FAQ service by implementing the normalization method***

4.4.4.1.2 Time

**- No impact for the business**

In order to get service, customers can get accessed to FAQ service anywhere anytime if they have the Internet access. Customers will look up the information themselves on the WebPages. Therefore, it is not necessary to hire customer service representative to answer customers' questions.

4.4.4.1.3 Updated information

**- Depending on company policy and frequency of new product launch.**

The key factors that will be take into consideration are depending on the company policy and frequency of new product launch. To offer the best FAQ service, it is certain that the company needs to update the necessary information on their WebPages, if needed. Especially, when the information is obsolete or the company has launched a new product. Therefore,

the FAQ page should be very up-to-date and can be of use to the current situation.

According the survey, 58% of respondents stated that they would be very satisfied with the up-to-date information on the web that the company makes. Whereas only 2% of them said it has very little effect on their satisfaction though the WebPages is usually updated.

| FAQ | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 3 | 2.0 | 2.0 | 2.0 |
| Low | 9 | 6.0 | 6.0 | 8.0 |
| Moderate | 23 | 15.3 | 15.3 | 23.3 |
| High | 28 | 18.7 | 18.7 | 42.0 |
| Highest | 87 | 58.0 | 58.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.6 The level of frequency in updating information needed in FAQ service***

To implement the normalization method in relation to the difference business industry, it reveals that every business industry stated that every business industry would be very satisfied with the up-to-date information on the web that company makes.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| FAQ | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 0 | 0 | 1.47 | 2.41 |
| Low | 2.36 | 1.67 | 1.15 | 0 | 5.18 |
| Moderate | 3.3 | 5 | 3.46 | 5.88 | 17.64 |
| High | 3.77 | 3.33 | 5 | 7.35 | 19.45 |
| Highest | 14.62 | 15 | 15.38 | 10.29 | 55.29 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.7 The level of frequency in updating information needed in FAQ service by implementing the normalization method***

4.4.4.1 4 Comfortability

**- High level of comfortability**

Since there is no registration process to use FAQ service, everyone can just goes the company homepage and look up information themselves. This can be supported by the result of the survey.

Only 6% of respondents comment that FAQ service is very difficult to use, while 36% of them stated that it is hardly difficult to use. Since customers do not need to have additional software or hardware to use FAQ service. Also, they do not need to wait for the response from the company.

| FAQ | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 54 | 36.0 | 36.0 | 36.0 |
| Low | 30 | 20.0 | 20.0 | 56.0 |
| Moderate | 40 | 26.7 | 26.7 | 82.7 |
| High | 17 | 11.3 | 11.3 | 94.0 |
| Highest | 9 | 6.0 | 6.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.8 The level of difficulties in using FAQ service***

To implement the normalization method in relation to the difference of business industry, it reveals that trading and computer industries stated that FAQ is the easiest service. Whereas the education and other industries stated that it is moderately difficult to use the service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| FAQ | Education | Trading | Computer | Others | |
| Lowest | 6.6 | 11.67 | 11.15 | 5.88 | 35.3 |
| Low | 3.3 | 5 | 6.54 | 4.41 | 19.25 |
| Moderate | 8.49 | 6.67 | 4.23 | 10.29 | 29.68 |
| High | 4.25 | 0 | 2.31 | 2.94 | 9.5 |
| Highest | 2.36 | 1.67 | 0.77 | 1.47 | 6.27 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.9 The level of difficulties in using FAQ service by implementing the normalization method***

4.4.4.2 Business aspects

4.4.4.2.1 Difference from competitors

**- No differentiation from competitors**

Again, FAQ service is so simple that almost every company that has their website on-line provides this service. It is obvious that this service cannot make the company different from others. However, the company might find the niche to make themselves different from others by frequently updating information on the WebPages as well as providing the search, question board feature for customers to look up the information more easily. By doing this, the company needs to make the database information, which can be retrieved, after sending search request.

4.4.2.2 Increase in channel of distributions

**- No increase in channel of distributions**

FAQ service cannot directly support or assist sales. Because of it is the one way communication.

## I.5 Critical Success Factors (E-mail)

### 4.5.1 Technical Factor

4.5.1.1 Ease of implementation and maintenance

**- Easy to implement and maintenance (Level 2)**

The implementations for E-mail are:

Hardware

To implement E-mail service, it is simple like FAQ service. The company has two options like FAQ service. The company can implement this by renting a space from the web-hosting company, if they have limited budget. The company will get a certain space from the web hosting or ISP company to allocate the limited space for all personnel in the company. At the meantime, the company can have their own server and administer it by themselves. To implement this by having own server, it will be very flexible. The company can allocate space for every customer service representative. Nevertheless, this will depend on the quality of the server as well. However, by doing this, the company needs to have high-speed connection line rather than a dial-up one, which could be an ISDN, T1, DSL, cable, etc.

- In case of the company has their own server, they still need to have other main components to connect to the Internet world. Basically, they

need to have a router, leased line to 24-hourly connect to ISPs (Internet Service Provider) companies who have backbone network to connect to other routers across the world. Then, customers can get information when they connect to the Internet anywhere by accessing the information on the company's server. The company will receive the incoming e-mails and store them in the server. Then, customer service representatives can answer questions to customers by using e-mail account provided by the administrator of the company.

- In case of the company rents a space on the server from the ISP company, basically, the company needs to know how much space they need to contain its e-mail files and applications, including the size of WebPages files. For the connection link, the company has two choices to implement E-mail service. If they want to provide the service by 24x7, they might want to get the leased line for 24-hour connection. If not, they can just get the instant Internet access with dial-up line to get into the Internet and reply customers' e-mails. Therefore, basically the company will need at least a PC to respond incoming e-mails, regular phone line in order to link to the ISP and get e-mails stored in the ISP's server. But if the company wants to provide 24-hour service, they need to have a leased line connect to the ISP in order to promptly get incoming e-mails from customers.

Note: In this thesis, the cost evaluations for this service will base on the 24-hour service in order to reasonably compare with other services.

Software

- Generally, if the company has its own server on site, they need to have E-mail application software which could be Microsoft Exchange to organize space and e-mail accounts. Also, the company will need Microsoft Outlook application loaded in client computers for customer service representatives to proceed e-mail correspondence.
- In case of renting space from an ISP company, the company needs to have Microsoft Outlook application loaded in client computers for customer service representatives to proceed e-mail correspondence.

Multimedia

No multimedia software and hardware are required for this service

Implementation

- Generally, if the company has its own server on site, the implementation is quite complicated if the company has no professional IT support since they need to have Microsoft Exchange application to organize space and e-mail accounts. Also, the company will need Microsoft Outlook application loaded in client computers for customer service representatives to proceed e-mail correspondence.
- In case of renting space from an ISP company, the process is not complicated. The company just needs to have Microsoft Outlook application loaded in client computers for customer service

representatives to proceed e-mail correspondence and leave all the rest for the ISP company to handle.

**Maintenance**

The cost of maintenance is approximately estimated to be 15% of the annual setup cost.

### 4.5.2 Economical Factor

4.5.2.1 The setup cost

**- Medium level of setup cost**

In case of having own server

| Cost | Baht |
|---|---|
| 1 server | 100,000 |
| 1 Client PC | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Router | 10,000-100,000 |
| Software – Microsoft exchange | 50,000 |
| - Microsoft Outlook (Microsoft office) | 9,000 |
| Maintenance cost | 15% per year |

In case of renting space on a server with 24 hour service

| Cost | Baht |
|---|---|
| 1 Client PC | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Monthly fee (telephone service) | 100 |

| | |
|---|---|
| Connection fee | 3 baht / unit call |
| Router | 10,000-100,000 |
| Web Hosting fee | 2,500-5,000 |
| Web Hosting (per month) | 1,500-5,000 |
| Software - Microsoft outlook (Microsoft office) | 9,000 |
| Maintenance cost | 15% per year |

***Table 4.10 Cost of E-mail***

4.5.2.2 Usage cost

**- Medium level of usage cost**

There is no charge or cost in service implementation. But there will be the cost in hiring customer service representative to correspond customers' emails.

| Cost | Baht |
|---|---|
| Customer service representative | 168 baht / 8 hours |

***Table 4.11 Usage cost of E-mail***

**4.5.3 Support Factor**

4.5.3.1 Service areas

**- International service areas**

To offer e-mail service to customers, basically there is no implementing cost in corresponding to customers. Therefore, the company can implement this service for customers across the world.

4.5.3.2 Number of customer

**- Limited customer to provide service at a time / Unlimited number of customer served in terms of service costs.**

For a customer service representative, he or she can serve only a customer at a time due to different questions from customers. Though customers might have the same question, the customer service representative cannot answer the question at the same time. And there is no additional cost if there are many customers asking questions because the service is based in the Internet network.

**4.5.4 Beneficial Factor**

4.5.4.1 Customer satisfaction

4.5.4.1.1 Reliability

**- Medium level of reliability on E-mail service**

Implementing E-mail service is difficult to increase the company image toward customers.

According to the survey, we find out that 33.3% of respondents agree that it moderately can increase the company image. However, E-mail service is somewhat able to increase the company image. For instance, by using the search feature.

| E-MAIL | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 3 | 2.0 | 2.0 | 2.0 |
| Low | 12 | 8.0 | 8.0 | 10.0 |
| Moderate | 50 | 33.3 | 33.3 | 43.3 |
| High | 39 | 26.0 | 26.0 | 69.3 |
| Highest | 46 | 30.7 | 30.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.12 The level of increasing of company image from E-mail service***

To implement the normalization method in relation to the difference of business industry, it reveals education and other

business industries agree that it can moderately increase the company image. Whereas the trading industry stated that it could highly increase the company image and computer industry feel that it can increase the company image at the highest level.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| E-mail | Education | Trading | Computer | Others | |
| Lowest | 0 | 1.67 | 0 | 2.94 | 4.61 |
| Low | 2.83 | 0 | 1.92 | 1.47 | 6.22 |
| Moderate | 9.43 | 5 | 7.7 | 10.29 | 32.42 |
| High | 4.25 | 13.33 | 7.31 | 4.41 | 29.3 |
| Highest | 8.49 | 5 | 8.08 | 5.88 | 27.45 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.13 The level of increasing of company image from E-mail service by implementing the normalization method***

Also, it is concluded that providing e-mail service cannot thoroughly encourage respondents to make decision in purchasing the company's product.

According to the survey, the majority of 36.7% said e-mail service could moderately encourage them to purchase the product, while 24% of them would be highly encouraged to purchase the product. And 4% percent of them said e-mail service has very little effect on their buy decision.

| E-MAIL | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 6 | 4.0 | 4.0 | 4.0 |
| Low | 22 | 14.7 | 14.7 | 18.7 |
| Moderate | 55 | 36.7 | 36.7 | 55.3 |
| High | 31 | 20.7 | 20.7 | 76.0 |
| Highest | 36 | 24.0 | 24.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.14 The level of influence on respondents' decision making to purchase a product from a company providing E-mail service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry said E-mail service could moderately encourage them to purchase the product.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| E-mail | Education | Trading | Computer | Others | |
| Lowest | 1.42 | 0 | 0.38 | 2.94 | 4.74 |
| Low | 4.72 | 3.33 | 2.31 | 5.88 | 16.24 |
| Moderate | 7.55 | 15 | 8.85 | 10.29 | 41.69 |
| High | 4.72 | 3.33 | 7.31 | 0 | 15.36 |
| Highest | 6.6 | 3.33 | 6.15 | 5.88 | 21.96 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.15 The level of influence on respondents' decision making to purchase a product from a company providing E-mail service by implementing the normalization method***

The reason that this service cannot create customer satisfaction because of it is not an interactive service. Customers still need to

wait for the response from the company, which they may, or may not get the answer.

As the result of the survey, respondents will be satisfied when they directly get response from customer service representative.

4.5.4.1.2 Time

**- 5- 12 hours response time and 24-hour service**

The response time is very critical in implementing the service. Customer satisfaction to the company can be better or worse depending on the response time.

According to the survey, the average of response time is 5- 12 hours but no longer than that.

| | E-mail | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Immediately | 1 | .7 | .8 | .8 |
| | 3 minutes | 3 | 2.0 | 2.5 | 3.4 |
| | 5 minutes | 2 | 1.3 | 1.7 | 5.0 |
| | 10 minutes | 2 | 1.3 | 1.7 | 6.7 |
| | 15 minutes | 5 | 3.3 | 4.2 | 10.9 |
| | 20 minutes | 3 | 2.0 | 2.5 | 13.4 |
| | 30 minutes | 10 | 6.7 | 8.4 | 21.8 |
| | 1 hour | 4 | 2.7 | 3.4 | 25.2 |
| | 3 hours | 3 | 2.0 | 2.5 | 27.7 |
| | 5 hours | 2 | 1.3 | 1.7 | 29.4 |
| | 12 hours | 6 | 4.0 | 5.0 | 34.5 |
| | 1 day | 78 | 52.0 | 65.5 | 100.0 |
| | Total | 119 | 79.3 | 100.0 | |
| Missing | 1.5 days | 1 | .7 | | |
| | 2 days | 18 | 12.0 | | |
| | 3 days | 10 | 6.7 | | |
| | 5 days | 1 | .7 | | |
| | 7 days | 1 | .7 | | |
| | Total | 31 | 20.7 | | |
| Total | | 150 | 100.0 | | |

***Table 4.16 The level of respondents' acceptable response time to receive E-mail service***

Meanwhile, the service hours for e-mail service should be 24 hours. As the result of the survey, 60% of responderts agree that e-mail service should be implemented based on 24x7 time, while 26.7% of them can accept the company to implement e-mail service during working hours.

| E-MAIL | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 08.30-17.00 | 40 | 26.7 | 26.7 | 26.7 |
| 17.01-00.00 | 11 | 7.3 | 7.3 | 34.0 |
| 17.01-08.30 | 9 | 6.0 | 6.0 | 40.0 |
| 24 hours | 90 | 60.0 | 60.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.17 The level of preferred service hours for E-mail service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry agrees that e-mail service should be implemented based on 24x7 time.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| E-mail | Education | Trading | Computer | Others | |
| 08.30-17.00 | 3.77 | 8.33 | 7.7 | 10.29 | 30.09 |
| 17.01-00.00 | 1.89 | 1.67 | 1.54 | 2.94 | 8.04 |
| 17.01-08.30 | 1.89 | 3.33 | 0.77 | 1.47 | 7.46 |
| 24 hours | 17.45 | 11.67 | 15 | 10.29 | 54.41 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.18 The level of preferred service hours for E-mail service by implementing the normalization method***

4.5.4.1.3 Updated information

**- Depending on customer service representatives**

Since e-mail service cannot prepare answers or information beforehand, customer service representatives need to be well trained and skillful in answering questions. However, the company can run the auto response e-mail service and reply customers' e-mails promptly. So, the company needs to update information frequently.

According to the survey, 51.3% of respondents want the company to mostly update the information.

| E-MAIL | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Low | 8 | 5.3 | 5.3 | 5.3 |
| Moderate | 23 | 15.3 | 15.3 | 20.7 |
| High | 42 | 28.0 | 28.0 | 48.7 |
| Highest | 77 | 51.3 | 51.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.19 The level of frequency in updating information needed in E-mail service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry want the company to mostly update the information.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| E-mail | Education | Trading | Computer | Others | |
| Lowest | 0 | 0 | 0 | 0 | 0 |
| Low | 1.89 | 1.67 | 0.77 | 1.47 | 5.8 |
| Moderate | 4.25 | 6.67 | 2.69 | 4.41 | 18.02 |
| High | 5.66 | 8.33 | 6.92 | 10.29 | 31.2 |
| Highest | 13.21 | 8.33 | 14.62 | 8.82 | 44.98 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.20 The level of frequency in updating information needed in E-mail service by implementing the normalization method***

4.5.4.1.4 Comfortability

**- High level of comfortability**

There is no registration process for using the service. Customers just write e-mails to ask questions and wait for response. And it is not difficult or complicated to use because there is no additional software or multimedia required.

However, according to the survey, 34% of respondents agree that e-mail service is least difficult to use, while only 2% of them said it is the most difficult to use.

| E-MAIL | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 51 | 34.0 | 34.0 | 34.0 |
| Low | 36 | 24.0 | 24.0 | 58.0 |
| Moderate | 48 | 32.0 | 32.0 | 90.0 |
| High | 12 | 8.0 | 8.0 | 98.0 |
| Highest | 3 | 2.0 | 2.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.21 The level of difficulties in using E-mail service***

To implement the normalization method in relation to the difference of business industry, it reveals that trading and computer business industries agree that e-mail service is the least difficult to use, while education and other industries said it is moderately difficult to use.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| E-mail | Education | Trading | Computer | Others | |
| Lowest | 8.02 | 6.67 | 9.62 | 7.35 | 31.66 |
| Low | 3.77 | 10 | 7.31 | 4.41 | 25.49 |
| Moderate | 10.38 | 5 | 6.15 | 10.29 | 31.82 |
| High | 2.36 | 1.67 | 1.54 | 2.94 | 8.51 |
| Highest | 0.47 | 1.67 | 0.38 | 0 | 2.52 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.22 The level of difficulties in using E-mail service by implementing the normalization method***

4.5.4.2 Business aspects

4.5.4.2 1 Difference from competitors

**- No differentiation from competitors**

E-mail service is very simple, similar to FAQ service since most of companies offer this e-mail service nowadays.

4.5.2.2 Increase in channel of distribution

**- Potentially increase in sales**

Though e-mail service is basically for questions and answers for customers. However, customers can use e-mail to inquire the product or order the product on-line. Therefore, this will more or less increase and ease the sales for the company rather than the traditional order process by phone or fax.

## 4.6 Critical Success Factor (Callback)

### 4.6.1 Technical Factor

4.6.1.1 Ease of implementation and maintenance

- **Medium level to implement and maintenance (level 3)**

It is quite difficult to implement with knowledge of computers and communications since it requires supporting program for sending the customers' information of "where to call" back to the company. This information will be kept as database that alerts us when receiving new information. It is easier in case of software due to no requirement to write the supporting program. They can keep source code prepared by the company in "call me now" button. If the customers need the return call from the company, the program will link between two parties. The drawback of this method is the users have to pay the minute-based connection fee. In the long run, the method of self-programming is more cost effective.

The implementations for callback are:

Hardware

The alternative to use hardware for this service depends on the company's decision to have its own server or not. Actually, callback service doesn't require server because the customers' information can be kept in company's database. The company will not miss any message sending and receiving, if the company uses 24-hour Internet access through the rented server as the information hub because of the ability to remind us of the incoming data. However, it is better to own a server. In consideration of server capacity, the company can freely

allocate server space to its every single employee.

- In case of the company has their own server, it's not only the server required, agents also needs PC to check the incoming information from the customers; 2 telephone lines, one for the internet connection through ISP so that both the company and the customers can get internet access all the time. Another line is for returning call; router and leased line to link with ISP and telephone set to call back.

- In case of the company rents a space from the web-hosting company, the company can also provide callback service. The company has to pay for the server rental fee and supporting program for information transmission from web page to be kept as database. Another important concern is the length of service. If the company would like to provide 24-hour service, lease line is more efficient in term of cost and data access. If not, the company can save more cost by buying an Internet package. The required hardware's are PC, telephone lines for Internet connection, router and leased line to link with ISP. For hourly-based usage, the modem is needed for Internet access and data transformation from digital to analog and vice versa, and telephone set to call back.

Note: In this thesis, the cost evaluations for this service will base on the 24-hour service in order to reasonably compare with other services.

Software

The required software is the supporting program for sending the data from the web to be kept in server. The suitable programs are CGI script, ASP, PHP3, etc.

Multimedia

This is an option for the agent. Normally, the telephone set is enough. Multimedia tool like headset can be used to increase the convenience for the users.

Implementation

The company needs to write a program to facilitate the data transmission. It takes time to set up the system for the agent to get the data to be database, and also get the data from database.

Maintenance

The cost of maintenance is approximately estimated to be 15% of the annual setup cost.

**4.6.2 Economical Factor**

4.6.2.1 Setup cost

**- Medium setup cost**

In case of having own server

| Cost | Baht |
|---|---|
| server 1 set | 100,000 |
| Client 1 set | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Monthly fee ( Telephone service) | 100 |
| Router | 10,000-100,000 |
| Connection fee | 3 baht / unit call |
| Software -- hiring programmer to write a program to send information back | 10,000 |

| | |
|---|---|
| Telephone set | 1,000 |
| Maintenance cost | 15% per year |

In case of renting space on a server with 24 hour service

| Cost | Baht |
|---|---|
| Client PC 1 set | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Monthly fee (telephone service) | 100 |
| Router | 10,000-100,000 |
| Web Hosting fee | 2,500-5,000 |
| Web Hosting (per month) | 1,500-5,000 |
| Software - hiring programmer to write a program to send information back | 10,000 |
| Telephone set | 1,000 |
| Maintenance cost | 15% per year |

***Table 4.23 Cost of callback***

4.6.2.2 Usage cost

**- High usage cost**

This is the cost of calling back to the customers depending on types of call as listed in the table below. In addition, the hiring customer service representatives cost also varies upon service time.

| Cost | Baht |
|---|---|
| Customer service representative | 168 baht / 8 hours |
| Telephone cost (Local) | 3 baht / per call |

| | |
|---|---|
| (long distance) | depend on province |
| (International) | depend on country |

*Table 4.24 Usage cost of Callback*

### 4.6.3 Support Factor

4.6.3.1 Service areas

**- Domestic service areas**

Due to the incurred usage cost of each call making, e.g. long –distance and overseas charge, domestic service providing is more suitable. The company can also provide supporting service to customers abroad by mean of VoIP or calls through internet. However, the quality of VoIP is not as good as normal telephone line and it's illegal.

4.6.3.2 Number of customer

- **Limited customer to provide service at a time / Limited number of customer served in terms of service costs**

The customer service representative can serve only one customer at a time because it is the interaction between two parties through verbal communication. One agent cannot handle many customers at the same time. Service delay is unavoidable. To solve this problem, more agents and telephone lines are needed. Consequently, usage cost increases. Also, the more number of customer required this service, the more usage cost will be incurred in the case of call fee as well as hiring customer service representatives.

### 4.6.4 Beneficial Factor

4.6.4.1 Customer satisfaction

4.6.4.1.1 Reliability

**- High level of reliability for Callback**

Callback service can create customer reliability and good image for the company. It is obvious that this service can create the company image to customers.

According to the survey from respondents, 45.3% of respondents agree that Callback service can highly increase the company images, while minorities commented differently.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 4 | 2.7 | 2.7 | 2.7 |
| Low | 10 | 6.7 | 6.7 | 9.3 |
| Moderate | 28 | 18.7 | 18.7 | 28.0 |
| High | 40 | 26.7 | 26.7 | 54.7 |
| Highest | 68 | 45.3 | 45.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.25 The level of increasing of company image from Callback service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry agrees that callback service can increase the company images at the highest level.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| Lowest | 0.47 | 3.33 | 0.38 | 0 | 4.18 |
| Low | 2.83 | 0 | 1.15 | 1.47 | 5.45 |
| Moderate | 4.25 | 6.67 | 3.46 | 8.82 | 23.2 |
| High | 8.49 | 6.67 | 5.77 | 4.41 | 25.34 |
| Highest | 8.96 | 8.33 | 14.23 | 10.29 | 41.81 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.26 The level of increasing of company image from Callback service by implementing the normalization method***

Not only reliability, callback service also has influence on the customers' decision making in the purchase of a particular company's product.

According to the survey reveals that 38.7% of the respondent accept that it strongly encourages respondents to make purchase decision, and only 0.7% strongly disagree that it can encourages to make purchase decision.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 1 | .7 | .7 | .7 |
| Low | 7 | 4.7 | 4.7 | 5.3 |
| Moderate | 38 | 25.3 | 25.3 | 30.7 |
| High | 46 | 30.7 | 30.7 | 61.3 |
| Highest | 58 | 38.7 | 38.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.27 The level of influence on respondents' decision making to purchase a product from a company providing Callback service***

To implement the normalization method in relation to the difference of business industry, it reveals education, computer and others business industries accept that it strongly encourages respondents to make purchase decision, and only trading business industry said it is moderately encourages to make purchase decision.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| Lowest | 0.47 | 0 | 0 | 0 | 0.47 |
| Low | 0.94 | 1.67 | 0.77 | 2.94 | 6.32 |
| Moderate | 8.02 | 8.33 | 4.23 | 7.35 | 27.93 |
| High | 7.08 | 8.33 | 8.85 | 4.41 | 28.67 |
| Highest | 8.49 | 6.67 | 11.15 | 10.29 | 36.6 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.28 The level of influence on respondents' decision making to purchase a product from a company providing Callback service by implementing the normalization method***

Since the nature of callback service allowing verbal communication, the customers tend to be more reliable if they get the response from the customer service representative. From the survey, we find out that 38% of the respondents are highly reliable to the company, 31.3% is high reliable, 26% is moderately reliable, and only 0.7% is disagree that having interactive service can increase the reliability to the respondents.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 1 | .7 | .7 | .7 |
| Low | 6 | 4.0 | 4.0 | 4.7 |
| Moderate | 39 | 26.0 | 26.0 | 30.7 |
| High | 47 | 31.3 | 31.3 | 62.0 |
| Highest | 57 | 38.0 | 38.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.29 The level of reliability respondents have on in interactive service in Callback service***

To implement the normalization method in relation to the difference of business industry, it reveals education and computer business industries agree that verbal communication can increase reliable to the company at the highest level. Whereas other industry is highly reliable and trading industry is moderately reliable.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| Lowest | 0 | 0 | 0 | 1.47 | 1.47 |
| Low | 0.47 | 3.33 | 0.77 | 1.47 | 6.04 |
| Moderate | 8.02 | 10 | 4.62 | 5.88 | 28.52 |
| High | 7.08 | 6.67 | 8.46 | 8.82 | 31.03 |
| Highest | 9.43 | 5 | 11.15 | 7.35 | 32.93 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.30 The level of reliability respondents have on in interactive service in Callback service by implementing the normalization method***

4.6.4.1.2 Time

**- 20–30 minutes response time and 8.30-17.00 service hours**

Our survey reveals that the acceptable respond time varies from 30 seconds to 12 hourss as listed in the table below: The average of respondents need to wait for a respond time within 20-30 minutes.

| Callback | | Freouency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 30 seconds | 1 | .7 | 1.1 | 1.1 |
| | 1 minute | 5 | 3.3 | 5.6 | 6.7 |
| | 3 minutes | 2 | 1.3 | 2.2 | 8.9 |
| | 5 minutes | 6 | 4.0 | 6.7 | 15.6 |
| | 10 minutes | 14 | 9.3 | 15.6 | 31.1 |
| | 15 minutes | 4 | 2.7 | 4.4 | 35.6 |
| | 20 minutes | 4 | 2.7 | 4.4 | 40.0 |
| | 30 minutes | 17 | 11.3 | 18.9 | 58.9 |
| | 1 hour | 12 | 8.0 | 13.3 | 72.2 |
| | 2 hours | 11 | 7.3 | 12.2 | 84.4 |
| | 3 hours | 4 | 2.7 | 4.4 | 88.9 |
| | 6 hours | 2 | 1.3 | 2.2 | 91.1 |
| | 12 hours | 8 | 5.3 | 8.9 | 100.0 |
| | Total | 90 | 60.0 | 100.0 | |
| Missing | 1 day | 47 | 31.3 | | |
| | 2 days | 8 | 5.3 | | |
| | 3 days | 5 | 3.3 | | |
| | Total | 60 | 40.0 | | |
| Total | | 150 | 100.0 | | |

***Table 4.31 The level of respondents' acceptable response time to receive Callback service***

We also find that the respondents need to use callback service at the different time range.

According to the survey, 52% of respondents prefer using the service during the period of 8:30am-17:00pm, 31.3% prefers 24-hours service, 8.7% prefers the period of 17:01pm-00:00am and 8% prefers 17:01pm-8:30am.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 08.30-17.00 | 78 | 52.0 | 52.0 | 52.0 |
| 17.01-00.00 | 13 | 8.7 | 8.7 | 60.7 |
| 17.01-08.30 | 12 | 8.0 | 8.0 | 68.7 |
| 24 hours | 47 | 31.3 | 31.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.32 The level of preferred service hours for Callback service***

To implement the normalization method in relation to the difference of business industry, it reveals that trading, computer and other industries prefer using the service during the period of 8.30am-17.00pm. Whereas the education industry prefers 24-hours service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| 08.30-17.00 | 7.55 | 16.67 | 17.31 | 10.29 | 51.82 |
| 17.01-00.00 | 2.83 | 0 | 1.15 | 5.88 | 9.86 |
| 17.01-08.30 | 2.36 | 1.67 | 1.15 | 4.41 | 9.59 |
| 24 hours | 12.26 | 6.67 | 5.38 | 4.41 | 28.72 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.33 The level of preferred service hours for Callback service by implementing the normalization method***

4.6.4.1.3 Updated information

**- Depending on customer service representatives**

It is very vital to provide training for customer service representatives if the company has callback service. The service begins with the conversation between representative and customers who expect to get useful and updated information

back. Customer satisfaction critically relates to how the customer service representative handles customers' questions. The well-trained representatives with good and updated product knowledge can tremendously increase customer satisfaction and ease the decision making process.

According to the survey tells that 42% of the respondent strong requires the information updating. 34% strongly require the information updating, while only 0.7% does not need the update.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 1 | .7 | .7 | .7 |
| Low | 8 | 5.3 | 5.3 | 6.0 |
| Moderate | 27 | 18.0 | 18.0 | 24.0 |
| High | 63 | 42.0 | 42.0 | 66.0 |
| Highest | 51 | 34.0 | 34.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.34 The level of frequency in updating information needs in Callback***

To implement the normalization method in relation to the difference business industry, it reveals that every business industry strongly requires the information updating.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| Lowest | 0.47 | 0 | 0 | 1.47 | 1.94 |
| Low | 2.83 | 1.67 | 0.38 | 2.94 | 7.82 |
| Moderate | 3.3 | 5 | 3.85 | 4.41 | 16.56 |
| High | 3.77 | 8.33 | 5 | 7.35 | 24.45 |
| Highest | 14.62 | 10 | 15.77 | 8.82 | 49.21 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.35 The level of frequency in updating information needs in Callback by implementing the normalization method***

4.6.4.1 4 Comfortability

**- Medium level of comfortability**

Before receiving the service, the customer are required to supply some pieces of information.

The survey reveals that only 6.7% of the respondents has the most difficulty going through this process. And the most of respondents feel moderately difficult to ask for this service.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 10 | 6.7 | 6.7 | 6.7 |
| Low | 20 | 13.3 | 13.3 | 20.0 |
| Moderate | 83 | 55.3 | 55.3 | 75.3 |
| High | 27 | 18.0 | 18.0 | 93.3 |
| Highest | 10 | 6.7 | 6.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.36 The level of difficulties in registration process to ask for the Callback service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry has the moderately difficulty to ask for the service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| Lowest | 0.47 | 1.67 | 3.08 | 0 | 5.22 |
| Low | 1.42 | 5 | 3.46 | 7.35 | 17.23 |
| Moderate | 11.79 | 15 | 14.23 | 17.65 | 58.67 |
| High | 8.96 | 0 | 3.08 | 0 | 12.04 |
| Highest | 2.36 | 3.33 | 1.15 | 0 | 6.84 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.37 The level of difficulties in registration process to ask for the Callback service by implementing the normalization method***

Also, The survey reveals that 46% of the respondents agree that Callback service is moderately difficult to use, while 4.7% of them said it is the most difficult to use.

| CALLBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 24 | 16.0 | 16.0 | 16.0 |
| Low | 32 | 21.3 | 21.3 | 37.3 |
| Moderate | 69 | 46.0 | 46.0 | 83.3 |
| High | 18 | 12.0 | 12.0 | 95.3 |
| Highest | 7 | 4.7 | 4.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.38 The level of difficulties in using Callback service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry has the moderately difficulty to use the service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Callback | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 8.33 | 6.15 | 1.47 | 16.89 |
| Low | 5.19 | 3.33 | 6.54 | 2.94 | 18 |
| Moderate | 13.21 | 11.67 | 8.46 | 17.65 | 50.99 |
| High | 3.77 | 0 | 3.08 | 2.94 | 9.79 |
| Highest | 1.89 | 1.67 | 0.77 | 0 | 4.33 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.39 The level of difficulties in using Callback service by implementing the normalization method***

4.6.4.2 Business aspects

4.6.4.2.1 Difference from competitors

**- Difference from competitors**

Callback is a brand new service that has not been broadly developed and adopted in customer service. Hence, the company providing this service has uniqueness and can differentiate itself from other companies.

4.6.4.2.2 Increase in channel of distributions

**- Potentially increases in sales**

From customers' perspective, it is easier to get company access and better understanding of its product with the use of callback service. As mentioned earlier that callback enhances customer satisfaction, it also affects customers' purchasing decision making. The more customers are satisfied with the company and service, the easier they can make decision. The survey also indicates that more purchase can be done with the help of callback service.

## 4.7 Critical Success Factor (Faxback)

### 4.7.1 Technical Factor

4.7.1.1 Ease of implementation and maintenance

**- Medium level to implement and maintenance (level 3)**

Faxback service works is similar to the operation of callback. Practically, the company can set up the automatic system to run this service instead of the manual one. When the customers select the supporting program designed by the company, the system will automatically fax the information through modem back to them. By this way, the company can provide the 24-hours service due to no staff required.

The implementations for faxback are:

Hardware

The alternative to use hardware for this service depends on the company's decision to have its own server or not. Actually, faxback service doesn't require server because the clients' information can be kept in company's text file. The company will not miss any message sending and receiving, if the company uses 24-hour Internet access through the rented server as the information hub because of the ability to remind us the information arriving. However, it is better to own a server. In consideration of server capacity, the company can freely allocate server space to its every single employee.

- In case of the company has their own server, it's not only the server required, agents also needs PC to check the incoming information from the clients: 2 telephone lines, one for the internet connection

through ISP so that both the company and the clients can get internet access all the time. Another line is for sending fax message back; router and leased line to link with ISP and fax machine.

- In case of the company rents a space from the web-hosting company, the company can also provide faxback service. The company has to pay for the server rental fee and supporting program for information transmission from web page to be kept as database. Another important concern is the length of service. If the company would like to provide 24-hour service, lease line is more efficient in term of cost and data access. If not, the company can save more cost by buying an Internet package. The required hardware's are PC, telephone lines for Internet connection, router and leased line to link with ISP. For hourly-based usage, the modem is needed for Internet access and data transformation from digital to analog and vice versa, and fax machine to fax the information back to the customers.

Note: In this thesis, the cost evaluations for this service will base on the 24-hour service in order to reasonably compare with other services.

Software

The required software is the supporting program for sending the data from the web to be kept in server. The suitable programs are CGI script, ASP, PHP3, etc.

Multimedia

No multimedia software and hardware are required for this service

Implementation

The company needs to write a program to facilitate the data transmission. It takes time to set up the system for the agent to keep the data into database, and also get the data from database.

Maintenance

The cost of maintenance is approximately estimated to be 15% of the annual setup cost.

### 4.7.2 Economical Factor

4.7.2.1 Setup cost

**- Medium setup cost**

In case of having own server

| Cost | Baht |
|---|---|
| Server 1 set | 100,000 |
| Client 1 set | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Monthly fee (Telephone service) | 100 |
| Router | 10,000-100,000 |
| Software --hiring programmer to write a program for sending the information back | 10,000 |
| Faxcimine set | 10,000 |
| Maintenance cost | 15% per year |

In case of renting space on a server with 24 hour service

| Cost | Baht |
|---|---|
| Client PC 1 set | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Monthly fee (telephone service) | 100 |
| Router | 10,000-100,000 |
| Web Hosting fee | 2,500-5,000 |
| Web Hosting (per month) | 1,500-5,000 |
| Software- hiring programmer to write a program for sending the information back | 10,000 |
| Faxcimine set | 10,000 |
| Maintenance cost | 15% per year |

***Table 4.40 Cost of Faxback***

4.7.2.2 Usage cost

**- High usage cost**

Usage cost is based on the provided service time and areas. The farther the customers are from the company, the higher the cost. Operator cost also depends on the length of service. The detailed usage costs are listed in the below table.

| Cost | Baht |
|---|---|
| Customer service representative | 168 baht / 8 hours |
| Telephone cost (Local) | 3 baht / per call |
| (long distance) | depend on province |
| (International) | depend on country |

*Table 4.41 Usage cost of Faxback*

**4.7.3 Support Factor**

4.7.3.1 Service areas

**- Domestic service areas**

In consideration of usage cost, faxback service is more suitable to be provided domestically. For international service, Textchat and VoIP are good alternatives for foreign customers.

4.7.3.2 Number of customer

**- Limited customer to provide service at a time / Limited number of customer served in terms of service costs**

The company can serve only one client at a time because it is impractical to send fax messages to many customers at the same time. Service delay is unavoidable. To solve this problem, more agents, fax machine and telephone lines are needed. Consequently, usage cost increases. Also, the more customers the company has in service, the more usage cost will be incurred in case of faxing fee as well as hiring customer service representatives. Actually, using the program to send the information pass through the system will cut off hiring cost.

### 4.7.4 Beneficial Factor

4.7.4.1 Customer satisfaction

4.7.4.1.1 Reliability

**- Medium level of reliability for Faxback**

Although faxback service is not a verbal communication between two parties, the company can also gain the reliability from its customers. The fax messages to customers are the proof of company's acknowledgement of their requests. Strategically and psychologically, customers feel good when they get the response and they feel better if they get the useful response. As a result, they have better attitude toward the company. Apparently, reliability has major relevance to purchasing decision making.

From the survey, 31.3% of respondents agree that faxback service can highly increase the company image, while minorities commented differently.

| FAXBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 6 | 4.0 | 4.0 | 4.0 |
| Low | 11 | 7.3 | 7.3 | 11.3 |
| Moderate | 41 | 27.3 | 27.3 | 38.7 |
| High | 45 | 30.0 | 30.0 | 68.7 |
| Highest | 47 | 31.3 | 31.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.42 The level of increasing of company image from Faxback service***

To implement the normalization method in relation to the difference of business industry, it reveals the education, trading

and other industries agree that faxback service can increase the company image at the highest level. Whereas computer industry stated that it highly increase the company image.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Faxback | Education | Trading | Computer | Others | |
| Lowest | 1.89 | 1.67 | 0.38 | 0 | 3.94 |
| Low | 1.42 | 5 | 1.15 | 2.94 | 10.51 |
| Moderate | 7.55 | 5 | 6.15 | 8.82 | 27.52 |
| High | 6.6 | 5 | 9.62 | 4.41 | 25.63 |
| Highest | 7.55 | 8.33 | 7.69 | 8.82 | 32.39 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.43 The level of increasing of company image from Faxback service by implementing the normalization method***

Faxback service can really encourage customers to make decision on purchasing a company's product when comparing with other Internet-based services.

As the result of the survey, to provide this service, majority of 34.7% accept that it highly encourages respondents to make purchase decision, while 2% of them said they won't be strongly encourages by the service.

| FAXBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 3 | 2.0 | 2.0 | 2.0 |
| Low | 16 | 10.7 | 10.7 | 12.7 |
| Moderate | 30 | 20.0 | 20.0 | 32.7 |
| High | 49 | 32.7 | 32.7 | 65.3 |
| Highest | 52 | 34.7 | 34.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.44 The level of influence on respondents' decision making to purchase a product from a company providing Faxback service***

To implement the normalization method in relation to the difference of business industry, it reveals the education, trading and other industries accept that it encourages respondents to make purchase decision at the highest level. Whereas the computer industry stated that it highly encourages respondents to make purchase decision.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Faxback | Education | Trading | Computer | Others | |
| Lowest | 1.42 | 0 | 0 | 0 | 1.42 |
| Low | 3.3 | 3.33 | 1.15 | 5.88 | 13.66 |
| Moderate | 6.13 | 3.33 | 4.23 | 5.88 | 19.57 |
| High | 6.13 | 8.33 | 11.54 | 1.47 | 27.47 |
| Highest | 8.02 | 10 | 8.08 | 11.76 | 37.86 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.45 The level of influence on respondents' decision making to purchase a product from a company providing Faxback service by implementing the normalization method***

4.7.4.1.2 Time

**- 30-40 minutes response time, 08.30-17.00 service hours**

From the survey, the respondents expects different responding time as listed in the table as follow. It is shown that the average of respondents will accept to get the response in 30-40 minutes.

| Faxback | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Immediately | 1 | .7 | 1.1 | 1.1 |
| | 1 minute | 5 | 3.3 | 5.4 | 6.5 |
| | 3 minutes | 2 | 1.3 | 2.2 | 8.7 |
| | 5 minutes | 4 | 2.7 | 4.3 | 13.0 |
| | 10 minutes | 16 | 10.7 | 17.4 | 30.4 |
| | 15 minutes | 7 | 4.7 | 7.6 | 38.0 |
| | 20 minutes | 2 | 1.3 | 2.2 | 40.2 |
| | 30 minutes | 16 | 10.7 | 17.4 | 57.6 |
| | 40 minutes | 3 | 2.0 | 3.3 | 60.9 |
| | 1 hour | 9 | 6.0 | 9.8 | 70.7 |
| | 2 hours | 8 | 5.3 | 8.7 | 79.3 |
| | 3 hours | 5 | 3.3 | 5.4 | 84.8 |
| | 5 hours | 2 | 1.3 | 2.2 | 87.0 |
| | 6 hours | 2 | 1.3 | 2.2 | 89.1 |
| | 12 hours | 10 | 6.7 | 10.9 | 100.0 |
| | Total | 92 | 61.3 | 100.0 | |
| Missing | 1 day | 44 | 29.3 | | |
| | 2 days | 9 | 6.0 | | |
| | 3 days | 5 | 3.3 | | |
| | Total | 58 | 38.7 | | |
| Total | | 150 | 100.0 | | |

***Table 4.46 The level of respondents' acceptable respond time to receive Faxback service***

At the same time, the required service period also varies. 48% of respondent prefers the period of 8:30am-17:00pm, 41.3% prefers 24-hours service. 6% prefers the period of 17:01pm-8:30am and 4.7% prefers 17:01pm-00:00am.

| FAXBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 08.30-17.00 | 72 | 48.0 | 48.0 | 48.0 |
| 17.01-00.00 | 7 | 4.7 | 4.7 | 52.7 |
| 17.01-08.30 | 9 | 6.0 | 6.0 | 58.7 |
| 24 hours | 62 | 41.3 | 41.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.47 The level of preferred service hours needed in Faxback***

To implement the normalization method in relation to the difference of business industry, it reveals the trading, computer and other industries prefer the period of 8:30am-17:00pm. While the education industry prefers 24-hours service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Faxback | Education | Trading | Computer | Others | |
| 08.30-17.00 | 7.08 | 15 | 15 | 13.24 | 50.32 |
| 17.01-00.00 | 1.42 | 0 | 0.77 | 2.94 | 5.13 |
| 17.01-08.30 | 1.89 | 3.33 | 0.38 | 2.94 | 8.54 |
| 24 hours | 14.62 | 6.67 | 8.85 | 5.88 | 36.02 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.48 The level of preferred service hours needed in Faxback by implementing the normalization method***

4.7.4.1.3 Updated information

**- Depending on company policy**

It is strongly agreed that the company can get more customer satisfaction providing updated information through faxback service. Different customers face different problems and have different areas of interest in the product. Hence, they have different doubts that need to be clarified differently.

Information updating is another method to secure customer satisfaction.

From the survey, 52.7% of the respondents strongly agrees that the company needs to update the information regularly. 22% agrees with this fact. 17.3% shows moderate concern about information update. 6.7% disagrees and only 1.3% strongly disagrees to have the update.

| FAXBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 2 | 1.3 | 1.3 | 1.3 |
| Low | 10 | 6.7 | 6.7 | 8.0 |
| Moderate | 26 | 17.3 | 17.3 | 25.3 |
| High | 33 | 22.0 | 22.0 | 47.3 |
| Highest | 79 | 52.7 | 52.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.49 The level of frequency in updating information needed in Faxback service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry strongly agrees that the company needs to update the information regularly.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Faxback | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 0 | 0 | 0 | 0.94 |
| Low | 2.36 | 1.67 | 0.77 | 2.94 | 7.74 |
| Moderate | 3.77 | 6.67 | 3.85 | 5.88 | 20.17 |
| High | 5.19 | 3.33 | 6.15 | 5.88 | 20.55 |
| Highest | 12.74 | 13.33 | 14.23 | 10.29 | 50.59 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.50 The level of frequency in updating information needed in Faxback service by implementing the normalization method***

4.7.4.1 4 Comfortability

**- Medium level of comfortability**

The respondents are required to go through some procedures before receiving the service.

The survey reveals that only 5.3% of the respondents agree that faxback service is more difficult in registration process to ask for the service. And most of respondents 54% feel moderately difficult to ask for the service.

| FAXBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 9 | 6.0 | 6.0 | 6.0 |
| Low | 20 | 13.3 | 13.3 | 19.3 |
| Moderate | 81 | 54.0 | 54.0 | 73.3 |
| High | 32 | 21.3 | 21.3 | 94.7 |
| Highest | 8 | 5.3 | 5.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.51 The level of difficulties in registration process to ask for the Faxback service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry feels moderately difficult to ask for the service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Faxback | Education | Trading | Computer | Others | |
| Lowest | 1.42 | 1.67 | 1.54 | 1.47 | 6.1 |
| Low | 1.89 | 1.67 | 5.38 | 1.47 | 10.41 |
| Moderate | 11.79 | 18.33 | 13.08 | 16.18 | 59.38 |
| High | 7.08 | 0 | 5 | 5.88 | 17.96 |
| Highest | 2.83 | 3.33 | 0 | 0 | 6.16 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.52 The level of difficulties in registration process to ask for the Faxback service by implementing the normalization method***

Also, according to the survey, 52% of respondents agree that faxback is moderately difficult to use, while only 4% of them said it is the most difficult to use.

| FAXBACK | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 18 | 12.0 | 12.0 | 12.0 |
| Low | 31 | 20.7 | 20.7 | 32.7 |
| Moderate | 78 | 52.0 | 52.0 | 84.7 |
| High | 17 | 11.3 | 11.3 | 96.0 |
| Highest | 6 | 4.0 | 4.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.53 The level of difficulties in using Faxback service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry agrees that faxback is moderately difficult to use.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Faxback | Education | Trading | Computer | Others | |
| Lowest | 1.89 | 5 | 3.85 | 1.47 | 12.21 |
| Low | 4.25 | 1.67 | 6.92 | 4.41 | 17.25 |
| Moderate | 14.15 | 15 | 11.15 | 14.71 | 55.01 |
| High | 3.3 | 1.67 | 2.31 | 4.41 | 11.69 |
| Highest | 1.42 | 1.67 | 0.77 | 0 | 3.86 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.54 The level of difficulties in using Faxback service by implementing the normalization method***

4.7.4.2 Business aspects

4.7.4.2 1 Difference from competitors

**- Difference from competitors**

Faxback is a brand new service that has not been broadly developed and adopted in customer service. Hence, the company providing this service has uniqueness and can differentiate itself from other companies.

4.7.4.2 2 Increase in channel of distributions

**- Potentially increases in sales**

From customers' perspective, it is easier to get company access and better understanding of its product with the use of faxback service. As mentioned earlier that faxback enhances customer satisfaction, it also affects customers' purchasing decision making. The more customers are satisfied with the company and service, the easier they can make decision. The survey also indicates that more purchase can be done with the help of faxback service.

## 4.8 Critical Success Factor (Textchat)

### 4.8.1 Technical Factor

4.8.1.1 Ease of implementation and maintenance

**- Difficult to implement and maintenance (level 5)**

It is quite difficult to implement with knowledge of computers and communications since Textchat requires a special program to facilitate on-line chat. Owing to the interactive feature of textchat, the more complicated program, compared to callback and faxback service, that can activate the service immediately after the preliminary is needed. However, the implementation is easier if the company uses the instant program available in the market instead of writing its own program. The implementation for textchat are:

Hardware

The company needs to own a server for setup chat system, PC for receiving the incoming data from customers and chat purpose, telephone lines to link with ISP for 24-hour internet access and *immediate response to customers' questions, router and leased line.* Note: In this thesis, the cost evaluations for this service will base on the 24-hour service in order to reasonably compare with other services.

Software

The required software is the supporting chat program with various features e.g. database feature, switching feature which the agent can response to many customers at a time, etc.

Multimedia

No additional multimedia software and hardware are required for this service.

Implementation

The implementation of textchat is more complicated than those of callback and faxback in that textchat requires program with special feature that enables on-line chat. Hence, it takes longer time to implement the system.

Maintenance

The cost of maintenance is approximately estimated to be 15% of the annual setup cost.

### 4.8.2 Economical Factor

4.8.2.1 Setup cost

**- High setup cost**

| Cost | Baht |
|---|---|
| server 1 set | 100,000 |
| Client 1 set | 25,000 |
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Monthly fee (Telephone service) | 100 |
| Router | 10,000-100,000 |
| Software --chat | 50,000 |
| Maintenance cost | 15% per year |

***Table 4.55 Cost of Textchat***

4.8.2.2 Usage cost

**- Medium usage cost**

Usage cost of textchat is solely based on hiring customer service representative that is varied on service length.

| Cost | Baht |
|---|---|
| Customer service representative | 168 baht / 8 hours |

***Table 4.56 Usage cost of Textchat***

**4.8.3 Support Factor**

4.8.3.1 Service areas

**- International service areas**

Textchat is considered as seamless service. The customers from all over the world can use this service without additional cost.

4.8.3.2 Number of customer

**- Number of customer to provide service at a time depending on software / The number of customer served in terms of service costs depend on company policy**

The customer service representative can provide the service to multiple customers at a time. However, the service capability depends greatly on supporting program used. The company may use the software with special feature that allows its representative to switch from one customer to another in case of slow response or internet traffic. But it is impossible to serve multiple customers at the same time. Service delay is unavoidable. To solve this problem, more customer service representative are required. Consequently, usage cost increases in the case of hiring customer service representatives.

### 4.8.4 Beneficial Factor

4.8.4.1 Customer satisfaction

4.8.4.1.1 Reliability

**- High level of reliability for this service**

Textchat service can create the company image to the customer. From the survey, 36% of respondents agree that Textchat servive can highly increase the company image, while minorities commented differently.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 5 | 3.3 | 3.3 | 3.3 |
| Low | 11 | 7.3 | 7.3 | 10.7 |
| Moderate | 39 | 26.0 | 26.0 | 36.7 |
| High | 41 | 27.3 | 27.3 | 64.0 |
| Highest | 54 | 36.0 | 36.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.57 The level of increasing of company image from Textchat service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business agrees that Textchat service can increase the company image at the highest level.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| Lowest | 0.47 | 3.33 | 0.77 | 0 | 4.57 |
| Low | 1.42 | 0 | 2.69 | 1.47 | 5.58 |
| Moderate | 5.66 | 5 | 8.08 | 4.41 | 23.15 |
| High | 7.55 | 8.33 | 5.38 | 8.82 | 30.08 |
| Highest | 9.91 | 8.33 | 8.08 | 10.29 | 36.61 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.58 The level of increasing of company image from Textchat service by implementing the normalization method***

In addition to increase the company image, reliability has direct relationship with respondents' decision making to purchase a product.

From the survey, 35.3% accept that it highly encourages respondents to make purchase decision, while only 3.3% of them said that they won't be strongly encouraged by the service.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 5 | 3.3 | 3.3 | 3.3 |
| Low | 22 | 14.7 | 14.7 | 18.0 |
| Moderate | 33 | 22.0 | 22.0 | 40.0 |
| High | 37 | 24.7 | 24.7 | 64.7 |
| Highest | 53 | 35.3 | 35.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.59 The level of influence on respondents' decision making to purchase a product from providing Textchat service***

To implement the normalization method in relation to the difference of business industry, it reveals that education, computer and other industries agree that it highly encourages

respondents to make purchase decision at the highest level, while only trading industry said that it highly encourages respondents to make purchase decision.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| Lowest | 0.47 | 3.33 | 0.77 | 0 | 4.57 |
| Low | 5.66 | 0 | 3.08 | 2.94 | 11.68 |
| Moderate | 4.72 | 5 | 6.15 | 5.88 | 21.75 |
| High | 6.13 | 11.67 | 5.38 | 4.41 | 27.59 |
| Highest | 8.02 | 5 | 9.62 | 11.76 | 34.4 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.60 The level of influence on respondents' decision making to purchase a product from providing Textchat service by implementing the normalization method***

The response from customer service representatives is another factor enhancing customer satisfaction and reliability. According to the survey reveals that 36.7% of the respondents said that textchat service can create highly reliable, while minorities commented differently.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 1 | .7 | .7 | .7 |
| Low | 14 | 9.3 | 9.3 | 10.0 |
| Moderate | 32 | 21.3 | 21.3 | 31.3 |
| High | 48 | 32.0 | 32.0 | 63.3 |
| Highest | 55 | 36.7 | 36.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.61 The level of reliability respondents have on interactive service in* Textchat**

To implement the normalization method in relation to the difference of business industry, it reveals that every business said that Textchat service could create reliable at the highest level.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| Lowest | 0 | 0 | 0.38 | 0 | 0.38 |
| Low | 0.94 | 3.33 | 3.08 | 2.94 | 10.29 |
| Moderate | 5.66 | 5 | 5.38 | 4.41 | 20.45 |
| High | 7.55 | 8.33 | 8.08 | 8.82 | 32.78 |
| Highest | 10.85 | 8.33 | 8.08 | 8.82 | 36.08 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.62 The level of reliability respondents have on interactive service in Textchat by implementing the normalization method***

4.8.4.1.2 Time

**- 3 - 5 minutes response time, 24 hours service**

From the survey, the respondent expects different responding time as listed in the table as follow: The average of respondents need to wait for a respond time within 3 - 5 minutes.

| Textchat | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Immediately | 17 | 11.3 | 14.5 | 14.5 |
| | 30 seconds | 2 | 1.3 | 1.7 | 16.2 |
| | 1 minute | 21 | 14.0 | 17.9 | 34.2 |
| | 2 minutes | 3 | 2.0 | 2.6 | 36.8 |
| | 3 minutes | 13 | 8.7 | 11.1 | 47.9 |
| | 5 minutes | 20 | 13.3 | 17.1 | 65.0 |
| | 10 minutes | 16 | 10.7 | 13.7 | 78.6 |
| | 15 minutes | 12 | 8.0 | 10.3 | 88.9 |
| | 20 minutes | 3 | 2.0 | 2.6 | 91.5 |
| | 30 minutes | 10 | 6.7 | 8.5 | 100.0 |
| | Total | 117 | 78.0 | 100.0 | |
| Missing | 40 minutes | 2 | 1.3 | | |
| | 1 hour | 10 | 6.7 | | |
| | 2 hours | 3 | 2.0 | | |
| | 3 hours | 1 | .7 | | |
| | 12 hours | 3 | 2.0 | | |
| | 1 day | 12 | 8.0 | | |
| | 2 days | 2 | 1.3 | | |
| | Total | 33 | 22.0 | | |
| Total | | 150 | 100.0 | | |

***Table 4.63 The level of respondents' acceptable response time to receive Textchat service***

At the same time, the required service period also varies. 39.3% of respondent prefers 24-hours service, 37.3% prefers the period of 8:30am-17:00pm, 13.3% prefers 17:01pm-0:00am and 10% prefers the period of 17:01pm-8:30am.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 08.30-17.00 | 56 | 37.3 | 37.3 | 37.3 |
| 17.01-00.00 | 20 | 13.3 | 13.3 | 50.7 |
| 17.01-08.30 | 15 | 10.0 | 10.0 | 60.7 |
| 24 hours | 59 | 39.3 | 39.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.64 The level of preferred service hours for Textchat service***

To implement the normalization method in relation the difference of business industry, it reveals that education, trading industries prefers 24-hours service. Whereas the computer, other industries prefer the period of 8:30am-17:00pm.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| 08.30-17.00 | 3.3 | 10 | 13.46 | 11.76 | 38.52 |
| 17.01-00.00 | 4.72 | 0 | 3.08 | 2.94 | 10.74 |
| 17.01-08.30 | 2.36 | 3.33 | 1.54 | 5.88 | 13.11 |
| 24 hours | 14.62 | 11.67 | 6.92 | 4.41 | 37.62 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.65 The level of preferred service hours for Textchat service by implementing the normalization method***

4.8.4.1.3 Updated information

**- Depending on customer service representatives**

It is strongly agreed that the company can get more customer satisfaction providing updated information through textchat service. Different customers face different problems and have different areas of interest in the product. Hence, they have different doubts that need to be clarified differently. Information updating is another method to secure customer satisfaction.

From the survey, 50% of the respondent strongly agrees that the company needs to update the information regularly, 20% agrees with this fact, 22.7% shows moderate concern about information

update. 6.7% disagrees and only 0.7% strongly disagrees to have the update.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 1 | .7 | .7 | .7 |
| Low | 10 | 6.7 | 6.7 | 7.3 |
| Moderate | 34 | 22.7 | 22.7 | 30.0 |
| High | 30 | 20.0 | 20.0 | 50.0 |
| Highest | 75 | 50.0 | 50.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.66 The level of frequency in updating information needed in Textchat service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry strongly agrees that the company needs to update the information regularly.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| Lowest | 0 | 1.67 | 0 | 0 | 1.67 |
| Low | 2.36 | 1.67 | 1.15 | 1.47 | 6.65 |
| Moderate | 5.19 | 5 | 5.77 | 7.35 | 23.31 |
| High | 3.3 | 3.33 | 6.15 | 7.35 | 20.13 |
| Highest | 14.15 | 13.33 | 11.92 | 8.82 | 48.22 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.67 The level of frequency in updating information needed in Textchat service by implementing the normalization method***

4.8.4.1.4 Comfortablility

**- Medium level of comfortability**

The customers are required to go through some procedures before receiving the service.

The survey reveals that only 8.7% of the respondent feel the most difficulty in registration process to ask for the service, 46.7% feel moderately difficult in registration process to ask for the service.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 7 | 4.7 | 4.7 | 4.7 |
| Low | 25 | 16.7 | 16.7 | 21.3 |
| Moderate | 70 | 46.7 | 46.7 | 68.0 |
| High | 35 | 23.3 | 23.3 | 91.3 |
| Highest | 13 | 8.7 | 8.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.68 The level of difficulties for registration process to ask for Textchat service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry feels the most difficulty in registration process to ask for the service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 1.67 | 1.54 | 0 | 4.15 |
| Low | 5.19 | 1.67 | 3.46 | 5.88 | 16.2 |
| Moderate | 10.38 | 16.67 | 11.54 | 11.76 | 50.35 |
| High | 5.66 | 5 | 6.15 | 5.88 | 22.69 |
| Highest | 2.83 | 0 | 2.31 | 1.47 | 6.61 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.69 The level of difficulties for registration process to ask for Textchat service by implementing the normalization method***

And the other one is difficulty to use the service. According to the survey, 44.7% of respondents agree that Textchat service is moderately difficult to use, while only 6% of them said it is the most difficult to use.

| TEXTCHAT | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 18 | 12.0 | 12.0 | 12.0 |
| Low | 20 | 13.3 | 13.3 | 25.3 |
| Moderate | 67 | 44.7 | 44.7 | 70.0 |
| High | 36 | 24.0 | 24.0 | 94.0 |
| Highest | 9 | 6.0 | 6.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.70 The level of difficulties in using Textchat service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry agrees that Textchat service is moderately difficult to use.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| Textchat | Education | Trading | Computer | Others | |
| Lowest | 2.36 | 5 | 3.08 | 2.94 | 13.38 |
| Low | 3.77 | 0 | 3.85 | 2.94 | 10.56 |
| Moderate | 10.38 | 13.33 | 11.15 | 11.76 | 46.62 |
| High | 5.66 | 5 | 6.15 | 7.35 | 24.16 |
| Highest | 2.83 | 1.67 | 0.77 | 0 | 5.27 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.71 The level of difficulties in using Textchat service by implementing the normalization method***

4.8.4.2 Business aspects

4.8.4.2.1 Difference from competitors

**- Difference from competitors**

Textchat is a new service that has not been broadly developed and adopted in customer service. Hence, the company providing this service has uniqueness and can differentiate itself from its competitors.

4.8.4.2.2 Increase in channel of distributions

**- Potentially increases in sales**

From customers' perspective, it is easier to get company access and better understanding of its product with the use of textchat service. As mentioned earlier that textchat enhances customer satisfaction, it also affects customers' purchasing decision making. The more customers are satisfied with the company and service, the easier they can make decision. The survey also indicates that more purchase can be done with the help of textchat service.

## 4.9 Critical Success Factor (VoIP)

### 4.9.1 Technical Factor

4.9.1.1 Ease of implementation and maintenance

**- Quiet difficult to implement and maintenance (level 4)**

It is quite difficult to implement with knowledge of computers and communications since VoIP requires a special software to facilitate on-line chat. It takes some times to customize the proprietary software for VoIP. It is easier poll the system from existing software; however, it depends on which kind of VoIP the company will use. In case of Netmeeting, the service can be done through IP address. The company has to customize the program that company's IP address is shown for customers' convenience to chat. In case of Mediaring, the service is done through telephone numbers which are shown on webpage. The customers can use other special features available in their software. They can also download the program prior to receiving the service if they don't have such software.

The implementation for VoIP are:

Hardware

The company needs to own a server for setup the system for VoIP service, PC for receiving the incoming data from customers and chat purpose, telephone lines to link with ISP for 24-hour internet access and immediate response to customers' questions, router and leased line. However, By doing this, the company needs to have high-speed connection line rather than a dial-up connection, which could be an ISDN, T1, DSL, Cable, etc.

Note: In this thesis. the cost evaluations for this service will base on the 24-hour service in order to reasonably compare with other services.

Software

The required softwares for VoIP program are Netmeeting. Mediaring talk and customized software written for the purpose of IP address display in case of company does not have their own server and they connect to the ISP via a dial-up connection or telephone numbers for Mediaring.

Multimedia

Multimedia tools and accessories required for VoIP service are soundcard, amplifier, microphone and headset.

Implementation

The implementation of VoIP is the most complicated process compared to other kind or customer services mentioned in this thesis in that VoIP requires special program that enables on-line chat and immediate service support.

Maintenance

The cost of maintenance is approximately estimated to be 15% of the annual setup cost.

### 4.9.2 Economical Factor

4.9.2.1 Setup cost

**- High setup cost**

| Cost | Baht |
|---|---|
| Server 1 set | 100,000 |
| Client 1 set | 25,000 |

| | |
|---|---|
| Leased line (start-up fee) 64Kbps | 40,000-70,000 |
| Leased line (per month) 64Kbps | 40,000-70,000 |
| Or | |
| ISDN line ( start-up fee) 64 Kbps | 40,000 baht / 4,200 MB |
| ISDN line (per month) 64Kbps | 20,000 baht / 1,000 MB |
| Monthly fee (Telephone service) | 100 |
| Router | 10,000-100,000 |
| Software – Netmeeting, Mediaring Talk | Free |
| - hiring programmer to write the program for showing IP address | 10,000 |
| Soundcard | 2,800 |
| Speakerphone | 400-1,600 |
| Microphone | 400 |
| Maintenance cost | 15% per year |

***Table 4.72 Cost of VoIP***

4.9.2.2 Usage cost

**- Medium usage cost**

Usage cost of VoIP is solely based on hiring customer service representative varied on service length. There is no other ongoing cost of service per time.

| Cost | Baht |
|---|---|
| Customer service representatives | 168 baht / 8 hours |

***Table 4.73 Usage cost of VoIP***

### 4.9.3 Support Factor

4.9.3.1 Service areas

**- International service areas**

Because there is no usage cost incurred, the service can be provided locally and internationally without any ongoing cost.

4.9.3.2 Number of customer

**- Limited customer to provide service at a time / The number of customer served in terms of service costs depend on company policy**

The company can serve only one client at a time because it is on-line conversation between customer service representative and customer. It is impossible to serve multiple customers at the same time. Service delay is unavoidable. To solve this problem, more agents are required. Consequently, usage cost increases in the case of hiring customer service representatives.

### 4.9.4 Beneficial Factor

4.9.4.1 Customer satisfaction

4.9.4.1.1 Reliability

**- High level of reliability for this service**

VoIP service can create the company image to the customer. From the survey, 35.3% of respondents agree that VoIP service can highly increase the company image, while minorities commented differently.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 12 | 8.0 | 8.0 | 8.0 |
| Low | 7 | 4.7 | 4.7 | 12.7 |
| Moderate | 36 | 24.0 | 24.0 | 36.7 |
| High | 42 | 28.0 | 28.0 | 64.7 |
| Highest | 53 | 35.3 | 35.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.74 The level of increasing of company image from VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business agrees that VoIP service can increase the company image at the highest level.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 1.89 | 6.67 | 1.15 | 1.47 | 11.18 |
| Low | 1.42 | 1.67 | 0.38 | 2.94 | 6.41 |
| Moderate | 6.6 | 6.67 | 5.77 | 4.41 | 23.45 |
| High | 5.66 | 3.33 | 8.85 | 7.35 | 25.19 |
| Highest | 9.43 | 6.67 | 8.85 | 8.82 | 33.77 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.75 The level of increasing of company image from VoIP service by implementing the normalization method***

In addition to increase the company image, reliability has direct relationship with customers' decision making to purchase a product.

From survey, 32% accept that it highly encourages respondent to make purchase decision, while 4.7% of them said that they won't be strongly encouraged by the service.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 7 | 4.7 | 4.7 | 4.7 |
| Low | 19 | 12.7 | 12.7 | 17.3 |
| Moderate | 35 | 23.3 | 23.3 | 40.7 |
| High | 41 | 27.3 | 27.3 | 68.0 |
| Highest | 48 | 32.0 | 32.0 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.76 The level of influence respondents' decision making to purchase a product from providing VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that education, other industries accept that it encourages respondent to make purchase decision at the highest level, while trading, computer industries said that it is high level to encourage for making purchase decision.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 3.33 | 0.77 | 1.47 | 6.51 |
| Low | 4.72 | 3.33 | 2.31 | 1.47 | 11.83 |
| Moderate | 6.13 | 5 | 5.38 | 7.35 | 23.86 |
| High | 5.19 | 8.33 | 8.85 | 2.94 | 25.31 |
| Highest | 8.02 | 5 | 7.69 | 11.76 | 32.47 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.77 The level of influence respondents' decision making to purchase a product from providing VoIP service by implementing the normalization method***

The response from customer service representatives is another factor that can enhance customer satisfaction and reliability. According to the survey, 37.3% of the respondents agree that VoIP can create highly reliable to the company, and only 3.3% strongly disagrees that VoIP can create more reliability.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 5 | 3.3 | 3.3 | 3.3 |
| Low | 14 | 9.3 | 9.3 | 12.7 |
| Moderate | 31 | 20.7 | 20.7 | 33.3 |
| High | 44 | 29.3 | 29.3 | 62.7 |
| Highest | 56 | 37.3 | 37.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.78 The level of reliability respondents' have on interactive service in* VoIP**

To implement the normalization method in relation to the difference of business industry, it reveals that education, computer, other industries agree that VoIP can create reliable to the company at the highest level, and only trading industry said that it can create moderately reliable to the company.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 1.67 | 0.38 | 1.47 | 4.46 |
| Low | 1.89 | 1.67 | 2.69 | 2.94 | 9.19 |
| Moderate | 8.02 | 10 | 2.69 | 1.47 | 22.18 |
| High | 4 72 | 6.67 | 9.23 | 8.82 | 29.44 |
| Highest | 9.43 | 5 | 10 | 10.29 | 34.72 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.79 The level of reliability respondents' have on interactive service in VoIP by implementing the normalization method***

4.9.4.1 2 Time

**- 2 - 3 minutes respond time needed, 24 hours service**

From the survey, the respondents expects different responding time as listed in the table from the company. The average of respondents will accept to get the response in 2 - 3 minutes.

| | VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | immediately | 21 | 14.0 | 17.9 | 17.9 |
| | 30 seconds | 5 | 3.3 | 4.3 | 22.2 |
| | 1 minute | 19 | 12.7 | 16.2 | 38.5 |
| | 2 minutes | 6 | 4.0 | 5.1 | 43.6 |
| | 3 minutes | 9 | 6.0 | 7.7 | 51.3 |
| | 5 minutes | 18 | 12.0 | 15.4 | 66.7 |
| | 10 minutes | 15 | 10.0 | 12.8 | 79.5 |
| | 15 minutes | 11 | 7.3 | 9.4 | 88.9 |
| | 20 minutes | 4 | 2.7 | 3.4 | 92.3 |
| | 30 minutes | 9 | 6.0 | 7.7 | 100.0 |
| | Total | 117 | 78.0 | 100.0 | |
| Missing | 1 hour | 12 | 8.0 | | |
| | 2 hours | 1 | .7 | | |
| | 3 hours | 1 | .7 | | |
| | 1 day | 16 | 10.7 | | |
| | 2 days | 3 | 2.0 | | |
| | Total | 33 | 22.0 | | |
| Total | | 150 | 100.0 | | |

***Table 4.80 The level of respondents' acceptable respond time to receive VoIP service***

At the same time, the required service period also varies. 40% of respondent prefers 24-hours service, 36.7% prefers the period of 8:30am-17:00pm, 13.3% prefers 17:01pm-0:00am and 10% prefers the period of 17:01pm-8:30am.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 08.30-17.00 | 55 | 36.7 | 36.7 | 36.7 |
| 17.01-00.00 | 20 | 13.3 | 13.3 | 50.0 |
| 17.01-08.30 | 15 | 10.0 | 10.0 | 60.0 |
| 24 hours | 60 | 40.0 | 40.0 | 100.0 |
| Tota | 150 | 100.0 | 100.0 | |

***Table 4.81 The level of preferred service hours for VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that education industry prefers 24-hours service. Whereas the trading, computer, other industries prefer the period of 8:30am-17:00pm.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| 08.30-17.00 | 3.77 | 13.33 | 12.31 | 10.29 | 39.7 |
| 17.01-00.00 | 3.3 | 1.67 | 3.46 | 4.41 | 12.84 |
| 17.01-08.30 | 2.83 | 1.67 | 1.92 | 4.41 | 10.83 |
| 24 hours | 15.09 | 8.33 | 7.31 | 5.88 | 36.61 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.82 The level of preferred service hours for VoIP service by implementing the normalization method***

4.9.4.1.3 Updated information

**- Depending on customer service representatives**

It is strongly agreed that the company can get more customer satisfaction providing updated information through VoIP service. Same as other services, different customers face different problems and have different areas of interest in the product. Hence, they have different doubts that need to be clarified differently. Information updating is another method to secure customer satisfaction.

From the survey, 46.7% of the respondents strongly agrees that the company needs to update the information regularly. 26% agrees with this fact. 18% shows moderate concern about information update. 6% disagrees and only 3.3% strongly disagrees to have the update.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 5 | 3.3 | 3.3 | 3.3 |
| Low | 9 | 6.0 | 6.0 | 9.3 |
| Moderate | 27 | 18.0 | 18.0 | 27.3 |
| High | 39 | 26.0 | 26.0 | 53.3 |
| Highest | 70 | 46.7 | 46.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.83 The level of frequency in updating information needed in VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry strongly agrees that the company needs to update the information regularly.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 5 | 0 | 0 | 5.94 |
| Low | 1.42 | 1.67 | 1.15 | 2.94 | 7.18 |
| Moderate | 3.3 | 5 | 4.62 | 7.35 | 20.27 |
| High | 6.6 | 5 | 6.92 | 5.88 | 24.4 |
| Highest | 12.74 | 8.33 | 12.31 | 8.82 | 42.2 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.84 The level of frequency in updating information needed in VoIP service by implementing the normalization method***

4.9.4.1.4 Comfortability

**- Medium level of comfortability**

The customers are required to go through some procedures before receiving the service.

The survey reveals that only 6.7% of the respondents has the most difficulty, 9.3% has more difficulty, 41.3% has moderate difficult, 24% has less difficulty and 18.7% has the least difficulty with the pre-service procedures.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 10 | 6.7 | 6.7 | 6.7 |
| Low | 14 | 9.3 | 9.3 | 16.0 |
| Moderate | 62 | 41.3 | 41.3 | 57.3 |
| High | 36 | 24.0 | 24.0 | 81.3 |
| Highest | 28 | 18.7 | 18.7 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.85 The level of difficulties in registration process to ask for the VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that every business industry has moderately difficult to ask for the service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 5 | 1.92 | 0 | 7.86 |
| Low | 1.42 | 0 | 2.69 | 5.88 | 9.99 |
| Moderate | 10.85 | 13.33 | 9.62 | 8.82 | 42.62 |
| High | 6.6 | 3.33 | 6.15 | 5.88 | 21.96 |
| Highest | 5.19 | 3.33 | 4.62 | 4.41 | 17.55 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.86 The level of difficulties in registration process to ask for the VoIP service by implementing the normalization method***

According to the survey, 5.3% of the respondents agree that VoIP service is least difficult to use, while most of them feel moderately difficult to use.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 8 | 5.3 | 5.3 | 5.3 |
| Low | 12 | 8.0 | 8.0 | 13.3 |
| Moderate | 62 | 41.3 | 41.3 | 54.7 |
| High | 36 | 24.0 | 24.0 | 78.7 |
| Highest | 32 | 21.3 | 21.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.87 The level of difficulties in using VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that education, other

industries agree that VoIP service is moderately difficult to use, while t ading, computer industries feel highly difficult to use.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 0 | 1.67 | 0 | 0 | 1.67 |
| Low | 1.89 | 1.67 | 0.38 | 4.41 | 8.35 |
| Moderate | 12.26 | 6.67 | 9.62 | 13.24 | 41.79 |
| High | 6.13 | 8.33 | 10.38 | 7.35 | 32.19 |
| Highest | 4.72 | 6.67 | 4.62 | 0 | 16.01 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.88 The level of difficulties in using VoIP service by implementing the normalization method***

Owing to additional multimedia tools and accessories required, the quality test for such tools is important.

In survey tells that 42.7% of the respondents shows no concern on the equipment test, 33.3% strongly agrees, 17.3% agrees, 6% strongly disagrees and only 0.7% strongly disagrees to have the test.

| VOIP | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Lowest | 1 | .7 | .7 | .7 |
| Low | 9 | 6.0 | 6.0 | 6.7 |
| Moderate | 64 | 42.7 | 42.7 | 49.3 |
| High | 50 | 33.3 | 33.3 | 82.7 |
| Highest | 26 | 17.3 | 17.3 | 100.0 |
| Total | 150 | 100.0 | 100.0 | |

***Table 4.89 The level of respondents' acceptable testing multimedia tools before receiving the VoIP service***

To implement the normalization method in relation to the difference of business industry, it reveals that education, computer, other industries show no concern on the equipment test. Whereas trading industry agrees to test the multimedia tools before receiving the VoIP service.

| Service/Level | Business Industry | | | | Total |
|---|---|---|---|---|---|
| VoIP | Education | Trading | Computer | Others | |
| Lowest | 0.94 | 3.33 | 1.54 | 0 | 5.81 |
| Low | 2.36 | 1.67 | 1.15 | 4.41 | 9.59 |
| Moderate | 11.32 | 6.67 | 10.38 | 10.29 | 38.66 |
| High | 5.19 | 8.33 | 6.15 | 5.88 | 25.55 |
| Highest | 5.19 | 5 | 5.77 | 4.41 | 20.37 |
| Total | 25 | 25 | 25 | 25 | 100 |

***Table 4.90 The level of respondents' acceptable testing multimedia tools before receiving the VoIP service by implementing the normalization method***

4.9.4.2 Business aspects

4.9.4.2.1 Difference from competitors

**- Difference from competitors**

VoIP is a new service that has not been broadly developed and adopted in customer service. Hence, the company providing this service has uniqueness and can differentiate itself from its competitors.

4.9.4.2.2 Increasing in channel of distributions

**- Potentially increases in sales**

From customers' perspective, it is easier to get company access and better understanding of its product with the use of VoIP

service. As mentioned earlier that VoIP enhances customer satisfaction, it also affects customers' purchasing decision making. The more customers are satisfied with the company and service, the easier they can make decision. The survey also indicates that more purchase can be done with the help of VoIP service.

**4.16 Comparison in each service types**

| No | FACTOR | FAQ | E-mail | Callback | Faxback | Textchat | VoIP |
|---|---|---|---|---|---|---|---|
| 1 | Technical Factor | Easy (1) | Easy (2) | Medium (3) | Medium (3) | Difficult (5) | Quite difficult (4) |
| 2 | Economical Factor | | | | | | |
| | Setup cost | Low | Medium | Medium | Medium | High | High |
| | Usage cost | No | Medium | High | Medium / High | Medium | Medium |
| 3 | Support Factor | | | | | | |
| | Service areas | International | International | Domestic | Domestic | International | International |
| | No. of customer to provide service at a time | Unlimited | Limited | Limited | Limited | Software | Limited |
| | No. of customer served in term of service cost | Unlimited | Unlimited | Limited | Limited | Company | Company |
| 4 | Benificial Factor | | | | | | |
| 4.1 | Customer satisfaction | | | | | | |
| | Reliability | Medium | Medium | High | Medium | High | High |
| | Response time | 24x7 | 5-12 hours | 20-30 minutes | 30-40 minutes | 3-5 minutes | 2-3 minutes |
| | Service hours | 24x7 | 24x7 | 8.30-17.00 | 8.30-17.00 | 24x7 | 24x7 |
| | Updated information needs | High / C | High / Reps | High / Reps | High / C | High / Reps | High / Reps |
| | Comfortable | High | High | Medium | Medium | Medium | Medium |
| 4.2 | Business satisfaction | | | | | | |
| | Differentiation from competitors | No | No | Yes | Yes | Yes | Yes |
| | Increase in channel of distribution | No | Yes | Yes | Yes | Yes | Yes |

***Table 4.91 Comparison in each service types***

** C= Company policy, Reps= Customer service representatives**

| Technical Factor | FAQ | | E-mail | | Callback | | Faxback | | Textchat | VoIP |
|---|---|---|---|---|---|---|---|---|---|---|
| | Own server | Rent server | Own server | Rent server | Own server | Rent server | Own server | Rent server | Own server | Own server |
| Hardware | S, L, R | PC, M | S, C, L, R | PC, L, R | S, C, L, R, T | PC, L R, T | S, C, L, R, M | PC, L, R, F | S, C, L, R | S, C, L, R |
| Software | Web | Web, FTP | Ex, Out | Out | Program | Program | Program | Program | Program | Media, Net |
| Multimedia | No | No | No | No | No, Yes | No, Yes | No | No | No | Yes |
| Implementation | Easy (1) | Easy (1) | Easy (2) | Easy (2) | Medium (3) | Medium (3) | Medium (3) | Medium (3) | Difficult (5) | Quiet difficult (4) |
| Maintenance | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% |

*Table 4.92 Comparison in technical factor*

** S= Server, L= Leased line, R= Router, PC= Personal computer, C= Client, T= Telephone, F= Faxcimine, M= Modem **

** Web= Web development software, FTP= File Transfer Protocol Software, Out= Microsoft outlook, Ex= Microsoft Exchange, Program= Proprietary program**



| Economical Factor | FAQ | | E-mail | | Callback | | Faxback | | Textchat | VoIP |
|---|---|---|---|---|---|---|---|---|---|---|
| | Own server | Rent server | Own server | Rent server | Own server | Rent server | Own server | Rent server | Own server | Own server |
| Setup cost | 222K-394K | 37K-47K | 315K-487K | 147K-326K | 260K-433K | 149K-330K | 270K-443K | 159K-340K | 304K-477K | 263K-436K |
| Usage cost | No | No | Reps | Reps | Reps, Call | Reps, Call | Fax | Reps, Fax | Reps | Reps |

*Table 4.93 Comparison in economical factor*

** Reps = Customer service representatives costs, Call= Callback cost, Fax= Faxback cost**

| No. | Factor | FAQ | E-mail | Callback | Faxback | Textchat | VoIP |
|---|---|---|---|---|---|---|---|
| 1 | Reliability | | | | | | |
| | Increase company image | 3.4867 | 3.7533 | 4.0533 | 3.7733 | 3.8533 | 3.78 |
| | Influence on making a decision to purchase a product from the com | 3.4467 | 3.46 | 4.02 | 3.8733 | 3.74 | 3.6933 |
| | | 6.9334 | 7.2133 | 8.0733 | 7.6466 | 7.5933 | 7.4733 |
| | Conversation with the customer service representative | No | No | 4.02 | No | 3.9467 | 3.88 |
| | | **6.9334** | **7.2133** | **12.0933** | **7.6466** | **11.54** | **11.3533** |
| 2 | Time | | | | | | |
| | Response time | No | 11.0867 | 10.3133 | 11.42 | 7.2133 | 6.7333 |
| | Service hours | 24x7 | 2.9933 | 2.1867 | 2.4067 | 2.5133 | 2.5333 |
| 3 | Updated information needs | 4.2467 | 4.2533 | 4.2333 | 4.18 | 4.12 | 4.0667 |
| 4 | Comfortable | | | | | | |
| | Difficult to registration process | No | No | 3.0467 | 3.0667 | 3.1467 | 3.3867 |
| | Difficult to use | 2.3133 | 2.2 | 2.68 | 2.7467 | 2.9867 | 3.48 |
| | | **2.3133** | **2.2** | **5.7267** | **5.8134** | **6.1334** | **6.8667** |
| | To agree testing multimedia accessories | No | No | No | No | No | 3.6067 |

***Table 4.94 Comparison in beneficial factor (Customer Aspects)***

## 4.11 Comparison in Beneficial factors (Customer Aspects)

The tables below are the average of customer satisfaction in each factor that will increase the level of satisfaction.

### 4.11.1 Reliability

4.11.1.1 Companies can build reliability and image by offering special add-on services. The level spans as the followings: 1=least, 5=most, and the result of the respondents is shown that the average of company image increasing from the callback service is 4.0533, Textchat 3.8533, VoIP 3.78, Faxback3.7733, E-mail 3.7533 and FAQ 3.4867.

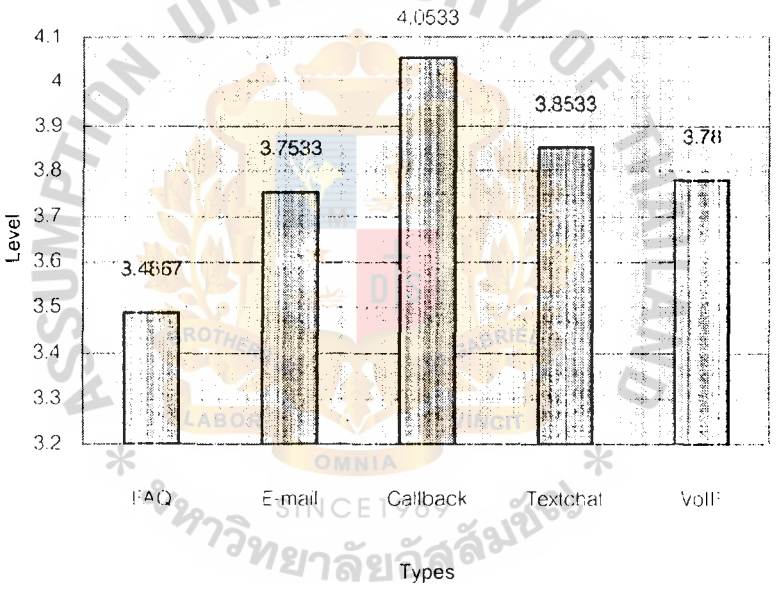


*Figure 4.14 Comparison of the increase in company image associated with types of service*

**Statistics**

| | | FAQ1 | MAIL1 | CALL1 | FAX1 | TEXT1 | VOIP1 |
|---|---|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.4867 | 3.7533 | 4.0533 | 3.7733 | 3.8533 | 3.7800 |
| Std. Error of Mean | | 9.060E-02 | 8.510E-02 | 8.762E-02 | 8.932E-02 | 8.944E-02 | 9.870E-02 |
| Median | | 3.0000 | 4.0000 | 4.0000 | 4.0000 | 4.0000 | 4.0000 |
| Mode | | 3.00 | 3.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Std. Deviation | | 1.1097 | 1.0423 | 1.0731 | 1.0939 | 1.0954 | 1.2089 |
| Variance | | 1.2314 | 1.0864 | 1.1515 | 1.1966 | 1.1998 | 1.4613 |
| Range | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Minimum | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Sum | | 523.00 | 563.00 | 608.00 | 566.00 | 578.00 | 567.00 |

***Table 4.95 Statistics of the increase in company image associated with types of service***

4.11.1.2 It can influence on making a decision to purchase product or service from the company because customers feel that the company is trustable due to add-on services. The level spans as the followings 1=least, 5= most, and the result of the respondents is shown that the trend of customers will make decision to purchase product if the company offers Callback service is 4.02, Faxback 3.8733, Textchat 3.74, VoIP 3.6933, E-mail 3.46 and FAQ 3.4467.

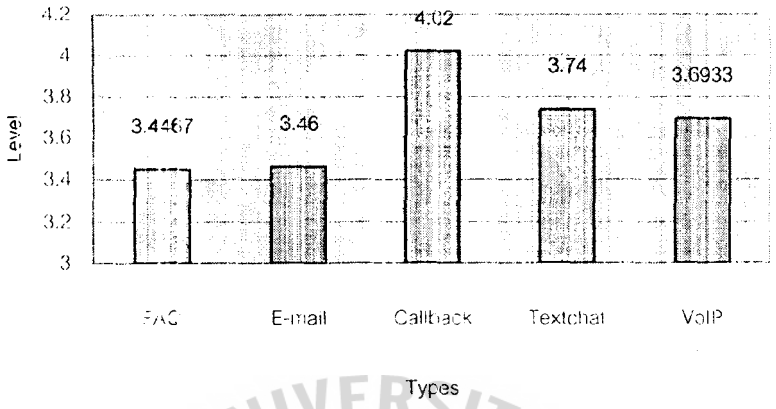


***Figure 4.15 Comparison of influence on purchase making decision associated with types of service***

**Statistics**

| | | FAQ2 | MAIL2 | CALL2 | FAX2 | TEXT2 | VOIP2 |
|---|---|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 3.4467 | 3.4600 | 4.0200 | 3.8733 | 3.7400 | 3.6933 |
| Std. Error of Mean | | 9.532E-02 | 9.202E-02 | 7.712E-02 | 8.737E-02 | 9.667E-02 | 9.645E-02 |
| Median | | 3.0000 | 3.0000 | 4.0000 | 4.0000 | 4.0000 | 4.0000 |
| Mode | | 3.00 | 3.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Std. Deviation | | 1.1674 | 1.1270 | .9446 | 1.0700 | 1.1840 | 1.1812 |
| Variance | | 1.3629 | 1.2702 | .8922 | 1.1449 | 1.4017 | 1.3953 |
| Range | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Minimum | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Sum | | 517.00 | 519.00 | 603.00 | 581.00 | 561.00 | 554.00 |

***Table 4.96 Statistics of services influence on purchase making decision***

4.11.1.3 Conversation with the customer service representatives can build reliability to customers. The level spans as the followings: 1=least. 5= most, and the result of the respondents is shown that the trend of customers will have reliability on interactive service if the company provides Callback service is 4.02, Textchat 3.9467 and VoIP 3.88

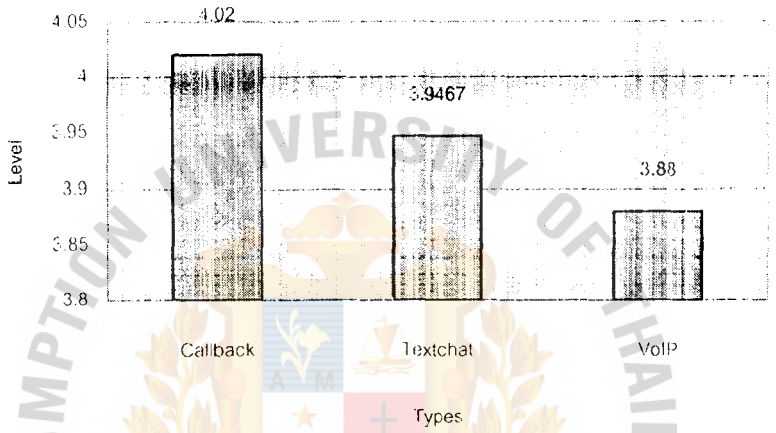


*Figure 4.16 Comparison of reliability customers have on interactive service*

**Statistics**

| | | CALL3 | TEXT3 | VOIP3 |
|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 |
| Mean | | 4.0200 | 3.9467 | 3.8800 |
| Std. Error of Mean | | 7.595E-02 | 8.235E-02 | 9.119E-02 |
| Median | | 4.0000 | 4.0000 | 4.0000 |
| Mode | | 5.00 | 5.00 | 5.00 |
| Std. Deviation | | .9303 | 1.0086 | 1.1168 |
| Variance | | .8654 | 1.0173 | 1.2472 |
| Range | | 4.00 | 4.00 | 4.00 |
| Minimum | | 1.00 | 1.00 | 1.00 |
| Maximum | | 5.00 | 5.00 | 5.00 |
| Sum | | 603.00 | 592.00 | 582.00 |

*Table 4.97 Statistics of reliability customers have on interactive services*

4.11.2 Time

4.11.2.1 The level of response time can improve the customer satisfaction because customer could be unsatisfied if they get the delay answer or service. The result of the respondents is shown that the average of acceptable responding time in FAQ service is 11.0867, Callback 10.3133, Faxback 11.42, Textchat 7.2133 and VoIP 6.7333

As a result, this could be computed in days as follows:-

** E-mail: 10= ½ day and 11= 1 day **

** Callback: 10= 2 hours and 11= 3 hours **

** Faxback: 11= 2 hours and 12= 3 hours **

** Textchat: 7= 10 minutes and 8= 15 minutes **

** VoIP: 6= 5 minutes and 7= 10 minutes **

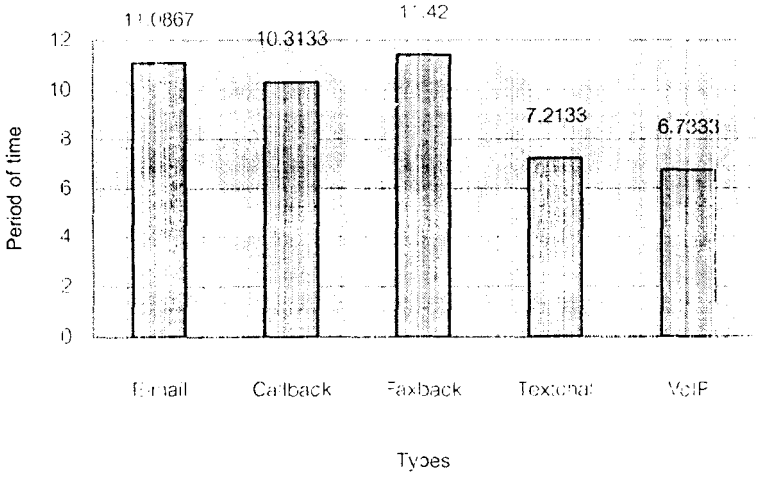


*Figure 4.17 Comparison of the response time associated with types of service*

**Statistics**

| | | MAIL7 | CALL7 | FAX7 | TEXT7 | VOIP7 |
|---|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 11.0867 | 10.3133 | 11.4200 | 7.2133 | 6.7333 |
| Std. Error of Mean | | .2589 | .3308 | .4019 | .3668 | .3423 |
| Median | | 12.0000 | 10.0000 | 12.0000 | 6.0000 | 6.0000 |
| Mode | | 12.00 | 14.00 | 16.00 | 3.00 | 1.00 |
| Std. Deviation | | 3.1706 | 4.0519 | 4.9226 | 4.4925 | 4.1928 |
| Variance | | 10.0528 | 16.4179 | 24.2318 | 20.1824 | 17.5794 |
| Range | | 16.00 | 15.00 | 17.00 | 16.00 | 14.00 |
| Minimum | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 17.00 | 16.00 | 18.00 | 17.00 | 15.00 |
| Sum | | 1663.00 | 1547.00 | 1713.00 | 1082.00 | 1010.00 |

*Table 4.98 Statistics of acceptable response time for particular services*

4.11.2.2 The range of service hours can improve the customer satisfaction. According to the survey, the service hours in the questionnaire is designed in range of time. Therefore, the most preferable range of time for each particular service will be used and assumed that it is the most appropriate choice for implementing service. As the result of the survey, respondents prefer to receive 24 hour service on e-mail, textchat and VoIP, while respondents can accept callback and faxback service during working hours which is 08:30-17:00.

**Statistics**

| | | MAIL8 | CALL8 | FAX8 | TEXT8 | VOIP8 |
|---|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.9933 | 2.1867 | 2.4067 | 2.5133 | 2.5333 |
| Std. Error of Mean | | .1081 | .1105 | .1167 | .1094 | .1094 |
| Median | | 4.0000 | 1.0000 | 2.0000 | 2.0000 | 2.5000 |
| Mode | | 4.00 | 1.00 | 1.00 | 4.00 | 4.00 |
| Std. Deviation | | 1.3235 | 1.3530 | 1.4288 | 1.3398 | 1.3395 |
| Variance | | 1.7516 | 1.8307 | 2.0416 | 1.7951 | 1.7942 |
| Range | | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Minimum | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |

***Table 4.99 Statistics of preferable service hours on particular services***

4.11.3 Frequent information update is also another factor the company can establish customer satisfaction. As the result of the survey, it reveals that the average of respondents prefer to get the updated information from E-mail service is 4.2533, FAQ 4.2467, Callback 4.2333, Faxback 4.18, Textchat 4.12 and VoIP 4.0667

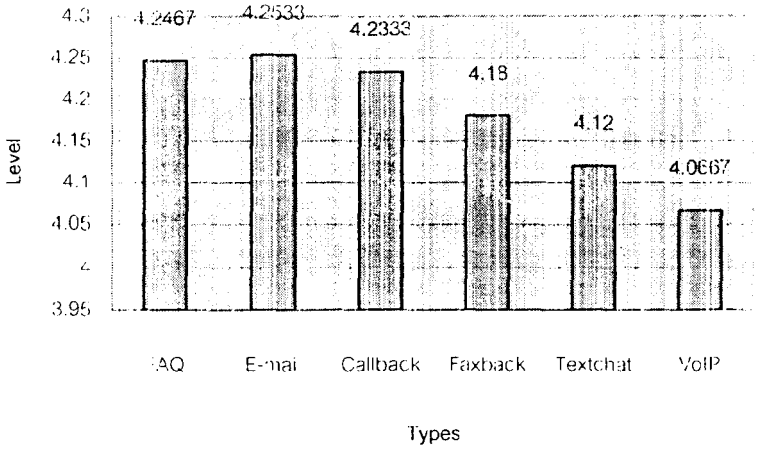


***Figure 4.18 Comparison of customer's preference in information update***

**Statistics**

| | | FAQ10 | MAIL10 | CALL10 | FAX10 | TEXT10 | VOIP10 |
|---|---|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 4.2467 | 4.2533 | 4.2333 | 4.1800 | 4.1200 | 4.0667 |
| Std. Error of Mean | | 8.563E-02 | 7.400E-02 | 8.377E-02 | 8.412E-02 | 8.350E-02 | 8.908E-02 |
| Median | | 5.0000 | 5.0000 | 5.0000 | 5.0000 | 4.5000 | 4.0000 |
| Mode | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Std. Deviation | | 1.0487 | .9063 | 1.0259 | 1.0302 | 1.0227 | 1.0909 |
| Variance | | 1.0998 | .8213 | 1.0526 | 1.0613 | 1.0459 | 1.1902 |
| Range | | 4.00 | 3.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Minimum | | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Sum | | 637.00 | 638.00 | 635.00 | 627.00 | 618.00 | 610.00 |

***Table 4.100 Statistics of customer's preference in information update***

4.11.4 Comfortability

The comfortability includes the difficulty in registration process and ease of use. Both of them can increase the level of customer satisfaction.

4.11.4.1 Difficulty in registration process. The level spans as the followings: 1=least, 5= most, and the result of the respondents is shown that the average of difficulties in registration process to ask for VoIP service is 3.3867, Textchat 3.1467, Faxback 3.0667 and Callback 3.0467

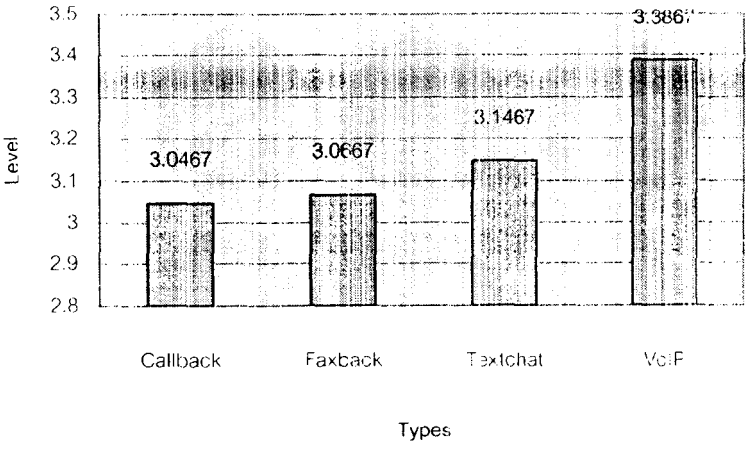


*Figure 4.19 Comparison of difficulties in registration process associated with types of service*

**Statistics**

| | | CALL11 | FAX11 | TEXT11 | VOIP11 |
|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 |
| Mean | | 3.0467 | 3.0667 | 3.1467 | 3.3867 |
| Std. Error of Mean | | 7.528E-02 | 7.307E-02 | 7.823E-02 | 8.964E-02 |
| Median | | 3.0000 | 3.0000 | 3.0000 | 3.0000 |
| Mode | | 3.00 | 3.00 | 3.00 | 3.00 |
| Std. Deviation | | .9220 | .8949 | .9581 | 1.0978 |
| Variance | | .8502 | .8009 | .9179 | 1.2052 |
| Range | | 4.00 | 4.00 | 4.00 | 4.00 |
| Minimum | | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 5.00 | 5.00 | 5.00 | 5.00 |
| Sum | | 457.00 | 460.00 | 472.00 | 508.00 |

*Table 4.101 Statistics of difficulties in registration process*

4.11.4.2 Difficulty in using the service. The level spans as the followings: 1=least, 5= most, and the result of the respondents is shown that the average of difficulties to use the service in VoIP is 3.48, Textchat 2.9867, Faxback 2.7467, FAQ 2.3 .33 and E-mail 2.2

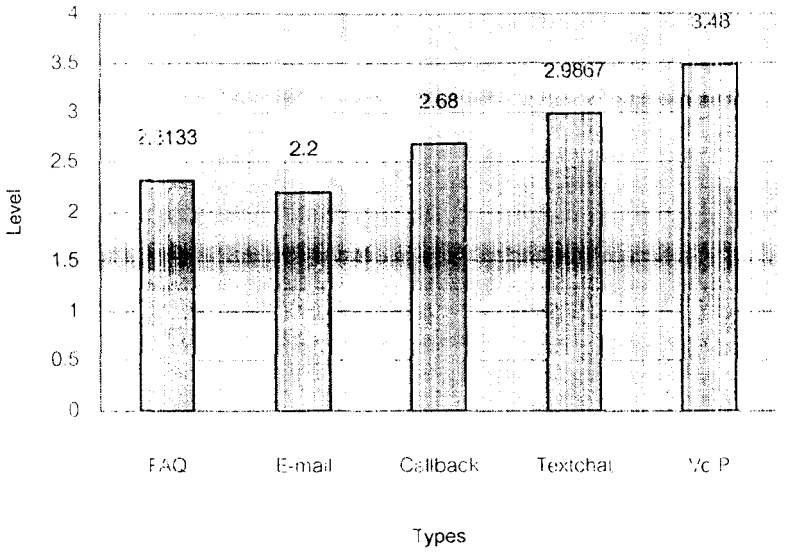


*Figure 4.20 Comparison of difficulties to use for particular services*

**Statistics**

| | | FAQ13 | MAIL13 | CALL13 | FAX13 | TEXT13 | VOIP13 |
|---|---|---|---|---|---|---|---|
| N | Valid | 150 | 150 | 150 | 150 | 150 | 150 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.3133 | 2.2000 | 2.6800 | 2.7467 | 2.9867 | 3.4800 |
| Std. Error of Mean | | .1011 | 8.670E-02 | 8.425E-02 | 7.754E-02 | 8.565E-02 | 8.809E-02 |
| Median | | 2.0000 | 2.0000 | 3.0000 | 3.0000 | 3.0000 | 3.0000 |
| Mode | | 1.00 | 1.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Std. Deviation | | 1.2378 | 1.0618 | 1.0318 | .9496 | 1.0490 | 1.0789 |
| Variance | | 1.5320 | 1.1275 | 1.0647 | .9018 | 1.1005 | 1.1640 |
| Range | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Minimum | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Maximum | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Sum | | 347.00 | 330.00 | 402.00 | 412.00 | 448.00 | 522.00 |

*Table 4.102 Statistics of difficulties to use for particular services*

# CHAPTER 5

# CONCLUSIONS AND RECOMMENDATIONS

To comply with the objectives of the study, this chapter presents requirement of using customer services in business and how it can be applied for the effectiveness of business operation.

## 5.1 Conclusion

First of all, the company should understand that customer service on the Internet is a new service for the end users. Hence, the company has to consider many factors before implementing any additional customer services. Such factors are frequency of Internet usage, number of on-line transactions, readiness to provide service through the Internet.

This study can be a useful criteria for the company to make decision on types of internet-based customer service to be used. From this study, the company can get in-depth information of technical requirement, potential cost and expenses, service scope, number of customers, factors enhancing customer satisfaction, and expected benefit of each customer service.

While conducting the research, I discovered that there are mistakes arisen from the wrong comprehension of our questionnaire and overlooking some questions. Therefore, we need to explain to the sample of the purpose of each question.
To successfully implement and use this study for decision making in a company, important commitment should be addressed.

1. Planning

Good planning has significant impact on the company's customer service in both short and long run. The company needs to make prudent decision on service type, its application and technological support for further development. For the implementation, the company can either use in-house IT consults or outsource personnel. However, it is recommended that the company has its own IT consults in that they know in-depth configuration of customer service. Hence, they can provide better customer service support.

2. Technical setup

Before arranging any technical setup for customer service, the company should have sufficient knowledge of the existing operating system to attain its utmost utilization. The company may adopt new customer service technology and equipment in parallel with using the existing resources to generate the outstanding customer service.

2. Coordination between organization and customers

Customer services require the coordination from both parties, so the service provided must have specific know-how for each particular service. With this qualification, the company can guarantee that customers will have better understanding of each service. As the consequence, customers tend to have more confidence to try new services.

According to the survey, we can conclude that there are a number of factors that will effect customer service on the Internet in Thailand as listed below:-

1. Technical Factor: This factor will concern generally relate to process and ease of use for each type of online customer service online.

- FAQ is considered as the easiest type of customer service on the Internet since it is simply the information page on the web server. The company can avoid having its own server by renting space from the web hosting company. The company will basically use downloading software and web developer software to create the FAQ page. Furthermore, no multimedia accessories needed for this service.
- E-mail is the second easiest service on the Internet. The company can rent the server space or run its own server. However, the company needs to install Microsoft Exchange in the server and Microsoft Outlook in clients. There is no need to install additional multimedia accessories if the customers apply this service
- Callback is considered as a more difficult service to implement comparing with the previous services. The representatives need to have telephones and multimedia accessories, for example, headset to comfort representatives when serving customers on-line.
- Faxback is similar to callback service, but the replacement of telephone set with fax machine. It can be implemented by hiring staffs to send fax or by using the automatic system which will pull information needed to be faxed from the database.
- Textchat is considered to be the most difficult service for users since the company needs to customize their own program according to their purpose. Also, the

company must have their own server to organize information and implement chat service for customers. However, there are no additional multimedia accessories needed in providing this service.

- VoIP is considered to be the second most difficult service to implement since it requires company to have their own server and customized program to pull up the freeware VoIP program. This could help the company save some cost concerning the voice communication program. Also, the multimedia accessories are required for this service.

2. Economical Factor

This issue can be separated into 2 categories which are setup cost and usage cost. The setup cost basically covers the assembly and installation cost, while the usage cost s the connection fee cost. The rate is shown in baht currency.

- FAQ: To operate FAQ service and own a server, the cost will range from which 222K-394K. However, the cost of renting space from the web-hosting company will be cheaper, ranging from 37K-47K. There will be no usage cost since this is the self-serve service from which customers will look up for the information from the Webpage themselves.
- E-mail: Setup cost of owning a server for e-mail service will range from 315K-487K, while the cost of renting space for e-mail service will range from 147K-326K. Also, the company needs hire staffs to reply customers e-mail.
- Callback: The setup cost by owning a server for callback service will range from 260K-433K, while renting space for e-mail service will range from 149K-330K. Also, the company has to hire personnel to reply customer callback request as well

as the call back fee for making a call. If the company provides the worldwide service, it is unavoidable to include long distance fee in usage cost.

- Faxback: The setup cost of owning a server for faxback service will be range from 270K-443K, while renting space for e-mail service will range from 159K-340K. Also, the company has to hire personnel to reply customer faxback request as well as the fees for faxing back. If the company provides the worldwide service, the long distance fee will be included in usage cost. However the auto response faxback can reduce cost since there is no need to hire any personnel.
- Textchat: The setup cost of owning a server for Textchat service will range from 304K-477K. Also, the company has to hire personnel to reply customers' requests but no usage cost occurred in per-time service providing.
- VoIP: The setup cost by owning a server for VoIP service will range from 263K-436K. Also, the company has to hire personnel to reply customers' requests but no usage cost occurred in per-time service providing.

3. Support Factor

This factor can be separated into 2 categories. The first category is service area where the company should provide the service. The other category is the number of customers that the company can serve at a time. These two issues have different impact on service on the Internet as follows:-

- FAQ: The service area is not an issue for this service because there is no potential expense for local and global service providing. Moreover, this type of service can serve multiple customers at a time depending on the capability of the CPU server.
- E-mail: The service area does not have any effect on this service. This service can be globally offered without additional cost. However, the company might have a

certain capability to answer to a number of customers per day since customers generally ask different questions.

- Callback: The service area has a certain effect on callback service. Since the company could have paid international call bill in case they provide the callback service internationally. The company might need to set its policy and scope for this service. At the meantime, the number of customers served will affect this service. It is almost impossible to serve multiple customers at a time since it is verbal communication and needs every customer service representatives to handle the customers' callback in case of hectic period. However, this would depend on the nature of the business itself and the policy of each company.
- Faxback: This is simply the same as callback service. The service area and the number of customers are the issue to take into consideration. The company needs to manage their personnel to cope with the workload to provide satisfying service to customers.
- Textchat: The service area does not have effect on this service. This service can be globally offered without additional cost. The number of customers served will affect this service. It depends on the supporting program to this service.
- VoIP: The service area does not have effect on this service. This service can be globally offered without additional cost. At the meantime, the number of customers served will affect this service. It is almost impossible to serve multiple customers at a time since it's verbal communication and requires every customer service representatives call customers back during hectic period. However, this would depend on the nature of the business itself and the policy of each company.

4. Beneficial factor

This factor can be separated into 2 categories. The first category partially involves customer aspects. The other category partially involves the business aspects.

4.1 Customer satisfaction

**FAQ**

- The level of reliability is moderate
- The level of acceptable response time to receive the FAQ service is 24*7 hours.
- The level of preferred service hours for FAQ service is 24*7 hours.
- The level of frequency in updating information needed in FAQ service is high / this service can be done by the company.
- The level of comfortability in using FAQ service is high

**E-mail**

- The level of reliability is moderate
- The level of acceptable response time to receive the E-mail service is 5-12 hours
- The level of preferred service hours for E-mail service is 24*7 hours
- The level of frequency in updating information needed in E-mail service is high / This service can be done by customer service representatives.
- The level of comfortability in using E-mail service is high

**Callback**

- The level of reliability is high
- The level of acceptable response time to receive the callback service is 20-30 minutes
- The level of preferred service hours for callback service is 8.30-17.00
- The level of frequency in updating information needed in callback service is high / This service can be done by customer service representatives.
- The level of comfortability in using callback service is medium

**Faxback**

- The level of reliability is moderate
- The level of acceptable response time to receive the faxback service is 30-40 hours
- The level of preferred service hours for E-mail service is 8.30-17.00
- The level of frequency in updating information needed in E-mail service is high / This service can be done by company.
- The level of comfortability in using E-mail service is medium

**Textchat**

- The level of reliability is high
- The level of acceptable response time to receive the callback service is 3-5 minutes
- The level of preferred service hours for callback service is 24 hours
- The level of frequency in updating information needed in callback service is high / This service can be done by customer service representatives.

- The level of comfortability in using callback service is medium

**VoIP**

- The level of reliability is high
- The level of acceptable response time to receive the faxback service is 2-3 hours
- The level of preferred service hours for E-mail service is 24 hours
- The level of frequency in updating information needed in E-mail service is high / This service can be done by customer service representatives.
- The level of comfortability in using E-mail service is medium

4.2 Business aspects

This factor can be separated into 2 categories. The first category is differentiation from competitors. The other categories can increase distribution channels.

- FAQ: FAQ service can not differentiate the company from others since almost all companies having their website on-line also provide this service. FAQ service cannot directly support or assist sales because it is one way communication.
- E-mail: E-mail service cannot differentiate the company from others since almost all companies that have their website on-line already provide this service. E-mail service can support or assist sales because it is the two-way communication and the customer can place an order via E-mail.
- Callback, Faxback, Textchat and VoIP: E-mail service can not differentiate the company from others since almost every company that has their website on-line already provides this service. They can support or assist sales because it is the two-way communication and the customer can place an order via E-mail.

## 5.2 Recommendations for further study

To study this thesis, the author would like to suggest several areas for further study related to the topic of customer service on the internet in Thailand.

- For the purpose of organization convenience, depending on the size of organization and type of business to making a model.
- Study from case study where the customer services on the internet are used.

# REFERENCES


[1] ATIO Corporation, " Cybercall, Chat", 1999

URL: http://www.atio.com/solution

[2] Bill Sproul. CRM, Customer Service and workflow in the call centre. Eastman Software UK, 1999

[3] Blum, Daniel J. The E-mail Frontier: Emerging markets and evolving technologies, Addison-Wesley, 1995

[4] D. Fluss. E-service Leadership Criteria: What is best for E-business?, GartnerGroup, 2000

[5] Ellsworth, Jill H. and Ellsworth, Matthew V., Marketing on the Internet, John Wiley & Sons,Inc., 1995

[6] Faxback, Inc., " NET SatisFaxtion", 2000

URL: http://www.faxback.com/webfax

[7] Gaynor, Gerard H. Achieving the competitive edge through integrated technology management, McGraw-Hill, Inc., 1991

[8] Gibbons, Dave.Using E-Mail. Indianapolis:Que, 1994

[9] GlobalPhone Corporation., "Operations Overview", 1999

URL:http://www.webcallback.com/Documentation.asp

[10] Gonyea, James C., Gonyea Wayne M. Selling on the Internet, McGraw-Hill, 1996

[11] Hayes, Bob E. Measuring Customer Satisfaction, American Society for Quality, 1997

[12] Janal, Daniel S. Online Marketing Handbook, Van Nostrand Reinhold, 1995

[13] Laura Guevin, " Want to Chat Online? Now you can talk in real time", *Internet Telephony*, Vol 2, No.7, 1999.

[14] QUINTUS Corporation., "Webcenter", 1999

URL: http://www.quintus.com/prod/web.html

[15] Regina Brandy, Edward Forrest and Richard Mizerski. Cybermarketing: your Interactive Marketing Consultant. NTC Business Books, 1997

[16] Robinson. Scot Thomas. " Does your call center do the web?," *Internet Telephony*., Vol.2. No.6. 1999.

[17] Staples, Coppelt J. Professional Selling:A Relationship Management Process.McGraw- Hill. 1990

[18] Sterne. Jim. Customer service on the Internet. John Wiley&Sons. Inc.. 1996

[19] Sterne. Jim. World Wide Web Marketing. John Wiley&Sons, Inc., 1996

[20] "Stellar E-Commerce Growth Makes Deep Impact" IT TRADE '99 Newsletter. July 24 999

[21] Turban. Efraim, Mclean. Ephraim. and Wetherbe. James. Information Technology for Management. John Wiley&Sons, Inc., 1996

[22] UniTerra Telecommunications. Inc.. 1999
URL: http://www.autofaxback.com/service.htm

[23] USA Global Link, " How it works", 1999
URL:http:// www.instantcall.com/howwork/

[24] USWeb and Rick E. Bruner. Net Results:Web Marketing That Works. Hayden Publishing. 1998

# APPENDIX A

# QUESTIONNAIRE

**This questionnaire is to survey opinions concerning the impact of using Internet-based services support for businesses**

Explanation: This questionnaire is composed and used to conduct the research for a university thesis of an Assumption University postbacclareute-student with a major of Information-Technology in science department. All the information given would definitely be of assistance to the completion of thesis and utmostly kept confidential. Thank you for your time.

---

**(Additional information before doing the questionnaire)**

The purpose of this questionnaire is to survey your opinions and thoughts regarding Internet-based service which will be responded to customers by staffs or auto-response system from the company.

**FAQ (Frequently Asked Question)** is general questions that would usually be asked by customers. Basically, the company will provide FAQ service in a part of their Website.

***Process in service request and feedback:***

None

***Usage:*** Customers can directly read questions and answers which are provided In the company website

**E-mail** is the service in which a customer can write e-mail to the company to ask questions or get explanations.

***Process in service request and feedback:***

No process Is required for service request, but customers need to wait for the feedback.

***Usage:*** Customers can ask questions or get further explanations by writing an e-mail to the company.

**Callback** is the service that allows customers to request the company to give them calls concerning problems and questions.

***Process in service request and feedback:***

Service request can be processed by having customers fill In the personal information (I.e., telephone no., name, address) on the company's Website. And customers wait for callbacks from the company.

***Usage:*** Customers just basically fill In a form provided on the web, and one of the company's customer agent will give customers calls.

**Faxback** is the service in which customers can request the company to fax a document to customers' fax machines. The company will provide a list of information on its Website.

***Process In service request and feedback:***

Service request can be processed by having customers fill in the personal information (I.e., fax no., name) And customers wait for fax back from the company.

***Usage:*** Customers just basically fill In a form provided on the web, and one of the company's customer agent will fax the requested information back to customers.

Text **chat** is the service in which customers can chat with the company's customer agent directly through the Internet.

***Process In service request and feedback:***

Service request can reprocessed by having customers fill in the service request form. And customers wait for feedback from the company.

***Usage:*** Customers can chat with customer agent by using keyboard after filling in the form and getting response from the company.

**VoIP (Voice Over Internet Protocol)** Is the service In which customers can directly talk to a customer agent by Using necessary accessories and a voice conferencing software (I.e., NetMeeting, mediating)

***Process In service request and feedback:***

Service request can reprocessed by having customers fill in personal information form. And customers wait for service from the company.

***Usage:*** After customers fill In the form, they can talk to the company's customer agents through the Internet by using a microphone and speaker.

---

Name... ..... Lastname .....

Gender 1. Male 2. Female

Age ( Years )

| 1. Below 15 | 2. 16-20 | 3. 21-25 | 4. 26-30 | 5. 31-35 | 6. 36-40 | 7. More than 40 |
|---|---|---|---|---|---|---|
| | | | | | | |

Graduation Currently Study

| 1. High school | 2. Vocational school / (Higher-level High school) | 3. College Degree | 4. Bachelor degree | 5. Master degree | 6. Ph.D. |
|---|---|---|---|---|---|
| | | | | | |

| 1. Business Administration | 2.Engineering | 3. Computer Science | 4. Art studies/ Human resource | 5. Education | 6. etc ..... ..... |
|---|---|---|---|---|---|
| | | | | | |

What is your career?.....

1. Student 2. Lecturer, Professsor 3. Programmer / Engineer
4. Customer Service 5. Sales / Marketing 6. Finance / Accounting
7. Administrative 8. Counselor/Attorney/R&D 9. Others,.....

What business Industry is your company in?

1. Finance/Banking/Insurance 2. Manufacturing
3. Hospital/ Public Health 4. Education
5. Research & Development 6. Service
7. Transportation 8. Trading
9. Import / Export 10. Telecommunications/Computer
11. Government//State Enterprise 12. Others,.....

**Questionnaire: Measurement of customer satisfaction towards the provision of Internet-based service support**

Explanation: Please check x on the level of satisfaction that you think it is fit for the following criterias (1= lowest, 2=Lower, 3=moderate, 4=High, 5=Highest)

| No. | Customer satisfaction criteria | FAQ | | | | | E-MAIL | | | | | CALLBACK | | | | | FAXBACK | | | | | TEXTCHAT | | | | | VoIP | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Questions from No.1-5 are to measure the trustworthiness of a company if providing Internet-based service support | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Able to increase the company image (Answer all types of service) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Influence on making a decsion to purchase a product from the company (Answer all types of service) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | What is your satisfaction level on the conversation with the company's customer agent? | No response | | | | | No response | | | | | | | | | | No response | | | | | | | | | | | | | | |
| 4 | Others..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Others..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Questions from No.6-9 are to measure the satisfaction level concerning the response time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Rate how important the response time (time to wait for the service from the company) is (Answer all types of service) | No waiting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | What is your acceptable response time for these service support? (Please identify in minutes, days) (Answer all types of services) | No waiting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | When is the most appropriate time for you that you want the company to contact you for service? (Please check only one that you think it's the most appropriate time for the company to contact for service) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Working hours 8.30-17.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Off-work hours 17.01-00.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Off-work hours 17.01-08.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 hours. | 24 hrs service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Rate the importance of service time according to Q.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Q.10 is to measure the customer satisfaction on up-to-date information

| | | |
|---|---|---|
| 10 | Rate the importance of updating information (I.e.. company webpage) (Answer all types of service) | |

Q.11-12 are to measure the ease of use of Internet-based service support (Please read the service explanation and process in requesting service)

| | | |
|---|---|---|
| 11 | Rate how convenient the registration process is to ask for services (Answer all types of service) | No registration No registration |
| 12 | Will you agree if the company requires testing on multimedia accessories before providing VoIP service? | |
| 13 | Rate how difficult it is for you to use each service (Answer all types of service) | |

ชุดที่ .....

# แบบสอบถาม

## เพื่อสำรวจความคิดเห็นเกี่ยวกับการให้บริการลูกค้าทางอินเตอร์เน็ต

คำชี้แจง: แบบสอบถามนี้ใช้เพื่อเป็นส่วนหนึ่งของการวิจัยในการทำวิทยานิพนธ์ของนักศึกษาปริญญาโท สาขาเทคโนโลยีสารสนเทศ คณะวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยอัสสัมชัญ ซึ่งข้อมูลเหล่านี้จะเป็นประโยชน์อย่างยิ่งในการทำวิทยานิพนธ์ และข้อมูลทั้งหมดนี้จะถูกปกปิดเป็นความลับ

ทางผู้วิจัยขอขอบพระคุณท่านเป็นอย่างยิ่งที่ให้ความร่วมมือ

---

*คำอธิบายเพิ่มเติมก่อนการทำแบบสอบถาม*

แบบสอบถามชุดนี้เป็นการสอบถามถึงความคิดเห็นต่อบริการต่างๆ ซึ่งเป็นการให้บริการลูกค้าทางอินเตอร์เน็ต ซึ่งบางอย่างจะได้รับการตอบกลับจากพนักงานบริษัทหรือข้อมูลที่ถูกเตรียมไว้แล้ว

FAQ ( Frequently Asked Question ) คือ คำถามที่บริษัทมักถูกถามอยู่บ่อยๆ ทางบริษัทจึงจัดทำเป็นส่วนหนึ่งของ Websites

***ขั้นตอนในการขอรับบริการ, รอคำตอบ*** : ไม่มีทั้งขั้นตอนในการขอรับบริการและการรอคำตอบ

***ลักษณะการใช้งาน***: สามารถอ่านคำถามและคำตอบได้เลยใน websites ของบริษัท

E-mail คือ การเขียนจดหมายอิเล็กทรอนิกส์ไปยังบริษัทที่ท่านต้องการสอบถาม

***ขั้นตอนในการขอรับบริการ, รอคำตอบ*** : ไม่มีการขั้นตอนการขอรับบริการ แต่การรอคำตอบเป็นรอการตอบกลับจากพนักงานบริษัท

***ลักษณะการใช้งาน***: **เป็นการเขียนถึงปัญหาหรือสิ่งที่ต้องการทราบผ่านทาง** E-mail

Callback คือ การที่ท่านต้องการให้พนักงานบริษัทโทรกลับ

***ขั้นตอนในการขอรับบริการ, รอคำตอบ***: กรอกข้อมูลส่วนตัว, เบอร์ที่ต้องการโทรกลับไว้ ซึ่งต้องรอคำตอบโดยการโทรกลับจากพนักงานของบริษัท

***ลักษณะการใช้งาน***: เป็นการกรอกข้อมูลบนหน้าหนึ่งบนเว็บ พนักงานจะโทรกลับหาท่านทางโทรศัพท์

Faxback คือ การที่ท่านต้องการให้บริษัทแฟกซ์ข้อมูลให้ท่านผ่านทางเครื่องโทรสารของท่าน ซึ่งทางบริษัทมีข้อมูลให้เลือกบนหน้าหนึ่งของ Websites

***ขั้นตอนในการขอรับบริการ, รอคำตอบ***: กรอกข้อมูลส่วนตัว, เบอร์แฟกซ์ที่ต้องการให้แฟกซ์กลับไว้ ซึ่งต้องรอคำตอบโดยการแฟกซ์กลับจากพนักงานของบริษัท

***ลักษณะการใช้งาน***: เป็นการกรอกข้อมูลบนหน้าหนึ่งบนเว็บ พนักงานจะแฟกซ์ข้อมูลที่ท่านต้องการกลับหาท่านโดยผ่านเครื่องโทรสาร

Text chat คือ การที่ท่านสามารถ chat กับพนักงานบริษัทได้ทันทีโดยการพิมพ์ผ่านทาง Keyboarc

***ขั้นตอนในการขอรับบริการ, รอคำตอบ:*** กรอกข้อมูลส่วนตัวก่อนรับบริการจากพนักงาน โดยต้องรอคำตอบจากการให้บริการของพนักงานบริษัท

***ลักษณะการใช้งาน:*** หลังจากการกรอกข้อมูลแล้ว ท่านสามารถคุยกับพนักงานบริษัทผ่านทางคีย์บอร์ด

VoIP ( Voice Over Internet Protocol ) คือ การที่ท่านสามารถคุยกับพนักงานของบริษัทได้ทันทีโดยใช้เสียงผ่านทางอุปกรณ์ Multimedia โดยอาจจะเป็นการคุยผ่านโปรแกรม Netmeeting, Mediaring

***ขั้นตอนในการขอรับบริการ, รอคำตอบ:*** กรอกข้อมูลส่วนตัวก่อนรับบริการจากพนักงาน โดยต้องรอคำตอบจากการให้บริการของพนักงานบริษัท

***ลักษณะการใช้งาน:*** หลังจากการกรอกข้อมูลแล้ว ท่านสามารถคุยกับพนักงานบริษัทผ่านทางไมค์, ลำโพง

---

ชื่อ ..... นามสกุล .....

เพศ 1. ชาย 2. หญิง

อายุ (ปี)

| 1. เด็กกว่า 15 | 2. 16-20 | 3. 21-25 | 4. 26-30 | 5. 31-35 | 6. 36-40 | 7. มากกว่า 40 |
|---|---|---|---|---|---|---|
| | | | | | | |

จบการศึกษา ☐ กำลังศึกษา

| 1. ม.ต้น | 2. ม.ปลาย / เทียบเท่า | 3. อนุปริญญา | 4. ปริญญาตรี | 5. ปริญญาโท | 6. ปริญญาเอก |
|---|---|---|---|---|---|
| | | | | | |

| 1. บริหารธุรกิจ | 2. วิศวกรรมศาสตร์ | 3. วิทยาศาสตร์ คอมพิวเตอร์ | 4. ศิลปศาสตร์/ มนุษย์ศาสตร์ | 5. ครุศาสตร์/ ศึกษาศาสตร์ | 6. อื่นๆ ..... |
|---|---|---|---|---|---|
| | | | | | |

ลักษณะงานที่ท่านทำ .....

| | | |
|---|---|---|
| 1. นักเรียน/นักศึกษา | 2. ครูอาจารย์ | 3. โปรแกรมเมอร์/วิศวกร |
| 4. การบริการลูกค้า | 5. พนักงานขาย/การตลาด | 6. การเงิน/บัญชี |
| 7. งานธุรการ (Admin) | 8. ที่ปรึกษา/นัก กม./R&D | 9. อื่นๆ ..... |

ธุรกิจของบริษัทที่ท่านทำงานเกี่ยวกับ

| | | |
|---|---|---|
| 1. การเงิน/ธนาคาร/ประกันภัย | 2. โรงงานอุตสาหกรรม | 3. โรงพยาบาล/สาธารณสุข |
| 4. การศึกษา | 5. การวิจัยและพัฒนา | 6. การบริการ |
| 7. การขนส่ง | 8. ธุรกิจเชิงพาณิชย์ | 9. การนำเข้า/ส่งออก |
| 10. โทรคมนาคมและคอมพิวเตอร์ | 11. รัฐบาล/รัฐวิสาหกิจ | 12. อื่นๆ ..... |

| ข้อ | ปัจจัยที่เกี่ยวข้องกับความพึงพอใจของลูกค้า | FAQ | | | | | E-MAIL | | | | | CALLBACK | | | | | FAXBACK | | | | | TEXTCHAT | | | | | VoIP | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| **ข้อ 1-5 เพื่อวัดระดับความน่าเชื่อถือที่เพิ่มขึ้นต่อบริษัท เนื่องจาก** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | สามารถเพิ่มภาพลักษณ์ที่ดีให้กับบริษัทได้ (ตอบทุกบริการ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | ทำให้ลูกค้าตัดสินใจซื้อสินค้าได้มากขึ้น (ตอบทุกบริการ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | ความพึงพอใจที่ได้คุยโต้ตอบกับพนักงานของบริษัทอยู่ในระดับใด | ไม่ได้โต้ตอบ | | | | | ไม่ได้โต้ตอบ | | | | | | | | | | ไม่ได้โต้ตอบ | | | | | | | | | | | | | | |
| 4 | อื่นๆ..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | อื่นๆ..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ข้อ 6-9 ปัจจัยด้านเวลามีส่วนเกี่ยวข้องกับความพึงพอใจของลูกค้า** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | ระดับความสำคัญในเวลาที่รอรับบริการ, คำตอบ จากบริษัท (ตอบทุกบริการ) | ไม่ต้องรอ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | ระยะเวลาที่ยอมรับได้ในการรอคำตอบ (กรุณากรอกเป็น นาที.วัน) (ตอบทุกบริการ) | ไม่ต้องรอ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | ช่วงเวลาใดที่ท่านคิดว่าเหมาะสมที่สุดเพื่อจะให้บริษัทบริการตอบคำถามแก่ท่าน (ในแต่ละบริการ เลือกช่วงเวลาเดียว) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | เวลาราชการ 8.30-17.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | เวลาหลังเลิกงาน 17.01-00.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | เวลาหลังเลิกงาน 17.01-08.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 ชม. | บริการ 24 ชมอยู่แล้ว | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | ความคิดเห็นของระดับความสำคัญในช่วงเวลา(ข้อ 8) ที่ให้บริการแก่ท่าน (ตอบทุกบริการ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ข้อ 10 ปัจจัยด้านความทันสมัยของข้อมูลมีส่วนเกี่ยวข้องกับความพึงพอใจของลูกค้า** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | ระดับความสำคัญของการอัพเดทข้อมูล (ตอบทุกบริการ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ข้อ 11-12 ปัจจัยด้านความสะดวกในการใช้งาน (ควรอ่านลักษณะขั้นตอนการขอรับบริการ, การใช้งาน จากคำอธิบายด้านหน้า)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | ท่านคิดว่าขั้นตอนในการขอรับบริการ มีความยากอยู่ในระดับใด (ตอบทุกบริการ) | ไม่ต้องขอ | | | | | ไม่ต้องขอ | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | ท่านยอมรับในระดับใดถ้ามีการทดสอบอุปกรณ์ Multi ก่อนการรับบริการในบริการของ VoIP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | ท่านคิดว่าการใช้บริการในแต่ละแบบ มีความยากอยู่ในระดับใด (ตอบทุกบริการ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# APPENDIX B

# RESPONDENTS' PROFILE

Table D-1 show respondent's profile derived from survey. In the profile, most of the respondent's responding to the survey are the one who often gets the information by the Internet and well known in the Internet. The numbers of respondent are 150 persons in each group. This profile can be separated into 7 groups as follow: -

| **Characteristic** | | **Number of respondents** |
|---|---|---|
| Gender | Male | 66 |
| | Female | 84 |
| Age | 16-20 | 8 |
| | 21-25 | 82 |
| | 26-30 | 48 |
| | 31-35 | 5 |
| | 36-40 | 5 |
| | More than 40 | 2 |
| Status of education | Graduated | 90 |
| | Currently study | 60 |
| Level of education | Vocation school / Higher-level High school | 1 |
| | College Degree | 4 |
| | Bachelor degree | 111 |
| | Master degree | 33 |
| | Ph.D. | 1 |
| Faculty | Business Administration | 43 |
| | Engineering | 20 |
| | Computer Science | 73 |
| | Art studies / Human Resource | 6 |
| | Education | 4 |
| | Food Science | 2 |

| | | |
|---|---|---|
| | Political Science | 2 |
| Career | Student | 45 |
| | Lecturer / Professor | 2 |
| | Programmer / Engineer | 49 |
| | Customer service | 21 |
| | Sales / Marketing | 8 |
| | Finance / Accounting | 7 |
| | Administration | 13 |
| | Counselor / Attorney / R&D | 5 |
| Business Industry | Finance / Banking / Insurance | 2 |
| | Manufacturing | 1 |
| | Hospital / Public Health | 1 |
| | Education | 53 |
| | Research & Development | 2 |
| | Service | 4 |
| | Trading | 15 |
| | Import / Export | 5 |
| | Telecommunications / Computer | 65 |
| | Government / State Enterprise | 1 |
| | Construction | 1 |

***Table D-1: Respondents' profile***

# APPENDIX C

# RECOMMENDATIONS

To study this thesis, the author would like to suggest several areas for further study related to the topic of customer service on the internet in Thailand.

The company can adopt many types of customer service mentioned in this thesis depending on various factors, for instance, the need and circumstance of the company, the trend of technology for customer service in Thailand, and the existing customer service provided. The company may develop the existing system for customer service by adding new technologies to the system so as to attain better performance and differentiate itself from other competitors. To develop the existing system, the company can apply one of the followings:

- FAQ: The company can set up the function for key word search which gives the customers more flexibility to key in the words. Another method is to divide the service in different categories, e.g., sales and technique. Customers can easily search for a particular category that they have queries.

- E-mail: To provide the most effective e-mail service is to respond to one customer at a time and avoid the use of auto-response and key-word search. Due to the flexibility of key word of each customer, there are more chances for the customers to receive inaccurate information. Instead of creating customer satisfaction, inaccuracy can disappoint them and cause negative attitude toward company's image. However, auto-response can be used in

gratitude e-mail or to notify customers of their expected responding queue or date.

- Callback and Faxback: Callback can be used in the more cost-saving manner with the application of internet as a medium to contact with customers. In case of faxback, company can reduce the burden in usage cost by providing the information for customers to download from its website.

- Textchat: Software is used in this service, can be notified the customer screen for doing help better. The customer representatives can help customers fill the form. Also, the business can push the pages, URL that customers want to see immediately.

- VoIP: Though VoIP is not a popular customer service in Thailand, this service will be adopted as one the effective customer services when internet chat is generally accepted.

All kinds of customer service mentioned and studied in this thesis are only part of the most practicable and suitable services on the internet in Thailand. When Thailand is ready for the more advanced technology or need to upgrade the customer services, Video conferencing will be one of the eye-catching service for the years to come.

In reality, the company should have more than one choice of customer services on the Internet for customer convenience. Basically, the company is supposed to have a few services like FAQ or e-mail as its fundamental services. In addition, there are no difficulties in implementation and incremental setup cost for

additional customer services. However, it is recommended to have one core database to pool customer information and records if the company plans to provide multiple customer services.

# APPENDIX D

# CORRELATIONS FACTORS

To offer customer service on-line, there are several factors that have been mentioned previously and these factors are cross connected and have impact to each other.

1. Support Factor (Service Areas) / Support Factor (Number of customers served in term of service cost)

   If the company is willing to provide international service, it might need limited number of customer for service since the company needs to make international calls back to customers. This will highly cost the company if they do not set the budget or limitation. At the meantime, to implement FAQ and e-mail services, the budget issue will not need to be considered. Since there will be no international call charges in term of these services.

2. Beneficial Factor (Service hours) / Economical Factor (Usage cost)

   Service hours and usage cost is another issue that should be addressed. If the company is willing to provide service by 24x7, certainly the cost will obviously increase. Therefore, this is the trade-off issue that needs to be addressed and sorted out the optimum level in terms of service hours and usage cost.