



Insulation Business Website
<http://www.psfoamplastic.com>

by
Ms. Supawan Kittiphattharaphon

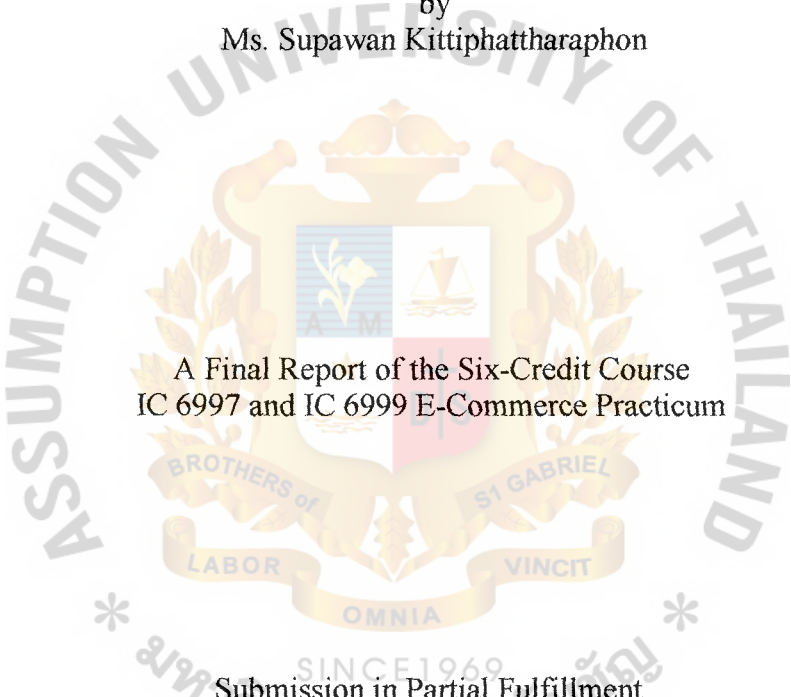
A Final Report of the Six-Credit Course
IC 6997 and IC 6999 E-Commerce Practicum

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

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

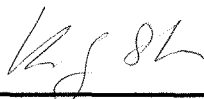
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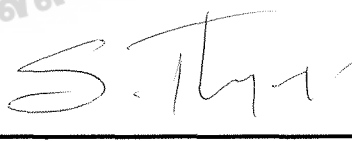
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ABSTRACT

In doing the project, the insulation field is being studied and information has been gathered to be used as the basis for conducting several analyses. Some important information analyses including situational analysis, SWOT analysis, financial analysis, as well as market analysis have been conducted carefully. Future plans of the website in chapter VII are developed based on those facts, so are the web concept and web development.

During the project development, several difficulties had been encountered and these mistakes have been learnt as well.

Finally, this project is completed and achieved the following things.

- (1) Project Report including all analyses, marketing plan and web concept. This is to be used as a guideline for running the insulation products online.
- (2) Prototype of the www.psfoamplastic.com to demonstrate how the web functions and what are their main features.

The writer does hope that www.psfoamplastic.com will be one of the insulation website and be able to expand the company market share in the near future.

ACKNOWLEDGEMENTS

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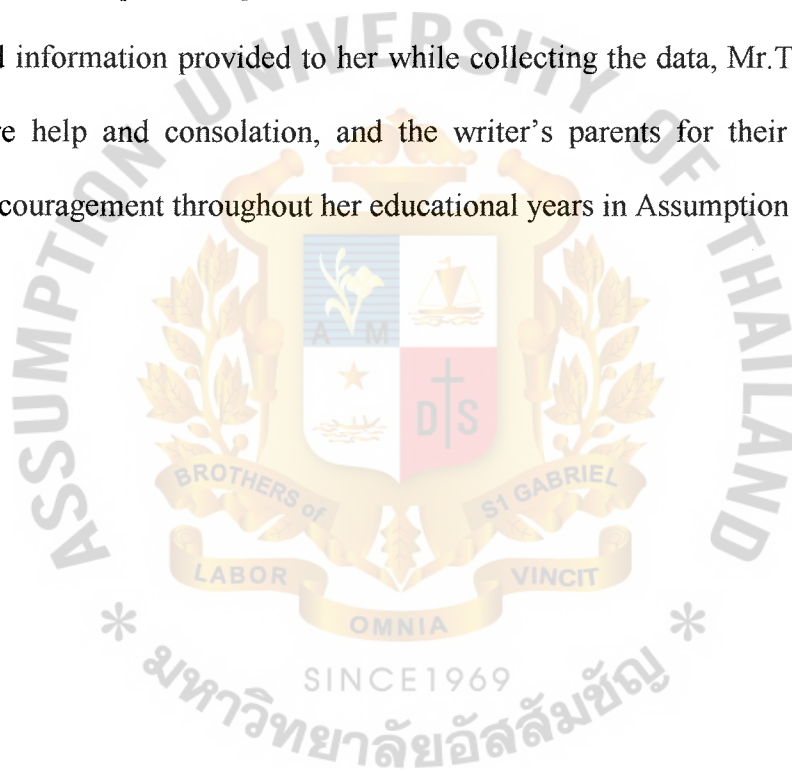


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I. INTRODUCTION

1.1 Background of the project

Nowadays, the Internet has become the crucial element in almost every field of trading. It has been widely used and also helps in the role of business. It is the new channel of communication that people mainly use right now.

The Internet provides us with many advantages. Most of the businesses use the Internet to search for the required information anytime they want because of its 24 hours availability such as the customer information, the supplier information and the trend of the current market. Just enter any search engine website and type only the word or sentence you want to search, it will automatically appear on the screen. It therefore makes the people have convenience and save time consumption because the users do not need to wait for any official time or working hours; they can just do anytime when they want. The Internet can assist the people to be more flexible. It can be the supporting tool for all businesses sizes whether they are small business, medium, or the biggest. Each company can set its own computerized network, and its web page to show how the company is and what are the products or service it is selling. They can also use e-mail to be the way of interaction with their customers, suppliers, as well as inside the company.

The proposed website is concerned about the insulation products i.e. foam, fiberglass, plastic, insulated pipe, etc. about which most of people do not have deep information and the correct method of their usage. Although they are not the interesting product type and do not have the nice shape, but they are the financial products for many of business fields e.g. packaging, architecture, stationary, air-refrigerator manufacturer, studio, etc. Creating the website for the existing company can generate a

lot of benefits for the company because the Internet is the new channel of communication, so it certainly can promote the company and expand its market share. Finally, the sales volume will also be increased.

1.2 Objectives of the project

- (1) To design and build a website for an existing company,
“PS FOAM PLASTIC CO.,LTD.”
- (2) To introduce the new channel of insulation market.
- (3) To introduce the company into the global market.
- (4) To create the company’s image to the customers and suppliers.
- (5) To help the users have more convenience and reduce the time-consuming task to find the price by walking in or telephoning.
- (6) 24 hours availability each day to select and search the products information.
- (7) To provide the information and benefits of each type of our product, so the customers can know more qualifications of each product.

1.3 The scope of the project

- (1) The website will be concerned about the company profile and the product’s details as well as the pros and cons of its products which are different by their grading measurement.
- (2) The customers can understand the way to use each item effectively.
- (3) The customers can compare the price with other competitors without calling us directly because the price table will be shown on the web site.
- (4) We provide our service domestic and Thailandwide.
- (5) Overall information on the website are:
 - (a) The e-magazine of the products
 - (b) Online Catalog

Describes each product individually including both picture and its usage .

(c) Company Profile

- (1) Profile
- (2) Location including the company's map
- (3) Working hours.
- (4) Contact numbers and contact persons.

(d) Made to order

(e) Price lists

(f) Payment Terms.

(g) Delivery Conditions.

1.4 Deliverables

Deliverables for this project will be as follows:

- (a) The Final Report
- (b) The Prototype Web site

II. LITERATURE REVIEW

2.1 Overview of E-Commerce

The word “E-Commerce” comes from “Electronic Commerce” which means to operate the transactions of business through the Internet.

E-commerce is currently one of the most topical issues in business today. Many businesses, large and small have made e-commerce a priority. Furthermore, many businesses are developing and implementing e-commerce strategies and some are experiencing a degree of success. At its simplest, e-commerce is merely another channel to market products or services. The real strength of e-commerce is that the Internet makes it fast and easy to get information to your clients and customers, wherever they are located. Moreover, it is competitively priced compared to more traditional marketing channels. E-commerce can take many forms, ranging from a simple web site offering details of products or services to fully functional sites incorporating searching, shopping carts, ordering and automated payment systems. The form e-commerce can take, will also depend on the industry a business is working in. E-commerce can be much easier in an industry like publishing - where products can be provided to customers electronically - than in retail or manufacturing where a logistics/delivery channel must be incorporated into the e-commerce process. Many business people think e-commerce is the domain of large businesses with large budgets and manpower. Nothing could be further from the truth! E-commerce can be embraced by businesses of all sizes. A key objective of e-commerce is to streamline existing business processes to develop and market products and services more efficiently. A successful e-commerce strategy will be superior to established business processes.

E-commerce can range from the relatively simple to the complex. For smaller business, e-commerce begins with an e-business plan which considers the strengths of the business and sets objectives based on the resources the business has available. E-commerce processes should leverage off the existing strengths of the business. It may also involve incorporating the strengths of other businesses. E-commerce is not about reinventing the wheel! Its about making the best use of the technology and processes already available.

In addition, e-commerce enabling to do your business via a business website, gives your business a global reach. With the right strategy and processes, there is no reason why you cannot develop a global customer base.

2.2 Definition of E-Commerce

E-Commerce is the business transactions that takes place by telecommunication networks. It is an emerging concept that describes a process of buying and selling products, services, and information over computer networks including the Internet.

The infrastructure for EC is networked computing, which is emerging as the standard computing environment in business, home, and government. Networked computing connects several computers and electronic devices by telecommunication networks. This allows users to access information stored in several places and to communicate and collaborate with others from their desktop computers. The vast majority of people use computers connected to a global networked environment known as the Internet.

According to Lou Gerstner, IBM's CEO mentioned that "E-Commerce is all about cycle time, speed, globalization, enhanced productivity, reaching new customers and sharing knowledge across institutions for competitive advantage."

The application of E-Commerce can be divided into three categories:

- (1) Buying and selling goods and services. These are usually referred to as electronic markets.
- (2) Facilitating inter and intra-organization flow of information, communication and collaboration. These are sometimes referred to as inter-organizational systems.
- (3) Providing customer service.

E-Commerce field can be classified into the following categories:

- (1) Business to Business or B2B:

Most of E-Commerce today is of this type. Such as Cisco, etc.

- (2) Business to Consumer or B2C:

These are retailing transactions with individual shoppers. The typical shopper at Amazon.com is a customer , or consumer.

- (3) Consumer to Consumer or C2C:

In this category, consumer sells directly to consumers. Including the advertising of personal services on the Internet and selling knowledge and expertise are other examples of C2C. Several auction sites allow individuals to put items up for auctions. Finally, many individuals are using intranets and other organizational internal networks to advertise items for sale or services. Such as eBay.com

- (4) Consumer to Business (C2B):

This category includes individuals who sell products or services to organizations, as well as individuals who seek sellers, interact with them, and conclude a transaction.

- (5) Nonbusiness E-Commerce:

There are increasing numbers of nonbusiness institutions such as academic institutions, not - for - profit organizations, religious organizations,etc. Social

organizations and government agencies are using various types of E-Commerce to reduce their expenses or to improve their operations and customer service.

(6) Intrabusiness E-Commerce (Organizational E-Commerce):

In this category, all internal organizational activities are included, usually performed on intranets that involve exchange of goods, services, or information. Activities can range from selling corporate products to employees to online training and cost-reduction activities.

For PS FOAM PLASTIC.COM, it is classified as B2B and B2C, because most of the company's customers are grouped as organizations and corporates.

2.3 Benefits of E-Commerce:

The global nature of the technology, low cost, opportunity to reach hundreds of millions of people, interactive nature, variety of possibilities, and resourcefulness and rapid growth of the supporting infrastructures result in many potential benefits to organizations, individuals, and society.

(1) Benefits to organizations

(a) Expands the marketplace to national and international markets.

With minimal capital outlay, a company can easily & quickly locate more customers, the best suppliers, and the most suitable business partners worldwide.

(b) Decreases the cost of creating, processing, distributing, storing, and retrieving paper-based information.

(c) Creates highly specialized businesses.

- (d) Reduces inventories and overhead by facilitating “pull” type supply chain management.(Start from customer order and use just in time manufacturing)
- (e) Enables expensive customization of products and services which provides competitive advantage to its implementers, by using the pull type processing.
- (f) Reduces the time between the outlay of capital and the receipt of products and services.
- (g) Initiates business processes reengineering projects.
- (h) Lowers telecommunications cost.
- (i) Improves image, improve customer service, new found business partners, simplified processes, compressed cycle and delivery time, increased productivity, eliminating paper, expediting access to information, reduced transportation costs, and increased flexibility.

(2) Benefits to Consumers

- (a) Enables customers to shop or do other transactions twenty four hours a day from any location.
- (b) Provides customers with more choices they can select from many vendors and from more products.
- (c) Provides customers frequently with less expensive products and services by allowing them to shop in many places and conduct quick comparisons.

(d) Allows quick delivery especially with digitized products.

Customers can receive relevant and detailed information in seconds rather than days or weeks.

(e) Makes it possible to participate in the virtual auctions.

(f) Interacts with the other customers in e-commerce and exchanges ideas as well as compares experiences,

(g) Facilitates competition, which results in substantial discounts.

(3) Benefits to Society

(a) Enables more individuals to work at home and to do less traveling for shopping, resulting in less traffic on the roads and lower air pollution.

(b) Allows some merchandise to be sold at lower prices, so less affluent people can buy more and increase their standard of living.

(c) Enables people in Third World countries and rural areas to enjoy products and services that otherwise are not available to them. This includes the opportunities to learn professions and earn college degrees.

(d) Facilitates delivery of public services and distribution of government social services at a reduced cost and/or improved quality.

2.4 The Limitations of E-Commerce

The limitations of E-Commerce can be grouped into technical and nontechnical categories.

(1) Technical Limitations

- (a) Lack of System Security, reliability, standards, and some communication protocols
- (b) Insufficient telecommunication bandwidth
- (c) Software development tools are still evolving and changing rapidly
- (d) Difficult to integrate the Internet and EC software with some existing applications and databases
- (e) Vendors may need special web servers and other infrastructures, in addition to the network servers.
- (f) Some EC Software might not fit with some hardware, or may be incompatible with some operating systems or other components.

(2) Nontechnical Limitations

(a) Cost and justification

The cost of developing EC in-house can be very high , and mistakes due to lack of experience may result in delays.

(b) Security and privacy

These issues are especially important in the B2C area, especially security issues which are perceived to be more serious than they really are when appropriate encryption is used. The customers perceive these issues as very important, and, the EC industry has a very long and difficult task of convincing customers that online transactions and privacy are, in fact, very secure.

(c) Lack of trust and user resistance

2645 e-1

Customers do not trust an unknown faceless seller, paperless transactions and electronic money. So it may be difficult to switch from physical to virtual stores.

(d) Other limiting factors

Lack of truth and feel online, some customers like to touch items such as clothes and like to know exactly what they are buying.



III. ABOUT THE COMPANY

3.1 Company Profile

| | | |
|-------------------|---|---|
| Company Name | : | P.S. Foam Plastic Co., Ltd. |
| Business Address | : | 889 Chulalongkorn soi 8, Banthadthong road, Wangmai, Pathumwan, Bangkok 10330. |
| Occupancy | : | Insulation Business. |
| Nos. of employees | : | 13 persons |
| Office space | : | 22 Square Meters. |
| Working Hours | : | 8.30 am.. - 5.00 pm. (Monday to Saturday) |
| Telephone | : | (662) 216-4944, 216-4945, 612-3140 |
| Fax | : | (662) 214-2464, 612-5309 |

3.2 Background of the Company

P.S.Foam Plastic Co.,Ltd is the existing company that operates the business of insulations . The Company was established for more than sixteen years by the owner, Khun Somphon Kittiphattharaphon. The owner has been working in this field of industry for more than 30 years so he knows all the processes of conducting and manufacturing the insulated products especially on poly-foam. With his over thirty accrued years of solid experience in insulation knowledge, the owner has currently become an expert in insulation aspect, even though PS FOAM is only the intermediary, he can describe to the customers almost every stage of the foam production. In addition, the PS FOAM products' price is cheaper than most manufacturers'. Many organizations have trusted and relied on PS FOAM service for a long period of time.

The first location of P.S. FOAM was located on Sathupradit road. Five years later, P.S. foam was moved near the center location of the business area, Banthadthong road,

near MBK (Maboonkrong Center). Presently, the physical office of this company is located on Banthadthong Road , Pathumwan district. It is near Siam Square which is the centre area of Bangkok. Nowadays, PS FOAM can contact and sell to the existing clients as well as to walk-in customers. It is hard to find the new market since the company's products are difficult to sell normally. In the past, PS FOAM divided the company customers into six business targets; food and beverage, Electrical Manufacturer and distributor, Studio and advertisement, Educational, Construction, Automotive, Others. To generate more revenue, the company expected to serve more channels of the market that they could reach to. Nowadays, PS FOAM has only the old accounts of customers, and only a little amount of walk in. I therefore set the creating of the web site; to design and build the website for PS FOAM is the main objective for this Project. Thus the company hopes to gain more share after promoting the company web site.

Presently, there are only thirteen persons working at PS FOAM Company. The classification of Staff's duties will be in the next section. In doing the business, the Company emphasizes on three main points: the company's service, quality of the products and the product's price.

(1) Service: Just In Time Delivery.

It is surely the better way to make the customers rely in the company service and to ensure that PS FOAM can serve even if it is the sudden need or urgent case.

(2) Products quality

There are many distributors of insulation business in the market. If the customers are aware of the differentiation of the products from different companies, they can easily notice the differences in the products' qualities,

especially styropor foam. It is hard to find the good qualified foam product.

The nature of under qualified foam is that it is too weak, thin and easily breaks into small pieces.

(3) Products price

Although PS FOAM is not the manufacturer, the products can be sold at the equal price as the factory offers. As mentioned earlier, the owner of PS FOAM has practiced in this field of business for more than thirty years, he therefore learnt all the information concerning insulation, especially foam, by himself. He also has the good relationship with many manufacturers.

From the past until now, PS FOAM serves all classes of customers whether it is an individual sale or corporate. The company has good control and management for the operation of all the business transactions include ordering, stocking, shipping, delivery (only within Thailand) as well as made to order.

3.3 Company Staff

Table 3.1. Company staff.

| Position | Persons |
|-------------------|---------|
| Manager | 1 |
| Assistant Manager | 1 |
| Secretary | 1 |
| Accountant | 1 |
| Administrator | 1 |
| Stock Controller | 1 |
| Marketing officer | 1 |
| Driver | 2 |
| General assistant | 3 |
| House keeping | 1 |
| Total | 13 |

Working hours : 8.30 am. To 5.00 pm. (Monday to Saturday)

Employees' Benefits:

Table 3.2. Company staff's benefits.

| | |
|------------------|--|
| Bonus | 2 months minimum |
| PA | AIA, 100,000 Baht Sum Insured |
| Life Insurance | AIA, 200,000 Baht Sum Insured |
| Social Insurance | The company's responsibility as a whole |
| Allowance | <ul style="list-style-type: none"> • 1 meal daily, • transportation fee • residential fee (half) • Annual leave 5 days / year. |

3.4 What the company sells

Company Product

Actually, PS FOAM sells all types of insulation products, but the major items that generate high income for the company are “Foam and fiberglass”.

Although all the product of the company is categorized as insulation which is not the main factor of human living, but it can be one of the facilities which may assist us more conveniently in daily life and business. Here are the product details that PS Foam sells:

3.4.1 Foam

(a) Foam Sheet

What is it used for?

It is used for many purposes such as

- (i) Education purpose : showing board for learning
- (ii) Construction purpose: to create walls, ceilings as well as the structure of floors.
- (iii) Public communication and mass communication purposes
- (iv) Exhibitions, performance indications
- (v) Drama purpose : to set the foam sheet as a screen / backdrop
- (vi) To install the stronger foam sheet (grade a) as a partition
- (vii) Air and refrigerator manufacturing purposes: To fix as part of the refrigerators and air conditioners.
- (viii) Electronic manufacturing: foam sheet is used as base or to protect the collision, and damage to the subject matter/ products.

(b) Foam box

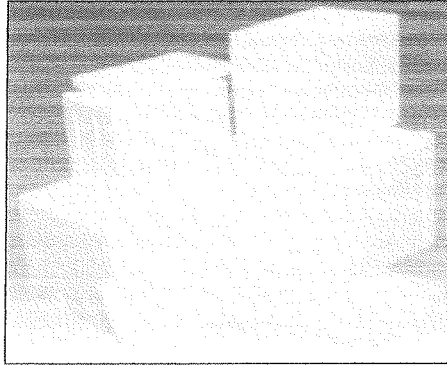


Figure 3.1. Foam Boxes.

What is it used for?

This kind of foam is used for keeping the wanted temperature for some things the users want to keep. It can prolong the high temperature as well as the low temperature for at least two hours. It normally is used to keep the food and drink including the ice or ice-cream. The following are the examples of the using purposes of Foam box:

- (i) Exporting and Importing of fruits , Fresh foods
 - (ii) Merchants who sell all kinds of food
 - (iii) Medicine Manufacturers
- (c) Foam Picnic

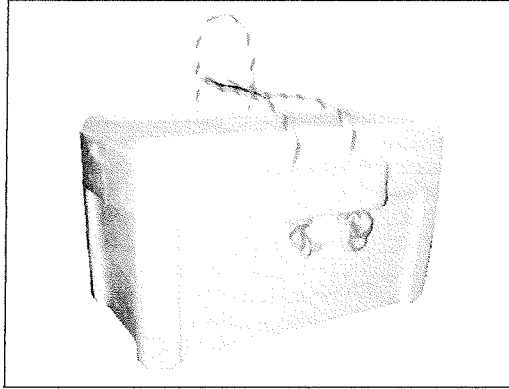


Figure 3.2. Foam Picnic

This kind of foam has the same purpose as the above mentioned foam box. But it has the nylon rope for convenient holding. There are two color foam picnics: White, and yellow. And the new version of its is the color covered. This color cover is an external cover which is plastic.



Figure 3.3. Foam Picnic with its color plastic-covered.

(d) Foam ball

This is generally used for containing in any container. It can relieve the causes of loss or damage. This also can be the subject to be used in Drama (as snow).

(e) Made to order

(i)Molding : Some company would like to have their own logo in their product packages. So PS Foam has to use the block as the model or mold.



Figure 3.4. Molding of logo on the opening of foam boxes.

(ii)Packaging: Some clients would like to have different packages. They can design or let us design for them to suit their products.

3.4.2 FiberGlass

FiberGlass is normally used for construction purpose. They are generally divided into the following items to match with each individual purpose of usage.

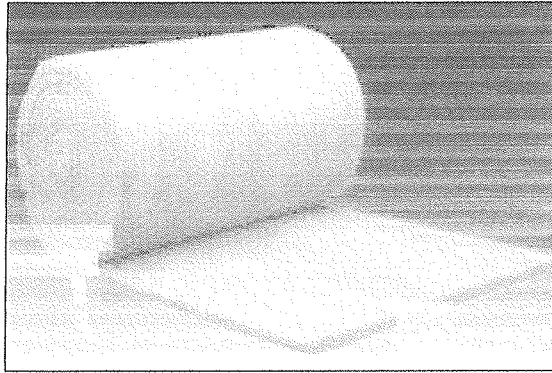


Figure 3.5. Fiberglass for construction.



Figure 3.6. Fiberglass Pipe insulation

- (a) Microfiber
- (b) Microcover
- (c) Micro duct Wrap
- (d) Microceiling
- (e) Others

3.4.3 Other kinds of insulation. Such as Cover Pipe, Freeze Pipe, Aluminium foil, Aluminum Tape, Plastic Tank, etc.

Although the products are not interesting and do not have any attractive issue to motivate people to view or access the website, it can provide the necessary information to some internet users. And it also creates an advantage for those who would like to purchase one of the insulations about which they do not know its details deeply, they can seek for the essential information concerning the products mentioned above by accessing the website. They can easily know the price, the objective of use as well as the suitable method of using. For example, there is a family who want to build a house for themselves. Before their house is constructed, they would like to install the Fiberglass into the ceiling, but they do not know how they can find and select the right choice of fiber glass. They can access the company website by entering the word “insulation product.” So after viewing the overall website, they can select to read which type of fiber glass they actually want. They, therefore, can find the solution within a short period of time.

3.5 Current problems and areas for improvement.

3.5.1 Limitation in the Internet and computer knowledge and skill.

Presently, PS Foam has only two computers which are available only for processing all documents and the company accounting & stock controlling.

Due to the limitations of the company staff and the old traditional trade of Chinese merchants, thus it is difficult to adapt from the old traditional way of business to the modern Internet. With no experience and knowledge in computer literature, the company has to set a high cost for staff training if necessary.

3.5.2 High cost of Advertising

The cost of advertising is expensive because the company always uses the yellow pages, newspapers and magazines as the media to promote the company's products.

3.6 Current Situation Analysis

3.6.1 Competitors

Every field of business has to face with competitors and as always, there is a large number of competitors in this insulation business field. Many times that PS Foam had suffered in the bargaining situation. Some purchasers bargain PS Foam to be the tool for their prospect suppliers. The products' prices of PS Foam are equal generally to the factories'. So PS Foam can win other suppliers but certainly cannot win the manufacturers. The competitors of PS Foam are both Suppliers themselves and intermediaries. Of course, PS Foam cannot always win these competitors but most of customers can realize that PS Foam products have better qualities.

3.6.2 The existing customers

Nowadays, the main revenue of the company comes from the existing customers who have traded with PS Foam for a long time. Most of PS Foam's existing customers are those who have trusted in the company for many years. The customers can be segmented as shown in the table below:

Table 3.3. Existing customers.

| Existing Customers | Percentage % | |
|---------------------|--------------|------------|
| | Foam | FiberGlass |
| Consumption field | 46.91 | 0.00 |
| Air Manufacturers | 29.75 | 9.13 |
| Electronic Business | 12.70 | 0.00 |
| Studio & Education | 3.83 | 2.02 |
| Construction | 4.76 | 79.94 |
| Miscellaneous | 2.05 | 8.91 |
| Total | 100.00 | 100.00 |



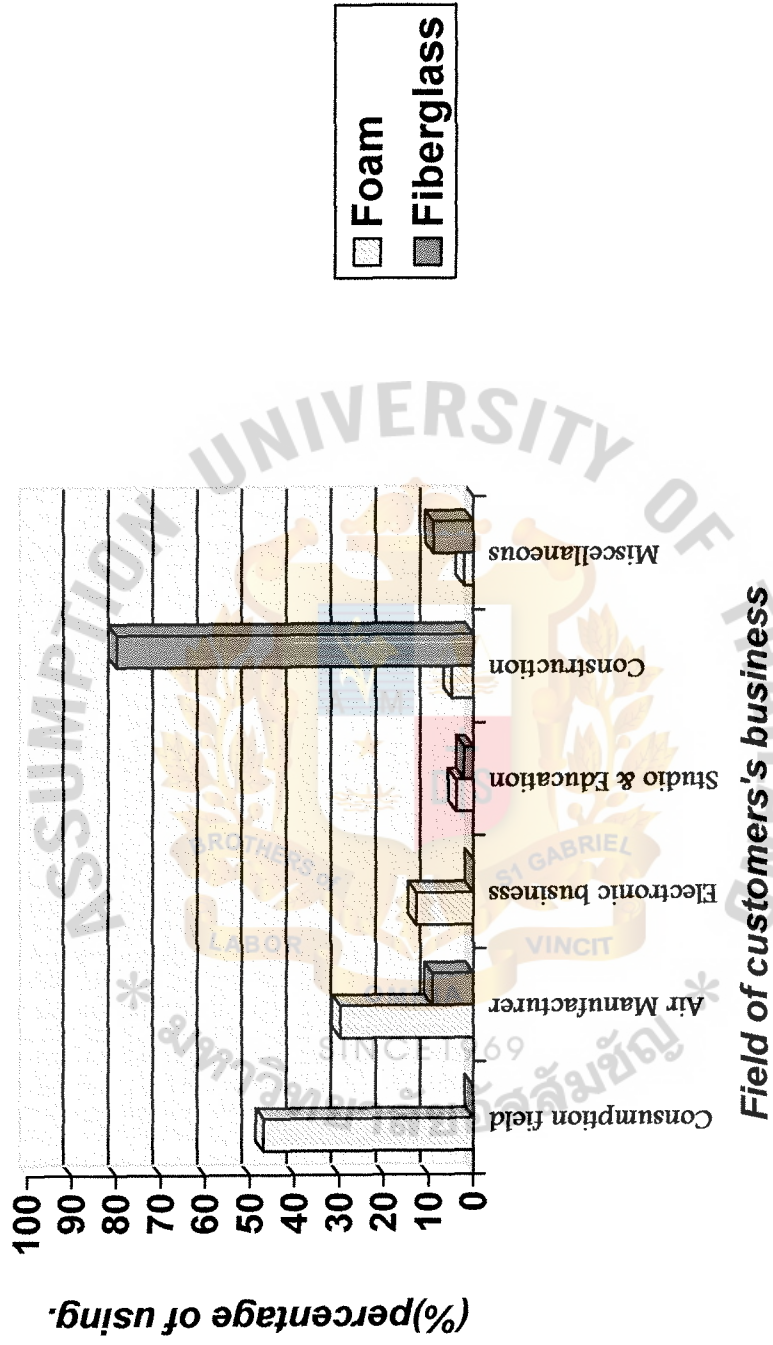


Figure 3.7. The existing Customer Analysis.

As you can see in the figure 3.6.1 above, it is clearly indicated that foam product is mostly used by the field of consumption and the most use of fiberglass is in the field of construction business. From the figure above, there are most business fields that have to use foam as their packaging. Because some products which are going to be transited will be on the high risk of loss or damaged, such as glass or some food such as fruits as well as electric equipment. They, therefore, must be in the proper package.

However, the company would like to maximize the sale volume of each product range as much as they can. So they try to find and search for another way of attacking the prospect customers.

3.7 Need for creating the website

At present, there are various kinds of websites, most of them are e-commerce and e-catalog. Most of those web sites are concerned about fashionable, health, restaurant as well as the things which have to be used in daily life.

As mentioned in the earlier part, PSFOAMPLASTIC.COM sells only the insulations which are not interesting. It does not have the attractive products for the customers to view and select from the various items. Thus the web is created only for showing the insulations products that the company sells. It is another method to assist the existing company that presently operates this field of business, to have another channel of market other than the physical one. Creating the web site can make the company meet many advantages:

(a) Distribution:

This is another way to advertise and promote the existing company. PS Foam may have the opportunity to build a new channel to reach the customer demand. By being on the Internet, PS Foam may have a chance to be remembered by the Internet users.

(b) Broader Market reach:

E-Commerce can give us unlimited geographic coverage. This is the only way to expand the market share of the company

(c) Present the company products:

By creating this website, it can assist the company in describing the details of each product item that most prospect customers do not know. And it does also explain what the PS Foam Plastic sells.

(d) Reach the new affluent target customers:

Internet users tend to be more educated and more affluent than their non-web-serving friends. With E-Commerce, the company can reach the new customer base and have the new attitude.

(e) Create reliability for the prospected suppliers or customers:

This is another way for some prospect suppliers to reach the company details by accessing PS Foam Website.

IV. MARKETING MIX'S

4.1 Product

In this web site, we just provide only the information of each line of product that PS Foam plastic sells. Although, it cannot be the process of buying and selling through this web site, it offers the customers/visitors the direct contact number. We trust in our lowest price that can convince the customer loyalty.

The products of the company that are mainly sold are Foam and Fiberglass as follows:

4.1.1 Foam

(a) Foam Boxes.

One type of expended styropor is used for keeping temperature of the wanted things such as ice, ice-cream, cooler, cool cake, cool food, as well as any high temperature. These types of foam can facilitate the users a lot. The customers can easily hold these boxes. It can be easily kept whether in the cars, home, or any place. It is suitable for those merchants who sell foods, fresh food and drinks. The importer and exporter also use these foam boxes for their products' shipment. In addition, these foam boxes are also used to pack medicine with their right temperature.

Below are the pictures of foam boxes which have different logos and patterns. The customers can design their logos or the model they want. PS Foam can pump or stamp the desired logo on the box or package they want at the proper area. This is a process of molding and it will charge for one time of each logo. The price of each block need not to be paid if the customers have the high volume of order.

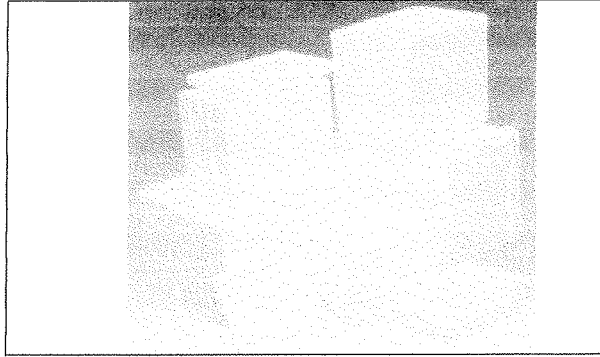


Figure 4.1. Foam boxes.

(b) Foam Picnic

This kind of foam style has the same objective as the above mentioned foam model. This foam picnic can assist the customers more conveniently with its nylon handle which help the users to carry it easily.



Figure 4.2. Foam Picnic.

Foam box with color-covered is another choice of foam box with its handle. This type of foam box has a higher price than the former type. It can be classified as made to order because of its design cover.

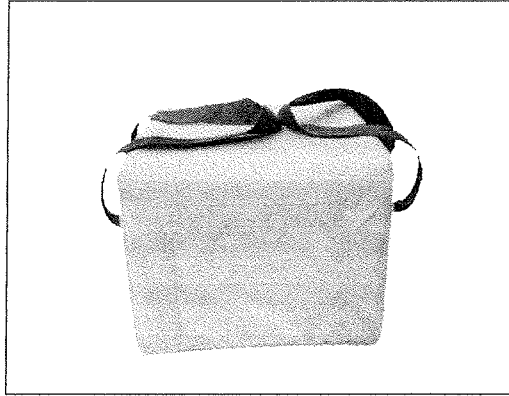


Figure 4.3. Foam box with its color cover.

(c) Foam Sheet

- (i) As per its name, the customers can easily understand that its shape is “Sheet”.
- (ii) Several sizes for different purposes of using. The sizes will be various by their thickness not width and height.
- (iii) Three density grades of foam sheet are intended to match the different in customers’ demands and specific used.

Foam sheet can be used for several purposes such as:

- (i) Education purpose : showing board for learning
- (ii) Construction purpose: to create walls, ceilings as well as the structure of floors.
- (iii) Public communication and mass communication purpose
- (iv) Exhibition, performance indication
- (v) Drama purpose : to set the foam sheet as a screen / backdrop
- (vi) To install the stronger foam sheet (grade a) as a partition
- (vii) Air and refrigerator manufacturing purpose: To fix as part of the refrigerators and air conditioners.

(viii) Electronic manufacturing: foam sheet is used as base or to protect the collision, and damage to the subject matter/ products.

(d) Foam Ball

It is one type of foam which is used to contain in any package in order to reduce the damage that may occur to some type of products.

With its very small shape, it looks like a pill, hence it can be used as the snow in the plays or in the studio.

(e) Made to order

The customers can design their own package or their products' model. To design the foam packaging to fit each specific product can be made with the use of moulding or blocking. This can be called tailor made since PS Foam has to create the new mould for special case.

It is certainly charged for that new block. But this new block can be no charged if the customers order very high volume. Normally the customers order not high volume and the cost of molding is very high, so the customers have to pay by themselves for the first time. If the customers order very high volume or reach the setting price, PS Foam will pay for their molding. The customers will pay only for their ordering.

The price of block will vary depending on each shape of products. So PS Foam cannot set the fixed price for the customers' calculation or budget. The following are the customers of PS Foam's tailor-made products.

(i) King bakery (cake foam box)

(ii) Gataeu House

(iii) Other bakeries.

(iv) Bucket-shape foam

The price varies depending on each pattern.

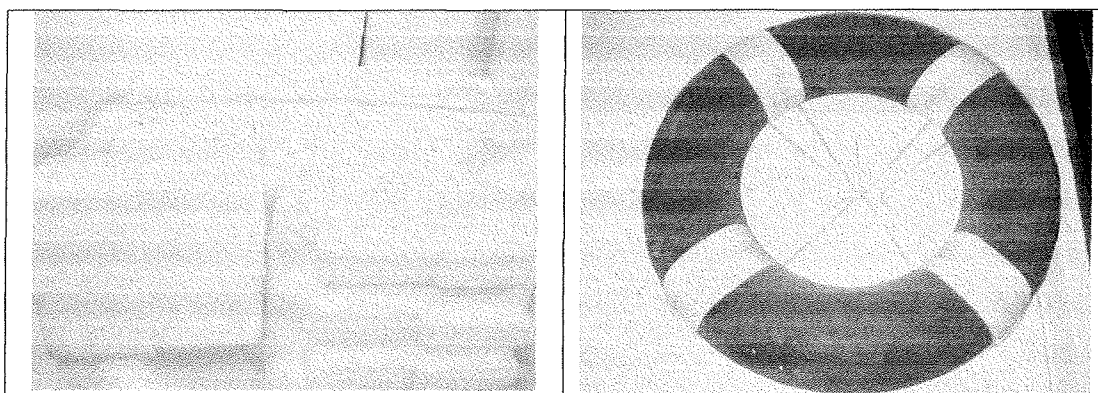


Figure 4.4. Made to order

Packaging:

Some types of products need the good packaging that can keep them fixed and protect them from any loss or damage that may occur.

Every journey is a risk. It is a long way from the loading point to another loading destination, with all the hazards encountered on the way. Expanded styropor reduces the risk. It is all depends on the package, because it can protect the product and produce at every stage of the journey especially for the fresh produce like fruit, vegetables, or fish, crabs, etc.

There is practically nothing that cannot be packed in expanded Styropor, be it large or small, heavy or light. Expanded styropor is the light weight material that can protect the heavy weights. It is more than just a packaging material: it is a packaging system in itself, functional and economic. However, the right design is all-important.

For examples:

- (i) For packing fish two things are vital: wet strength and thermal insulation.
- (ii) Refrigerators can be packed in styropor trays, which protect corners and serve as pallets.

(iii) Pharmaceutical products need protection against shock, pressure, and rapid temperature changes. Expanded styropor provides this: fragile ampoules and bottles can be packed in it without fear or breakage.

(iv) Etc.

The complete styropor box or case is ideal. It provides maximum security and optimum rationalization of packing operations. Hence, it is necessary for many types of products to be packed in the good and right packaging.

4.1.2 Fiberglass



Figure 4.5. Fiber glass.

(a) Microfiber

Fiberglass blanket & Batt type insulation

Useless Expenditure of wealth

Due to inadequate insulation in factories, offices and home constructions, we are wasting 50% of energy that is spent in heating and cooling. This unnecessary over spending costs a substantial amount of money.

Why should we waste the money that we have labored for?

Damage to our health

The high temperature in a tropical country like Thailand causes discomfort and can eventually jeopardize our health. The noise and air pollution affect our lives. Fortunately, thermal and acoustic insulations can protect our health.

Life is short and sweet, why should we shorten it by damaging our health?

Although we can not prevent these unnecessary losses, but we can minimize these losses by applying common sense and using Microfiber insulation materials.

What is microfiber and how is it made?

Microfiber is an excellent insulation material with outstanding thermal and acoustic efficiencies.

Microfiber is made of long, extremely fine glass fibers with a nominal diameter of seven microns. These fibers are bonded with thermosetting resin to form soft lightweight blankets, batts ceiling panels, cylindrical pipe covers etc. The countless tiny dead air cells of Microfiber give it its thermal insulating and sound absorbing characteristics.

Microfiber blankets, batts and ceiling panels can effectively prevent outside heat and noise from entering your homes to create a more pleasant and comfortable living environment. Moreover, if your rooms are air-conditioned, the cooling requirements are significantly reduced.

The insulation cost of Microfiber is cheaper and can be easily afforded by every house owner. It is an invaluable and long lasting investment.

Why use Microfiber?

It can be used as insulation against heat gain and/or heat loss, as well as acoustical insulation in residential/commercial/industrial buildings. Also as thermal/acoustical insulation in refrigerators, ducts, ovens, and other industrial equipment.

Microfiber can be easily installed instantly in your new or existing houses. By contacting the architect, engineer, contractor or our sales team, the right installation will be done and further recommendation will be given.

If fiberglass can be installed correctly, it can provide the consumers a lot of benefits. You can see its advantages given below:

- (i) Protect from the heat
- (ii) Maintain the right temperature.
- (iii) Protect from the irritating noise.
- (iv) Safety insulation

Main features of Microfiber:

- (i) High thermal insulation efficiency
- (i) Excellent sound proof value
- (ii) Easy to handle and install
- (iii) Incombustible
- (iv) Resistant to shocks, rodents or vermin
- (v) Low moisture absorption
- (vi) Light weight
- (vii) Not dangerous to body and your health

(b) Microcover

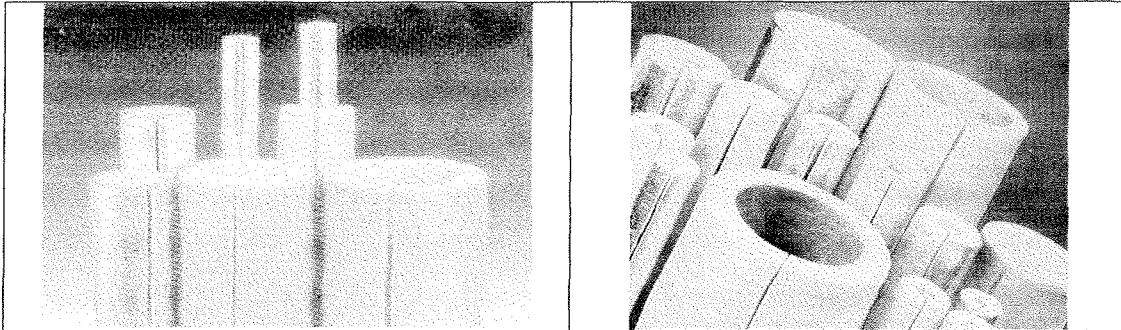


Figure 4.6. Microcover.

Fiber glass pipe insulation

It is a rigid, one piece fiber glass pipe insulation made from glass fibers bonded with a thermo-setting resin. It is lightweight, easy to work with, and has a one-piece “hinged” construction for quick installation.

Main Properties:

- (i) High thermal insulation efficiency, at 24°C (75°F) mean temperature, the thermal conductivity value is only 0.033 W/m. K(0.23 Btu in/ft²h/°f)
- (ii) Resilient and durable. Does not shrink, swell or rot.
- (iii) Moisture resistance
- (iv) Noncombustible.

Technical specification:

| | | |
|----------------|---|---|
| Density range | : | Standard 64kg/m ³ Availability 56-112 kh/m ³ (3.5-7.0 Lb/Ft ³) |
| Wall Thickness | : | ¾ , 1, 1½, 2, 2 ½, 3, 3 ½, 4, 4 ½ , 6 Inch. 19,25,38,50,63,75,89,100,112,125 mm. |

| | | |
|----------------------------------|---|--|
| Standard Length | : | Exactly 1 meter |
| Service temperature | : | 350 ⁰ c(660 ⁰ F) |
| Moisture Temperature: | | Less than 0.2% by volume |
| Corrosives | : | Does not accelerate with steel, copper or aluminium |
| Alkalinity | : | Less than 0.6% expressed as Na ₂ O |
| Chlorine content | : | Less than 0.0009% |
| Odour | : | None |
| Shrinkage | : | None |
| Resistance to fungi or bacteria: | | does not breed or promote growth |
| Surface burning | | |
| Characteristic | : | Frame spread 35 smoke developed 50 (ASTM E 84) |
| Packing | : | In carton box |
| Application | : | For steam pipe, hot water pipe, hot oil pipe, cold and chilled water pipe. |
| Benefits from Microcover: | | |

(i) Lower energy cost:

On a cost-performance basis, this fiber glass will save more fuel cost Bht than other insulations normally used as higher temperatures. No heat loss at joints due to shrinkage. Intermeshing glass fiber and single piece construction means less joints and tighter joints.

(ii) No breakage loss:

Under normal circumstances, it will not crack or break in shipping or handling, during, or after installation.

(iii) Faster, simple installation, saves time.

One piece construction with complete cylindrical spring hinge action, light weight, avoids difficult handling two or more sections. Cuts with a knife, no saws or special tools required.

(c) Micro Duct Wrap

It is one kind of Microfiber which is especially designed for covering the cooler duct or heating duct of buildings, offices, factories, as well as residences in order to maintain the stable temperature of the duct not to exceed 121⁰c or 250°F

Advantages:

- (1) Thermal Resistance
- (2) Sound Absorption
- (3) Condensation Control
- (4) Easy to install
- (5) Nonflammable and nonsmoker
- (6) Fungi Resistance
- (7) Long life Performance.

Technique Information

Table 4.1. Technical information for Micro duct Wrap.

| Density (kg/m ³) | Thickness(mm.) | Length (m.) | Width (m.) |
|------------------------------|----------------|-------------|------------|
| 16 | 25 | 30.50 | 1.22 |
| | 38,50 | 15.25 | 1.22 |
| 24 | 25 | 30.50 | 1.22 |
| | 38,50 | 15.25 | 1.22 |
| 32 | 25,50 | 2.44 | 1.22 |

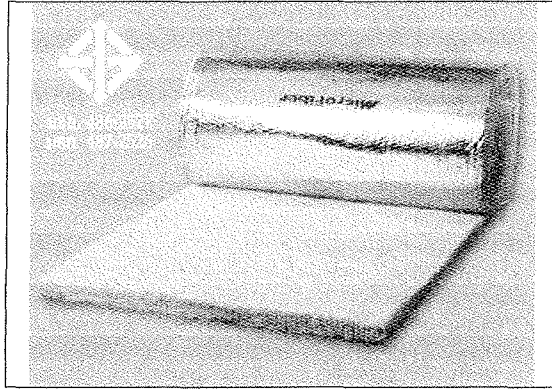


Figure 4.7. Micro Duct Wrap.

(d) Microceiling

Microceiling board for thermal and acoustic insulation



Figure 4.8. Microceiling.

Microceiling:

Microceiling is made of fiber glassed bonded with thermosetting resin to form a strong, dimensionally stable ceiling panel. The surface is faced with textured vinyl film

which offers unique beauty, while the base fiberglass panel provides effective acoustical and thermal insulation.

Excellent Sound control

Microceiling offers excellent sound control and high noise reduction coefficients assuring quiet interior condition in various types of buildings: - offices, schools, stores, shopping centers, residential houses and buildings , as well as other commercial and institutional structures. Microceiling acoustical panels are also ideal for industrial areas, where their sound-control qualities assure reduced noise pollution.

Thermal Insulation Efficiency

Microceiling offers effective thermal insulation value, an ideal product for energy saving.

Durability

Film-faced ceilings will not chip or crack. The high moisture resistance and dimensionally stable panels will not warp, buckle or sag after installation.

When necessary, surface dirt can be removed with vacuum cleaner or by wiping with damp sponge and mild detergent solution. The easily washable surface lowers maintenance cost.

4.2 Price

The price shown in the web site is the factory selling price which cannot be found in the direct physical market.

The prices of PS Foam products are ranged and differentiated by their sizes, nature of each product as well as their different qualifications. The prices are varied as shown in the following tables:

4.2.1 Foam

(a) Foam Boxes Price List

Table 4.2. Foam boxes price list.

| Weight (kg) | Size Description (Width x Length x Height)(cm.) | Price @ box |
|-------------|--|-------------|
| 5 | 21 x 30 x 23 | 30 |
| 10 | 25.5 x 37.5 x 31 | 40 |
| 13 | 30 x 39 x 33 | 50 |
| 15 | 31 x 43 x 33 | 60 |
| 20 | 34.5 x 47.5 x 36 | 70 |
| 25 | 45 x 60 x 31 | 80 |
| 30 | 51 x 51 x 39 | 130 |

(b) Foam sheet

Table 4.3. Foam sheet price list.

| Size (foot) | 0.6 pound Baht / each | 1 pound Baht / each |
|-----------------|--------------------------|------------------------|
| 2 x 4 x ½ inch | 10 | 20 |
| 2 x 2 x ¾ inch | 15 | 30 |
| 2 x 4 x 1 inch | 20 | 40 |
| 2 x 4 x 1½ inch | 30 | 60 |
| 2 x 4 x 2 inch | 40 | 80 |

(c) Foam Picnic

Table 4.4. Foam picnic price list.

| | Normal | Yellow -Color |
|--------------------|--------|---------------|
| Length | 34 | 32.5 |
| Width | 23 | 19.5 |
| Height | 22.5 | 20 |
| Weight | 300 g. | 200 |
| Selling Price/Baht | 70 | 100 |

(d) Foam Ball

Table 4.5. Foam Ball Price list.

| Weight | Baht |
|---------------------|------|
| 1 Kg. | 120 |
| 5 Kg. (per package) | 600 |

4.2.2 Fiberglass

The price is varied as shown in the following tables:

(a) Microceiling

Table 4.6. Fiberglass price list.

| Vinyl film | thickness (mm.) | Width x Length (mm.) | Spec | Piece Per box | Price(baht) | |
|------------|-----------------|----------------------|---------|---------------|-------------|------|
| | | | | | Plain | Foil |
| No.824 | 19 | 600 x 600 | MI A824 | 40 | 75 | 88 |
| 826 | 19 | 600 x 1200 | MI A826 | 20 | 145 | 170 |
| 862 | 25 | 600 x 600 | MI B862 | 30 | 95 | 108 |
| 864 | 25 | 600 x 1200 | MI B864 | 15 | 185 | 210 |

(b) Microfiber / fiberglass (roll)

The fiber glass is mainly used by construction field. These products type are sold as a roll. There are many sizes of roll based on specific used. The price is differentiated by their sizes and their features. Some customers purchase by themselves, they sometime don't want to pass the construction because they beware of the additional charges may occur. Before purchasing, the users must know the size of the specific area they want to apply with. Because PS Foam staff will calculate the space and the suitable size of Fiber glass roll together with suggestion of installation. In some case the clients have no knowledge of installation, PS Foam will serve by hiring the technician to install with the clients have to responsible for this expense without any additional charge from PS Foam.

Fiber Glass
MicroFiber
Insulation for residence

Table 4.7. Price list of insulation for residence.

| Density (kg./m ³) | Thickness (mm.) | Size (m.) | Area (m ²) | SPEC | Price per roll (square meter) (Baht) | | |
|----------------------------------|--------------------|-------------|---------------------------|-----------|---|---------------|----------------------------|
| | | | | | One side foil | Two side foil | Foil covers for all sides. |
| No.5 | 50 | 0.6 x 4 | 2.4 | MI No.5-2 | - | - | 285 |
| No.5 | 75 | 0.6 x 4 | 2.4 | MI No.5-3 | - | - | 350 |
| R - 7 | 50 | 1.22 x 16.5 | 20 | R 7 | 2600 | 3250 | - |
| R-10 | 75 | 1.22 x 11.5 | 14 | R10 | 2520 | 2985 | - |

(c) Microcover

Fiberglass Pipe Insulation (plain / Aluminium Foil) , Density 64 Kg/m³

Table 4.8. Price list for Microcover.

| ขนาดท่อ เหล็กस्टริม I.P.S. (Inch) | ภายนอก O.D. (mm.) | ความหนา Wall Thickness / price per Meter (Baht) | | | | | | | | | | | |
|--|-------------------------|---|------|-------------|------|---------------|------|-------------|------|---------------|------|-------------|------|
| | | ¾" (19 mm.) | | 1" (25 mm.) | | 1 ½" (38 mm.) | | 2" (50 mm.) | | 2 ½" (63 mm.) | | 3" (75 mm.) | |
| | | Plain | Foil | Plain | Foil | Plain | Foil | Plain | Foil | Plain | Foil | Plain | Foil |
| ½ | 21.7 | 66 | 74 | 85 | 93 | 144 | 153 | 207 | 217 | - | - | - | - |
| ¾ | 27.2 | 72 | 80 | 90 | 98 | 150 | 159 | 215 | 225 | - | - | - | - |
| 1 | 34.0 | 85 | 94 | 102 | 111 | 157 | 167 | 217 | 228 | - | - | - | - |
| 1 ¼ | 42.7 | - | - | 109 | 118 | 169 | 179 | 230 | 241 | - | - | - | - |
| 1 ½ | 48.6 | - | - | 120 | 131 | 181 | 193 | 241 | 256 | - | - | - | - |
| 2 | 60.5 | - | - | 133 | 143 | 193 | 206 | 265 | 280 | 362 | 378 | 517 | 534 |
| 2 ½ | 76.3 | - | - | 144 | 156 | 217 | 232 | 302 | 317 | 410 | 427 | 546 | 564 |
| 3 | 89.1 | - | - | 157 | 169 | 241 | 256 | 350 | 366 | 471 | 489 | 592 | 611 |

The setting prices of each product type in the above table can be decreased by the high order volume. Besides, the customers can have the longer terms payment if they have reliable credit or always give their payment in due course.

4.3 Place

“PS Foam” is the existing company that operates the business of insulation. The physical office is located in the center of Bangkok. It therefore can easily access to customers and the customers can easily reach us and we can provide quick and better service because short travel can increase the customers’ satisfactions.

Creating the website does help and is more convenient for the customers because the products in this field must be learnt and customers can have much information before considering buying each product type. If the customers have some queries concerning the products, they can promptly call us, but they can see neither sample nor picture. Accessing to the web site, it can help the customers to reduce the time and reduce the traffic problem. It is twenty-four hours availability access from any time anywhere. The customer can view the selected products by easily entering into www.psfoamplastic.com, then they can click on the product they want to know, and contact us for further information.

After this PS Foam has been transferred to post on the web hosting, the customers can easily search the required information and can read each products’ details before any purchase. They can access the PS Foam website twenty-four hours a day, seven days a week.

4.4 Promotion

The Existing Market Strategies.

Nowadays PS Foam promotes the company and does advertising through the Yellow page, magazines, university and school catalogues, and construction catalogues

which have high costs. So PS Foam decided to create the web site to post on the Internet for promoting the company's name and promoting what the company sells.

Normally, the promotion of PS Foam is Quantity volume discount. It is decreasing the products' price by high volume of order, based on each per each volume. PS Foam always has very high volume of order from the factories, so PS Foam can sell at the factories' prices equal to other manufacturers'. Furthermore, the longer credit or payment term are satisfied by most of customers. As always, PS Foam mainly emphasis on the company service of quick delivery, Product availability, Product quality, useful suggestion of the right products' usage.



V. THE EXISTING SITUATION ANALYSIS

This chapter analysis the existing situation of PS Foam Plastic Company. A popular way to conduct such an analysis is to start with environmental scanning using SWOT analysis.

5.1 SWOT Analysis

Performing a SWOT Analysis

SWOT is an acronym used to describe particular Strengths, Weaknesses, Opportunities, and Threats. It is a simple, popular technique which can be used in preparing or amending plans, in problem solving and decision making, or for making the staff generally aware of the need for change.

Definition

SWOT analysis is a general technique which can find suitable applications across diverse management functions and activities, but it is particularly appropriate to the early stages of strategic and marketing planning.

Performing a SWOT analysis involves the generation and recording of the strengths, weaknesses, opportunities, and threats concerning a task, individual, department, or organization. It is customary for the analysis to take account of internal resources and capabilities (strengths and weakness) and factors external to the organization (opportunities and threats).

SWOT Analysis of the company

Strengths

Strengths can relate to the organization, to the environment, to public relations and perceptions, to market shares, and to people. "People" element includes the skills,

capabilities and knowledge of staff which can provide a competitive edge, as well as reasons for past successes. Other than the above said, the following are included:

(a) Easier controlled of business operation

PS Foam Plastic Company is only a small company that has only fifteen staff. Therefore, the company can simply provide flexible services and meet the customer needs without any complex processes.

(b) Good management.

(i) The owner of the company has skill and experience of insulation industry for more than thirty years. He also has the vision and leadership to direct the company toward its goal.

(ii) Planning and controlling systems are effectively developed to immediately respond to changes in the market. The company hires staff and supervisors who have specialized in a particular skill. The company decentralizes the authority and power to each low level to quickly solve the problems and to motivate, empower, and encourage its staff to make a great contribution.

(c) Center point of physical store location.

The company is located in the center of Bangkok. It therefore can easily access to customers and the customers can easily reach us and we can provide quick and better service because short travel can increase the customers' satisfactions.

(d) High Experience in Insulation field

As the company has been founded in this industry for more than sixteen years, it has gained economies of scope. It knows how to produce in the most efficient and effective way.

(e) Good Image

The company has a good image in the customers' perception as well as the supplier's perception.

(f) Price Competitive advantage

This can be the crucial factor of PS Foam strength because the product's price of PS Foam is one point of the competitive advantage. PS Foam sells the products at a very competitive price because of high volume of sales and long experience in this field of industry and knows how to win the price with the better product qualities that can win the customer's satisfaction. In addition, PS Foam can set the price as equal as the manufacturers' themselves.

(g) High quality of products

The customers can ensure in PS Foam products since the production of our products has been controlled and inspected by the owner of PS Foam in every stages. Although he is not involved in any production process, he finally will check the products' quality by himself or may be by his reliable assistants. Nowadays, the customers can differentiate PS Foam products with other brands because of their absolute differences.

Weaknesses

(a) Lack of online business experience

(b) Intermediary status.

The company is only the intermediary. PS Foam does not have its totally owned the factories. Although the owner of PS Foam had ever settled this aspect, he knows how to do each type of foam, but he cannot operate the processes by himself and does not have any deep knowledge concerning the production

processes; he can check and control only the finished goods. So it is hard to open the PS Foam factory.

(c) Low-educational background staff.

The company has skilled labor (workforce). The low level employees have low education and skills newly trained before doing the real works. Training consumes a lot of time and costs. Also these newly trained workers are supposed to make errors and defects which can increase the production costs

(d) Communication problem

Due to most of our staff not being good in English, misunderstanding that always leads to errors, defects, scraps, and rework, is often the result of these kinds of problems.

(e) High Competition

Although PS Foam has price competitiveness, the competitors can win the new customers as well as intervene PS Foam's existing customers by their lower prices. Some customers normally select the cheaper price first. These kinds of customers will not be aware of the product's quality. Most of the clients do not know deeply that the products in this field of business can be ranged into several classes.

(f) Lack of progress in technology

Currently, most of the businesses have their own websites in the Internet. PS Foam still does not have it. So it is a disadvantage for PS Foam Plastic Company.

Opportunities

This step is the external environment that is outside the company and is not typically within the short-run control of the top management. It is designed to assess the socio-economic, political, environmental and demographic factors, among others, to evaluate the benefits they may be brought to the organization.

(a) Increase in number of customers

The customers may rely on PS Foam product and will spread their belief and trust through the market. So there may be more demand, and lead to more sale volume

(b) Increasing in E-Commerce Growth

Nowadays, there are the growing numbers in E-Commerce users and audiences. E-Commerce has become the convenient tool for trading. With its cheap cost of investment and other ways, there are more Internet users coming. In the current education system, most schools and universities have set the Internet subject as the required course which enhances the human qualifications. So the trend of E-commerce tends to increase rapidly.

(c) Reduction in number of competitors

As mentioned above, PS Foam always controls the products quality. Since we have no factories nowadays, but we hire the factory and make contracts to produce poly-foam by PS Foam private formula. PS Foam Products are produced and mixed with PS Foam components.

(d) Low price of entering the market.

With the e-Commerce technology, the opportunity of introducing and expanding products into the worldwide market is easy to do and low monetary funds for investment need to be spent.

(e) Create the chance of exporting to global market

E-Commerce could create benefits for the entrepreneur. Small businesses could grow and progress because Internet is the new media where the buyer meets the seller. The buyer can seek information of our merchandise from all around the world and compare our product with the other brands.

After PS Foam Website has been posted on Internet, it is another way to expand the market. As the Internet can be called a tool that can diminish the world to be smaller, we therefore can contact the global market easier with low cost of communication. We can contact the global market by e-mail correspondence without any additional cost other than the Internet fee. So the company may have a chance to expand the market into the global market. At that time, the company products may match with any prospected client so the company can do the exporting to generate more revenue. The Internet can also enhance services because the users can access to the website anytime and anywhere, twenty-four hours a day, seven days a week.

Threats

(a) Technical limitation

(b) Bad Economy in customer's country.

Bad Economy will decrease customers' purchasing power and the demand for the product. Less demand means less sales and less profit.

(c) Limitation in foreign import regulations and restrictions.

Each foreign country such as America, Canada, Singapore, Australia, etc has more import restrictions and regulations. The duty tax from these countries is also an obstacle for the company to carefully consider.

(d) Increase in number of competitors.

If there are many new entrances in the company's product, it will lead to more competitive markets. Therefore, it is difficult for the company to get large sales and high profit.

(e) Economic Slow Down

It is anticipated that if the customers, government and all stores will use less of foam which creates the pollution, they may tend to use only those made from papers.

5.2 Target Market

As mentioned above PS Foam will not operate online for this website project, but just only to show the product's details. So the target market will remain the same as said in the section of existing customers (chapter III). The target customers of PS Foam remain the same but expect to gain more shares of each customer business field. However, the target market of the company emphasizes on both B2B and B2C.

The target market of the company emphasizes on both B2B and B2C.

(a) B2B:

For B2B, Suppliers, other companies which use the product as material or packaging. some companies purchase the products from PSFOAM in order to individual sale at their companies' fronting offices. i.e. Presently the company serves the large organizations (Big manufacturers and distributors in the field of consumer products, Contractors, Refrigerator manufacturers as well as sound audio companies, etc)

(b) B2C:

For B2C, many customers purchase the products for their direct usages. Students buy the foam product to be used as stationary, for plays, and use foam boxes for temperature controlling as well as those who intend to buy for only their usages.

5.3 Market Positioning

PS Foam has been positioning as an intermediary. Thus, PS Foam has to contact several suppliers as well as the owners of each factory. And there are many organizations or corporate currently purchasing PS Foam Products.

Presently PS Foam are the suppliers for many organizations (which cannot be revealed) The existing clients of PS Foam all know that PS Foam Products' Price are quite lower than other manufacturers' and those of other insulation or foam companies. Furthermore, PS Foam products emphasize on their standard qualities.

5.4 Market Segmentation

It is the process of dividing a consumer market into a logical group for marketing research decision making, advertisement, and sales activities. PS Foam can segment the customers into their group of occupancies in order to summarize at the end of each year among which group of customers PS Foam should expand the product range. PS Foam also has the number of customers' record in order to measure which channels of business come first and also to measure the effectiveness of advertisement. The record will be specified as follows:

(a) Walk- In customers

Those who come to PS Foam physical office to buy the products when they just pass PS Foam front store. If they do not pass, they will surely not purchase from PS Foam.

(b) Customers from advertisements.

Those who know PS foam from any advertisement, most of them will use the telephone to contact first and then will do the further processes.

(c) Informative Customers

PS Foam Company has been recommended or suggested to these kinds of customers by PS Foam's existing customers.

(d) Approached Customers

This is the group of customers PS Foam approaches.

From the company recorded, PS Foam then categorizes these different channel of customers into each different group to indicate the field of PS Foam's products users. Then the company can simply see the result of the graph analysis and will easily realize that which group of customers they should concentrate and which customers they should approach.

5.5 Competitive Analysis

Competitive Analysis

5.5.1 Direct Competitors.

Direct Competitors of PS Foam Company are those who operate the same field of business including Insulation suppliers & manufacturing, as well as all intermediaries i.e. small to medium sizes of companies/ manufacturers

These direct competitors are always competing the price with PS Foam. Some of these potential competitors are having their own websites. The following figures are some of these competitor's websites and will be analyzed by SWOT Analysis in the next sections:

(i) Bay Corporation

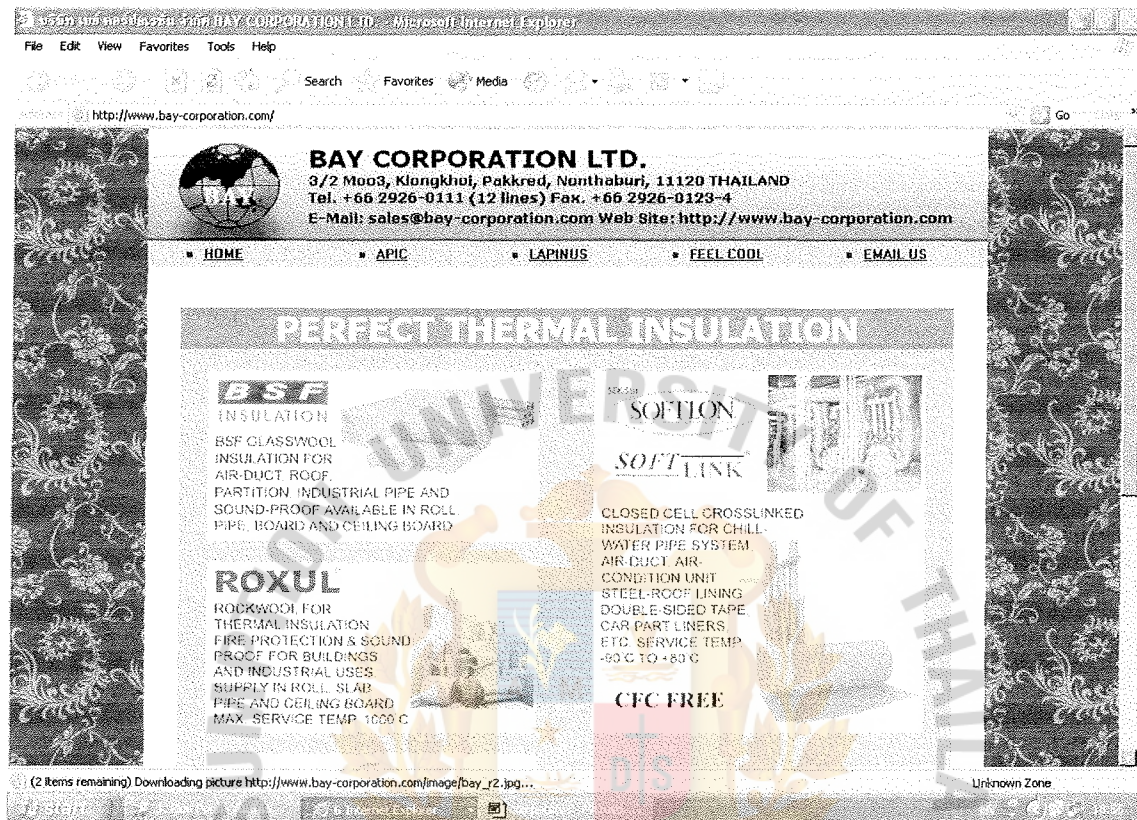


Figure 5.1. Web image of Bay Corporation.

(ii) Miccell Co.,Ltd.

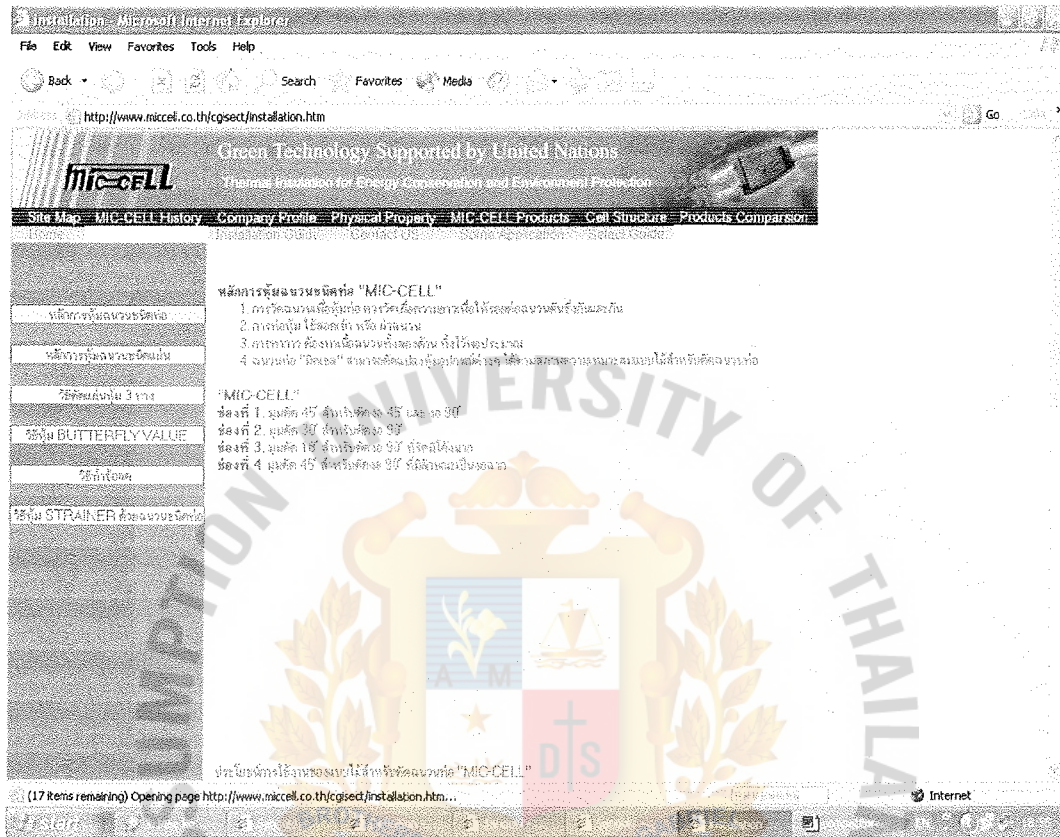


Figure 5.2. Web Image of Miccell Company.

Strengths:

(1) Advanced in Technology

Some of these companies already have their own websites. So when the prospect's/ customers search from the search engine on the Internet, they will find from the word "insulation business", and they can easily contact these companies.

(2) Price Competitiveness

Some of these companies are manufacturers themselves, so they can lower their products prices as much as they can without worrying about such factors.

(3) Sizes of Stores

Some companies have large store sizes. So it can create the customers reliability.

(4) More reliable

It's seem to be more reliable since they have been operated for a longer time by the security capital. Most of Customers may rely on the bigger or large organizations than those intermediaries.

Weaknesses:

(1) Location

Most of the manufacturers have located their factories far away from Bangkok. So in case of emergency they cannot reach the customers as quickly as they can.

(2) Pollution

Although some competitors have large areas of offices and factories, some customers do not like to go, because of the pollution of producing foam and other insulated products are very dangerous and poisonous to human health.

(3) Customers Dissatisfaction

Most of the customers are satisfied to purchase from intermediaries or small businesses because of the better services and on-time delivery as well as longer credit term payment.

(4) Non negotiated price

Most medium to large companies do not have the good marketing strategies because of non-concentrating on direct customers or a small volume. So the price cannot be negotiated.

(5) Offline operating website

Although they have the website, it contains only three pages maximum which cannot provide any more details that can make the customers understand more, and it does not mention any contact person. Since this kind of products cannot be sold online, so it should have further information or the contact name if the customers need to know anything or want to purchase something.

5.5.2 Indirect Competitors.

These competitors will not find the market like the above competitors, because their products are different from PS foam and the above competitors but they can be used as substitute due to the same product type. Also for the big manufacturers / companies will concentrate only on the big organizations or the corporate sites, and their customers are all intermediaries, so they will not directly contact the general customers by themselves. Because it may waste their time and cost to conduct low demand customers. They can also reduce their marketing expenses. This creates the advantages to reduce their own market cost with the corporate businesses, the large manufacturers, as well as the large construction sites, etc.

Another type of indirect competitors are those who sell the same kind of products but have different purpose of usages, e.g. Thepvimol Packaging Co.,Ltd. only one kind of product is sold the same as Ps Foam, that is “Foam Sheet” but the other kinds have different purposes.

Here are the website of indirect competitors:

(i) Thepvimol Packaging Co.,Ltd.

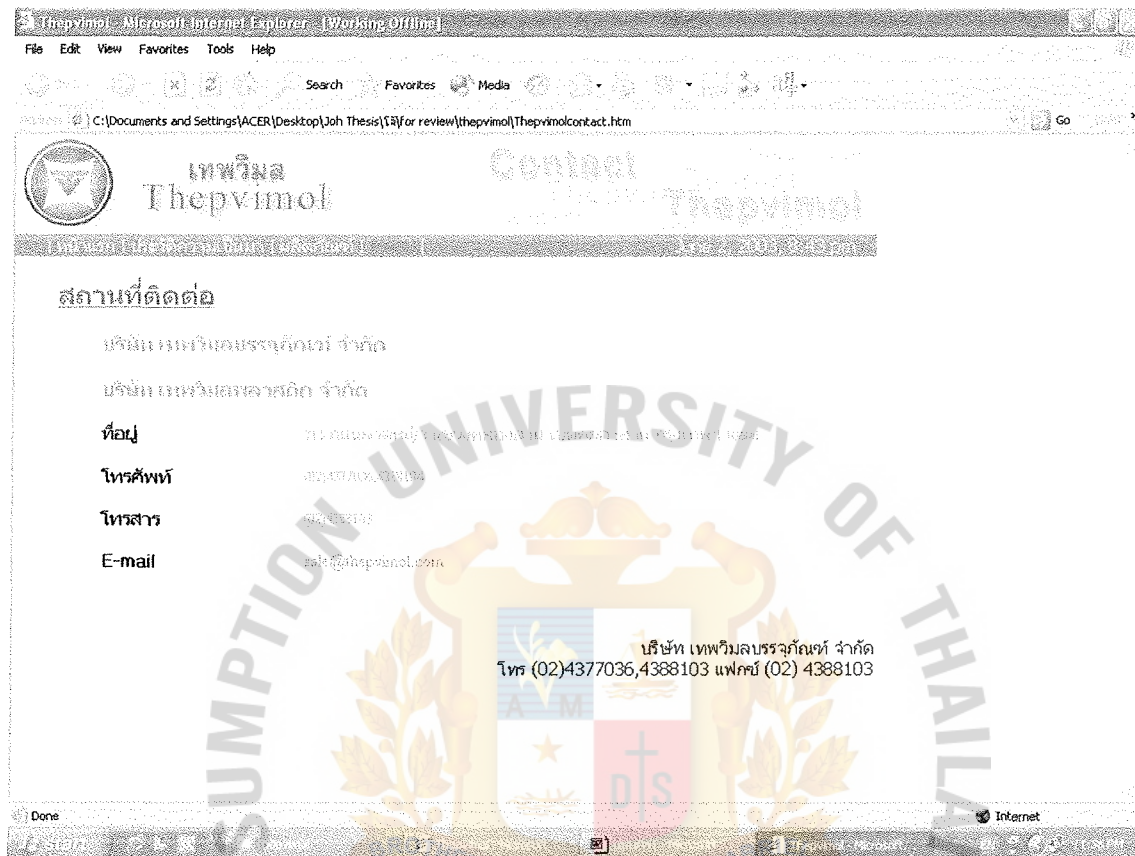


Figure 5.3. Thepvimol Foam Packaging Co.,Ltd.

(ii) Eastern Polymer Industry.

This is the large industry and manufacturer of insulation field in Thailand.

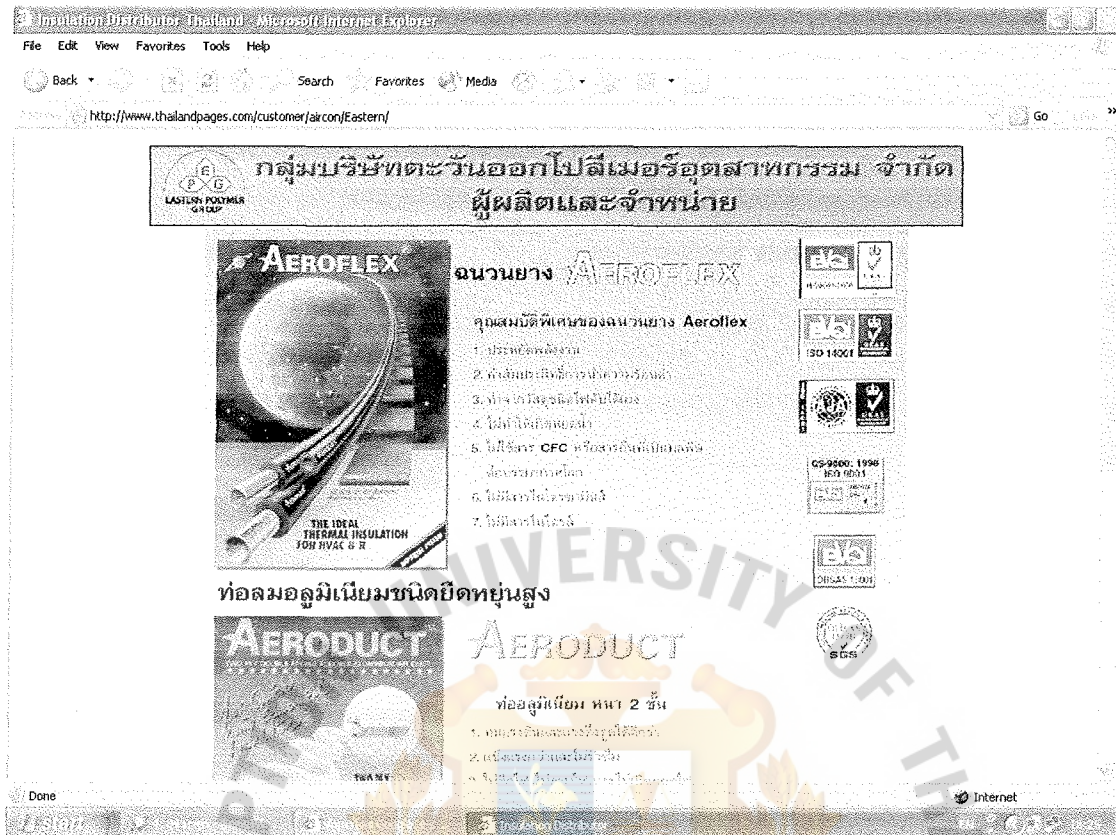


Figure 5.4. Eastern Polymer.

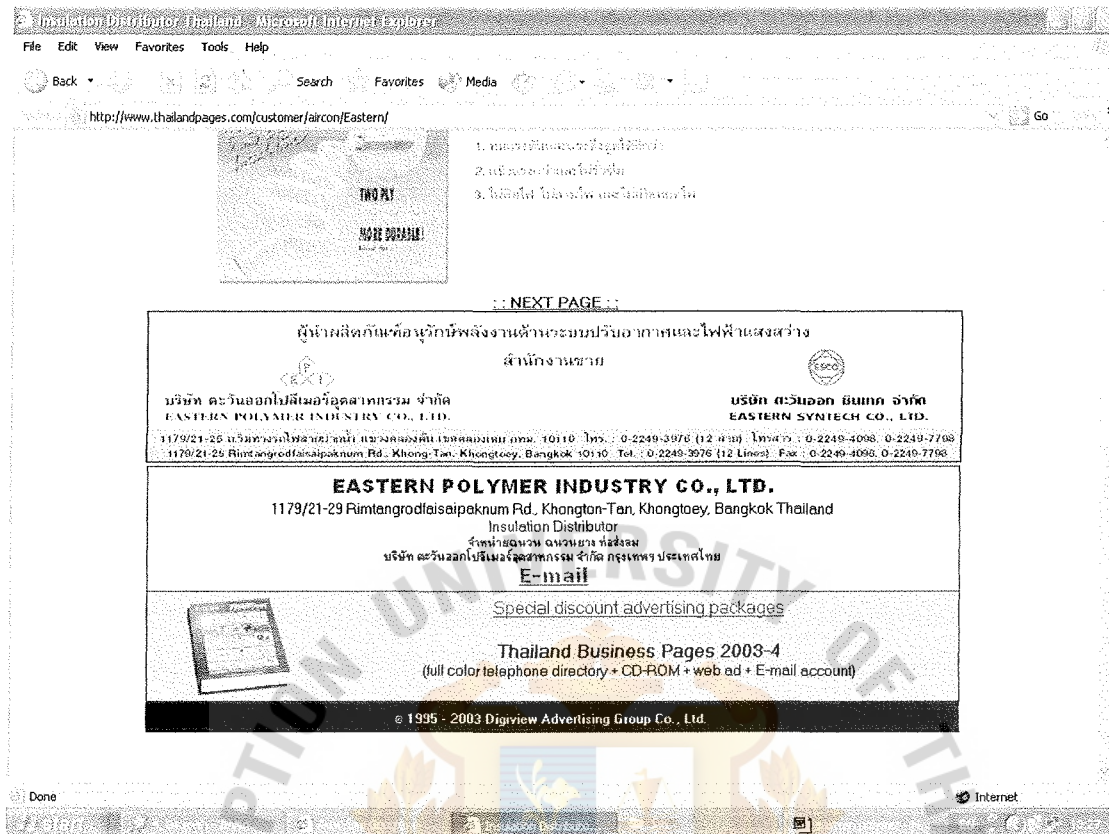


Figure 5.5. Eastern Polymer.

Strengths:

- (1) Have its own factory, they therefore, are not aware of the competitors much since the main customers of this manufacturer are “the agents or intermediaries”
- (2) Having a web site which has already been promoted for a year.
- (3) Own self based. They will not base on others; everything will be based on themselves. Such as Price Competition.

Weaknesses:

- (1) Raw Materials are expensive

For the production process, raw materials are needed. It can be seasonal price if it is in the high season, the price of raw material may be higher and more expensive because some of raw material may be imported from upcountry.

(2) The website cannot sell online

Because of the difficulty of products that cannot be traded online, the company should provide the contact number and further information than in the normal brochure.

(3) High expenses of manufacturing

For the production process, it certainly needs very high costs and expenses of operating which the intermediaries will not suffer.

(4) Low educational background staff

It is difficult to communicate in English since the workforce of these manufacturers are low educated. A major training is needed to improve the quality of staff.

5.6 Key to success

The key to success is to maintain the customer satisfaction. One of those keys is to maintain and develop the products' qualities.

The good communication between the customers and the company staff as well as the company suppliers is highly crucial for a successful outcome. Sending out the company news or update on the website can make the customers familiar with the company. Moreover, the company should serve the customers when there is an urgent case, and understanding each situation of the customers whilst they are facing any problem, will automatically make them think of PS FOAM when that time arrives.

VI. FINANCIAL ANALYSIS

Cost Benefit Analysis

Cost Benefits analysis is used to determine whether the project is economically feasible. Numerous approaches have been developed to measure the value of the proposed project to a company.

There are the costs of an Internet program and creating as well as maintaining the web site. The following are included:

- (1) Connecting to the Internet (ISP)
- (2) Hardware and Software
- (3) Website and advertising design
- (4) Staff to develop the web site content (may be part-time or full-time)

However the starting investment cost for this project can be divided as follows:

- (1) Fixed cost

This cost will be invested only the first time, it is normally for the Computer and its equipment as well as other hardware and software application and the system that is used to create this project.

- (2) Operating costs

This cost will be added every month equally. Because this is the operating cost of work in each month, or may be separate for each year.

6.1 Start Up Expense and Source of Funds

As the initial minimum investment is the crucial element of our web site in order to reduce all possible costs, so the total start-up cost of www.PSFOAMPLASTIC.com is very low when measured to other kinds of advertisement.

Table 6.1. Start-up Expense.

| Start-up Expense | Baht |
|--|--------------------|
| Hardware <ul style="list-style-type: none"> • One set of Computer • Printer • Scanner (600 x 1,200 dpi) | 47,800.00.- |
| Digital Camera | 24,699.00.- |
| Software | 18,000.00.- |
| Miscellaneous | 8,000.00.- |
| Total | 98,499.00.- |

Operation Expenses in each month are for the following items:

Table 6.2. Operating expenses each month.

| Operating Expenses | Baht | |
|---|---------------------|-----------------|
| | Per year | Per month |
| Hosting fee and Web pages (with storage of 200 MB) | 3,480.00.- | 290.00 |
| Domain name fee (include in Hosting Fee) | 0.00.- | 0.00 |
| Web Maintenance Expense | 48,000.00.- | 4,000.00 |
| Advertising and Promotion | 39,000.00.- | 3,250 |
| Miscellaneous | 14,400.00.- | 1,200.00 |
| Total operating expense | 104,880.00.- | 8,740.00 |

Here are the estimated expenses per year for three years.

Table 6.3. Forecasting expenses for three years

| Estimating Expenses Per year | | Baht | | |
|---------------------------------|--|----------------------|----------------------|----------------------|
| | | 1 st year | 2 nd year | 3 rd year |
| 1. | <i>Starting Expenses</i> | | | |
| | Hardware <ul style="list-style-type: none"> • One set of Computer • Printer • Scanner (600 x1,200dpi) | 47,800.00.- | - | - |
| | Digital Camera | 24,699.00.- | - | - |
| | Software | 18,000.00.- | - | - |
| | Miscellaneous | 8,000.00.- | - | - |
| | Total Fixed costs | 98,499.00.- | - | - |
| 2 | <i>Operating Expenses</i> | | | |
| | Hosting fee & web pages | 3,480.00.- | 3,480.00.- | 3,480.00.- |
| | Domain name fee | 0.00.- | 0.00.- | 0.00.- |
| | Web Maintenance Expense | 48,000.00.- | 48,000.00.- | 48,000.00.- |
| | Advertising and Promotion | 39,000.00.- | 39,000.00.- | 39,000.00.- |
| | Miscellaneous | 14,400.00.- | 14,400.00.- | 14,400.00.- |
| | Total operating expense | 104,880.00.- | 104,880.00.- | 104,880.00.- |
| | Total Estimated Expenses per year | 203,379.00.- | 104,880.00.- | 104,880.00.- |
| | Accrued Expenses | 203,379.00.- | 308,259.00.- | 413,139.00.- |

Table 6.4. The start up expense & operating expenses per month.

| | Jan'03 | Feb'03 | Mar'03 | Apr'03 | May'03 | Jun'03 | Jul'03 | Aug'03 | Sep'03 | Oct'03 | Nov'03 | Dec'03 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Fixed costs | 98,499 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Operating Costs | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 |
| Total | 107,239 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 | 8,740 |
| Accrued Expenses | 107,239 | 115,979 | 124,719 | 133,459 | 142,199 | 150,939 | 159,679 | 168,419 | 177,159 | 185,899 | 194,639 | 203,379 |

6.2 Forecasting order and profit:

Then, in the part of revenue, it can be forecasted as follows:

Sources of Income

Sources of Income for this project will come from the profit gain from each type of products. The profit of each product will be different. Different kinds of products will have different kinds of profit.

The following table shows the minimum profit generated from each product range:

Table 6.5. Minimum Profit of each product range per item.

| Product | Profit (Baht) | Per item |
|-----------------|--------------------|----------|
| Foam Box | 11.00 | Per box |
| Foam Picnic | 18.00 | |
| Foam Sheet | 3.00 | Per item |
| Foam Ball | 20.00 | Per kg. |
| Made to order | Based on each work | |
| Fiberglass | 220.00 | Per roll |
| Micro cover | 150.00 | Per box |
| Micro ceiling | 130.00 | |
| Micro duct wrap | 160.00 | |

Assumption:

We positively thought that by this project, we will have the return on investment about:

(a) The beginning phase:

In the period of the first month after just opening PS Foam website, it can help generate no profit. It is because the web site has just been opened, so it is needed to be promoted and advertised to be known. Thus, this web site cannot generate any profit during this period.

(b) Second Month

For this period, there may be increase in sale volume and generate the initial profit. The orders are as follows:

- (i) The first order is Microfiber for which PS foam gets only 220 Baht profit from per roll. The client is corporate and will order 20 rolls.
So, the total profit is 220 Baht @ 20 rolls = 4,400 Baht.
 - (ii) The second order is 500 Foam boxes. The profit of a foam box is 11 Baht for each item. So the total revenue from this item is Baht 5,500.-
 - (iii) And Foam ball for 45 Kg., the profit is 900 Baht.-
 - (iv) The last order for this month is 1,000 Foam sheets, and the profit is 3 Baht each. So the profit for this last order is 3,000 Baht
- Total profit this month: 13,800 Baht.

The profit of the next month will be increased as the forecasted percentage below:

Table 6.6. Forecasting profit each month.

| Month | Forecasting increase in profit %each month | Amount (Baht) | Accrued Revenue |
|------------------------|--|---------------|-----------------|
| 1 st Month | 0 | 0.00 | |
| 2 nd Month | Start Getting revenue | 13,800.00 | |
| 3 rd Month | 2% | 14,076.00 | 27,876.00 |
| 4 th Month | 2% | 14,358.00 | 42,234.00 |
| 5 th Month | 4% | 14,932.00 | 57,166.00 |
| 6 th Month | 4% | 15,529.00 | 72,695.00 |
| 7 th Month | 4% | 16,461.00 | 89,156.00 |
| 8 th Month | 6% | 17,449.00 | 106,605.00 |
| 9 th Month | 6% | 18,495.00 | 125,100.00 |
| 10 th Month | 6% | 19,975.00 | 145,075.00 |
| 11 th Month | 8% | 21,473.00 | 166,548.00 |
| 12 th Month | 8% | 23,299.00 | 189,847.00 |

In the second year and third year, the sale volume is expected to increase by 10% and 20% accordingly.

Table 6.7. Forecasting minimum revenue for three years.

| | 1 st Year | 2 nd Year | 3 rd Year |
|--------------------------|----------------------|----------------------|----------------------|
| Total sale volume (bht.) | 189,847.00 | 208,832.00 | 250,598.04 |
| Accrued Income | 189,847.00 | 398,679.00 | 649,277.04 |

6.3 Breakeven point Analysis

As per Figure 6.1 below, in the first month the company forecasts that the website can generate no profit because this period is the month of promoting the website to be known in the market. After that, the minimum revenue is expected to gain each month and increased by 2% with accumulated. The forecasted revenue cannot cover the occurred expenses until in the operating month of thirteen approximately.

See below figure:

Breakeven point

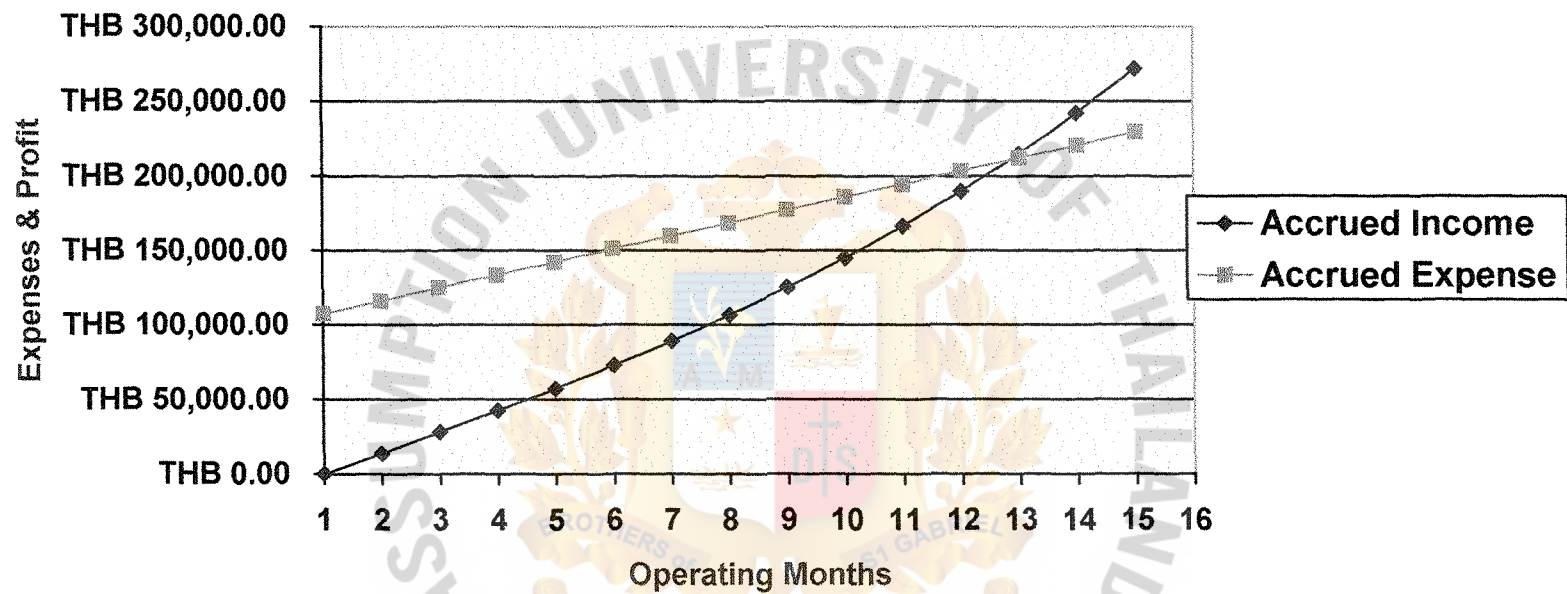


Figure 6.1. Breakeven point.

Explanation of the figure above:

To find the ROI point.

ROI = Return on investment

The rate of return on investment for an e-commerce project is a ratio of the cost of resources required to the benefits generated by the E-commerce project. It includes both quantifiable and nonquantifiable items, although there is the cost of resources, such as hardware, software, and human resources.

As you can see in the figure above, the break-even point for this project will be in the first month of the second year or it can be the thirteenth month of operating. This is the period when the profit covers all the costs and expenses.



VII. THE PROPOSED WEBSITE

7.1 Web Concept

Objectives of This Site

- (1) To provide full information of the products' details as well as the proper method of selecting insulation products, so the customers can use the product correctively.
- (2) To enhance the good image of the company and the brand.

Short Term Plan

- (1) To introduce customers to visit our site.
- (2) Use this site as an alternative distribution channel.
- (3) We use this site to promote and advertise the company image.
- (4) To provide the information for the customers.
- (5) To make the Internet users remember the company's website.

Long Term Plan

- (1) Always remain in customers' mind as their alternative choice.
- (2) Customers may have more interaction and might be a community of our brand.

7.2 Target Audience

To maximize our sales revenue, the target audiences of PS Foam are those who want to purchase the insulation products or those who would like to search for the insulation usages. The website are created for all visitors who are seeking to have more knowledge in this field of business.

7.3 Visual Design

- (a) Banding or Logo Design

We use the logo of the physical company to be the logo on the website. This is the official logo that is used presently, but to be posted on the Internet we must change its color for protection of any ill intention. The color of the company logo is only green. Because the company owner's favors the green color so much. He believes that the green color can let him lucky to do everything.



Figure 7.1. Company logo.

(b) Color

The colors used in the web site are only two main colors that are black and brown. These are the simply colors that quite be official. Although, it's seemed to be not bright. In our intention, we would like to emphasis on the products. These colors will let the users more concentrate on each section.

(c) Layout

This part concerns about PS Foam Website layout. The top of the web page is the area of company logo. All the navigated buttons are placed at the left side of the page, and many links and copyright are placed at the footer of the web page.

| | |
|----------------------|----------------------|
| Company name & logo | |
| Home | Contents |
| About us | |
| Product | |
| Service | |
| Contact us | |
| | |
| | |
| Search | |
| <input type="text"/> | |
| Submit | |
| | Links and Navigators |
| | Copyright |

Figure 7.2. Layout Design of PS Foam Website.

7.4 Web content

PS Foam web site is intended only to provide the product information to the prospective customers. There are no online order and payment in the web site. The following are the website interfaces:

(a) Home / Main Page

The home page of PS Foam web site contents are as follows:

- (i) The introduction paragraph to thank the visitors who are entering in PS Foam website and,
- (ii) The informative references of the products that PS Foam sells.
- (iii) Links to the other websites

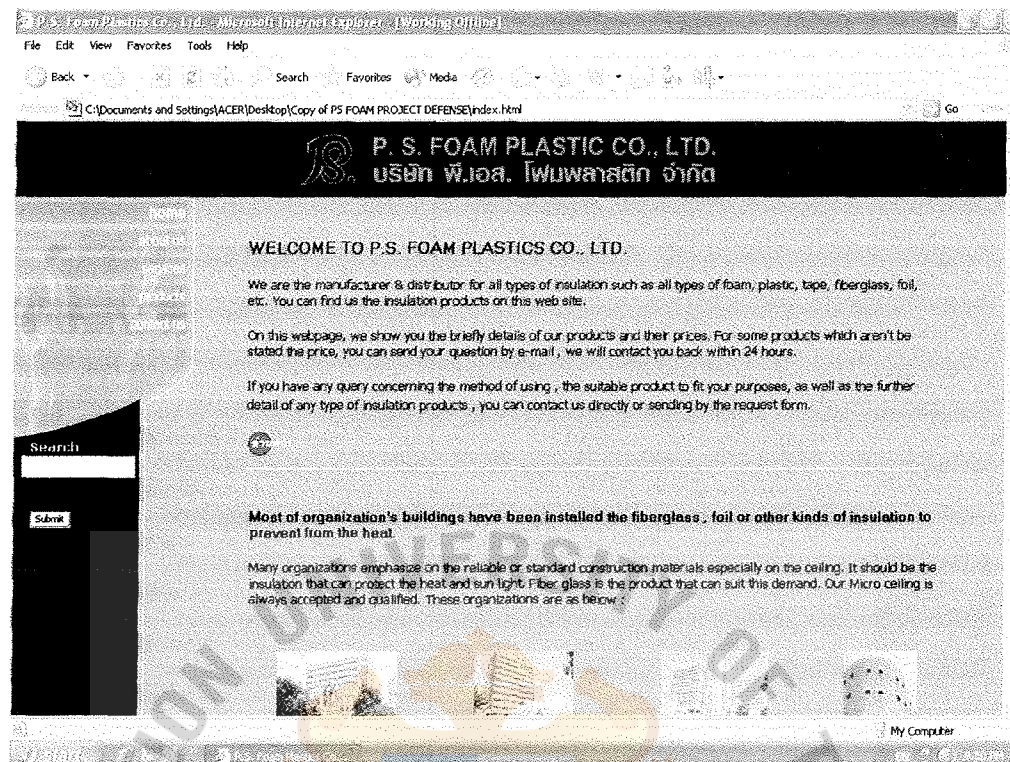


Figure 7.3. Main page of PS Foam Web site.

(b) About Us

This page is about the brief profile of PS Foam Plastic Company Limited. In order for the visitors to easily contact PS Foam, the information given below is provided on the website:

| | | |
|------------------|---|---|
| Company | : | PS Foam Plastic Company Limited. |
| Business Address | : | 889 Soi Chulalongkorn 8, Banthadthong Rd., Wangmai, Pathumwan District, Bangkok 10330. |
| Phone No | : | (662) 216-4944-45 |
| Working hours | : | 8.30 am - 5.00 pm. (Monday to Saturday) |
| Contact person | : | Supawan K. |
| E-mail Address | : | sales@psfoam.com |

In the website, there is the map of the company address to clearly identify the company location.

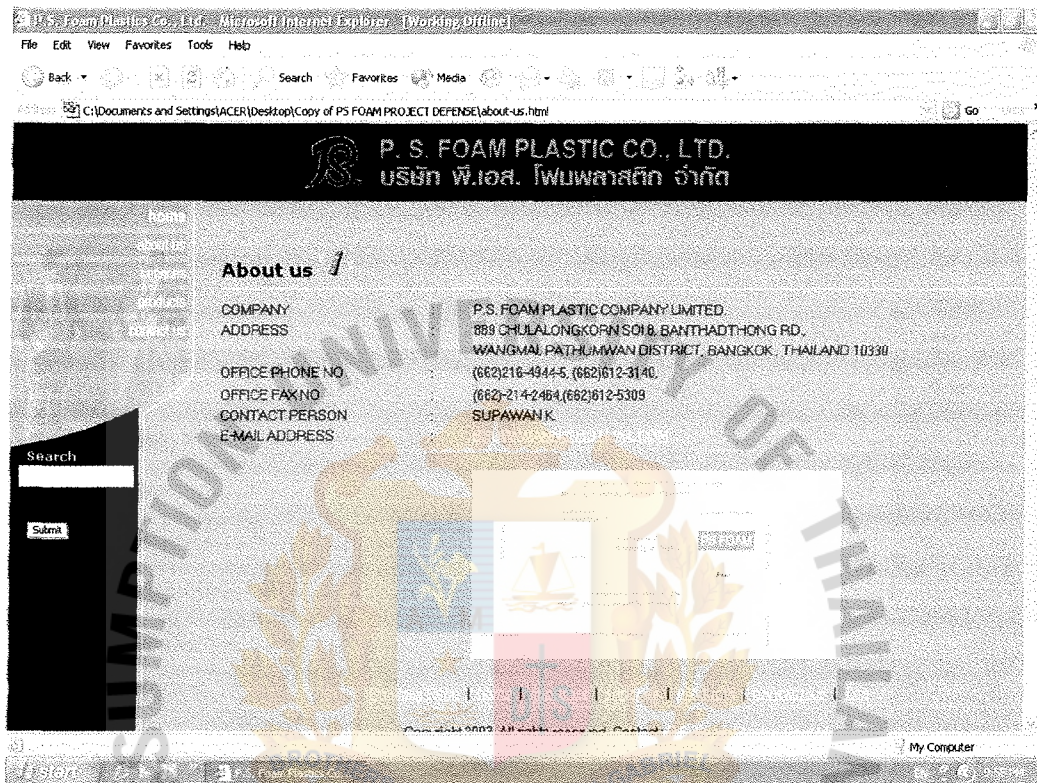


Figure 7.4. About us page.

(c) Contact Us

This is the contact us page, which is intended for the visitors to send us feedback, any suggestions, comments as well as any question. It will automatically be sent to the PS Foam e-mail.

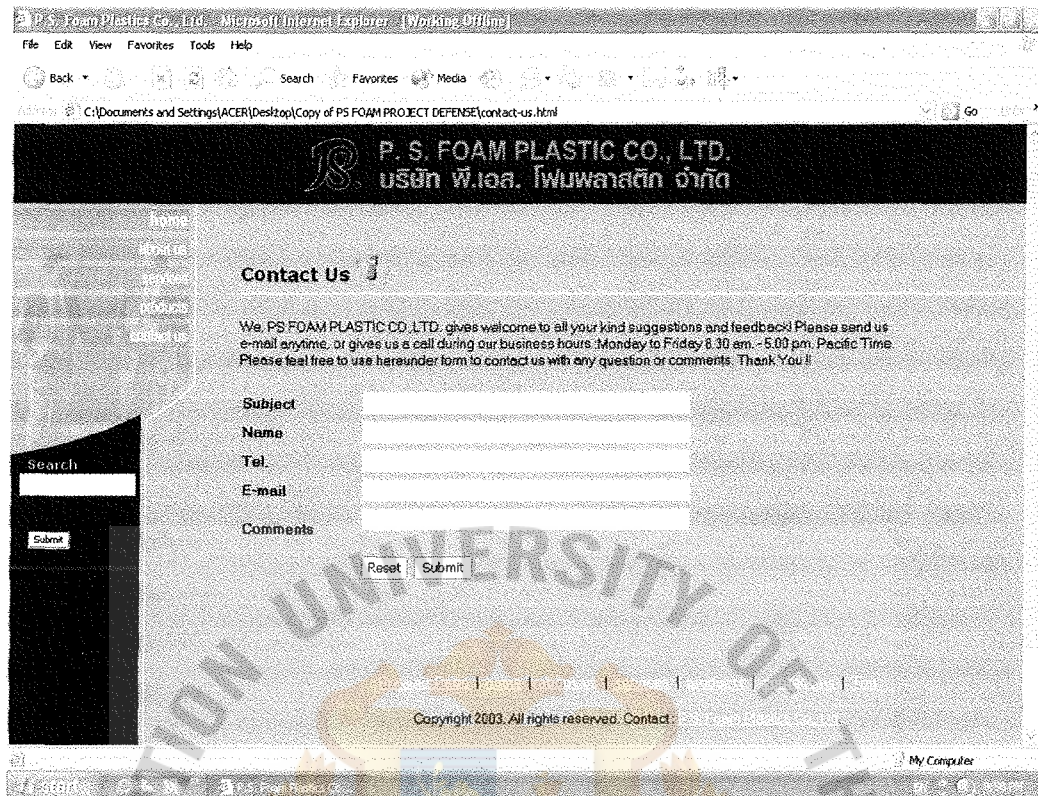


Figure 7.5. Contact Us page of PS Foam Website.

(d) Product

This section will have all the products that PS Foam sells. Each product picture will navigate the visitors to enter in the details of each product range again.

Foam → Foam Boxes, Foam Picnic, Foam Sheet, Foam Ball,
and Made to order.

Fiberglass → Microfiber, Microceiling, Micro Duct Wrap,
Microcover.

Other insulation → Aluminium foils, tape, plastics, etc.

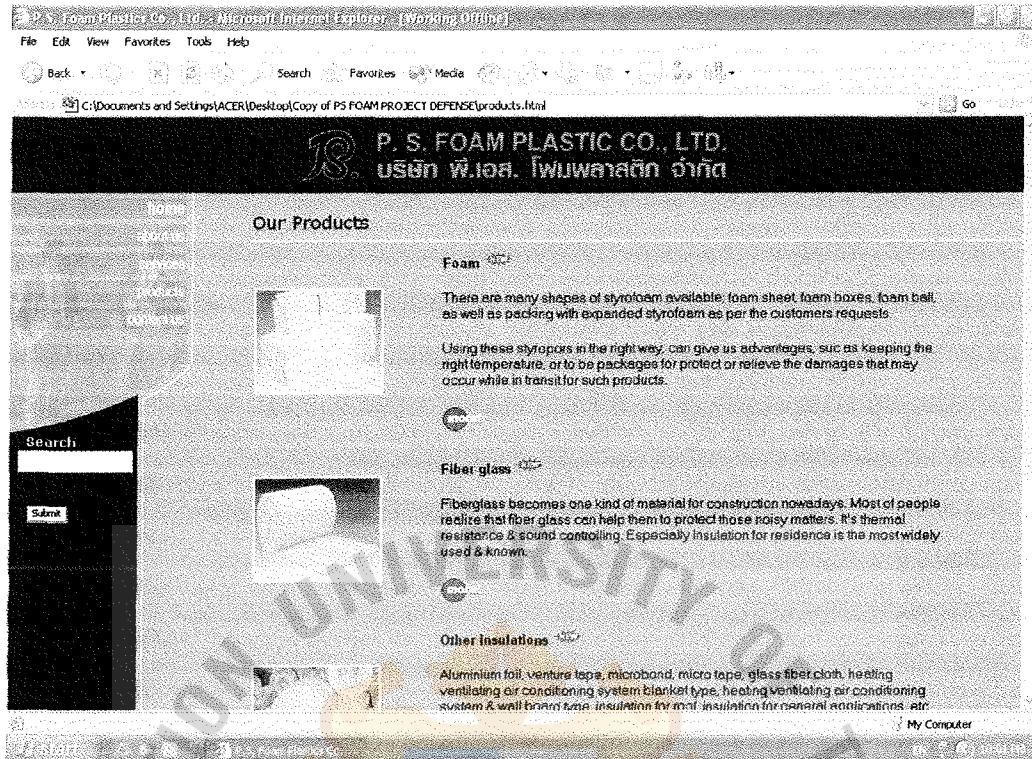


Figure 7.6. Products page of PS Foam Website.

(e) Services

This page is intended to clarify to the customers about the company service, delivery conditions as well as the payment terms.

The customers can also send their questions or order the stock by using this page. In addition, they can ask about the availability of each product stock.

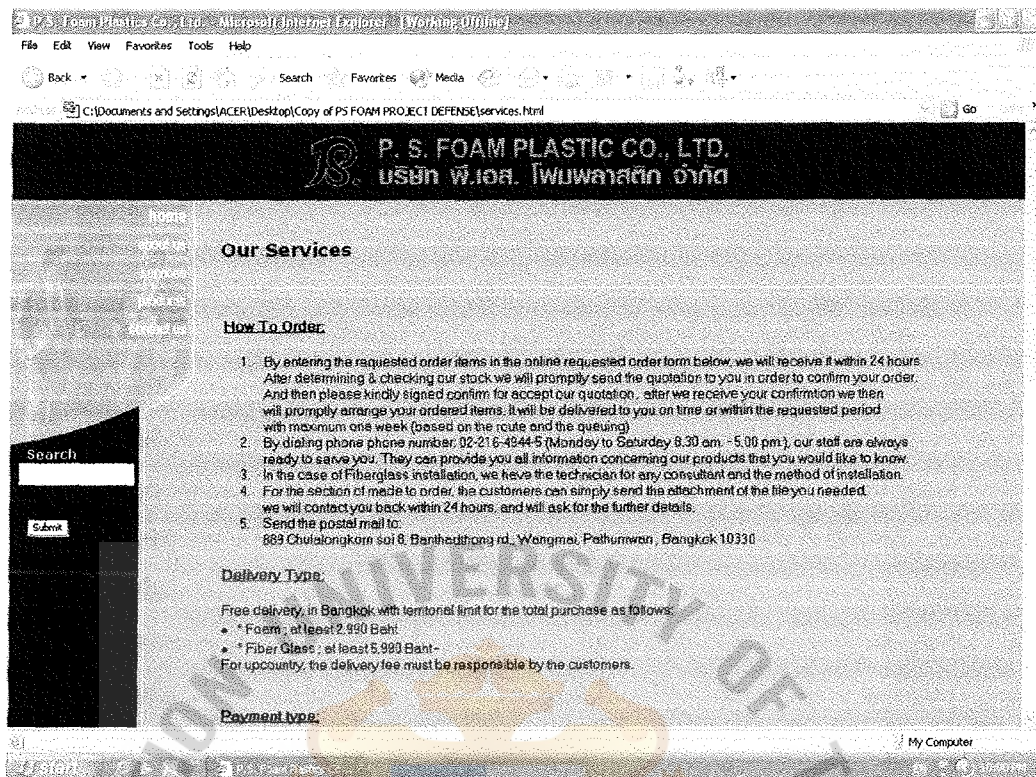


Figure 7.7. Service page of PS Foam Website.

7.5 How to order, Delivery and Payment Conditions

(a) How to order

As mentioned above this website is not intended for online shopping or online ordering. So the way to order is still like the traditional method:

- (i) This project website does not reveal any online operating process.

Thus the customers can search the product information and contact PS Foam through e-mail or telephone. Their questions may concern the products they would like to buy.

- (ii) By fax, like the existing customers of PS Foam do nowadays.

(b) Delivery Method

The company can deliver the ordered products within the geographical limits of “Thailandwide”. But the free delivery must be within the conditions as follows:

- (i) Free delivery, in Bangkok with territorial limit for the total purchase of e.g. Foam ; at least 2,990 Baht

Fiber Glass ; at least 5,990 Baht

- (ii) For upcountry, or other provinces, the delivery fee must be given by the customers.

- (iii) But if there is a large amount of order, the delivery fee can be negotiated later.

(c) Payment Methods

- (i) Cash only for those new customers.
- (ii) Credit for the existing customers who have the reliable credit terms.

7.6 Site Map of the Web site

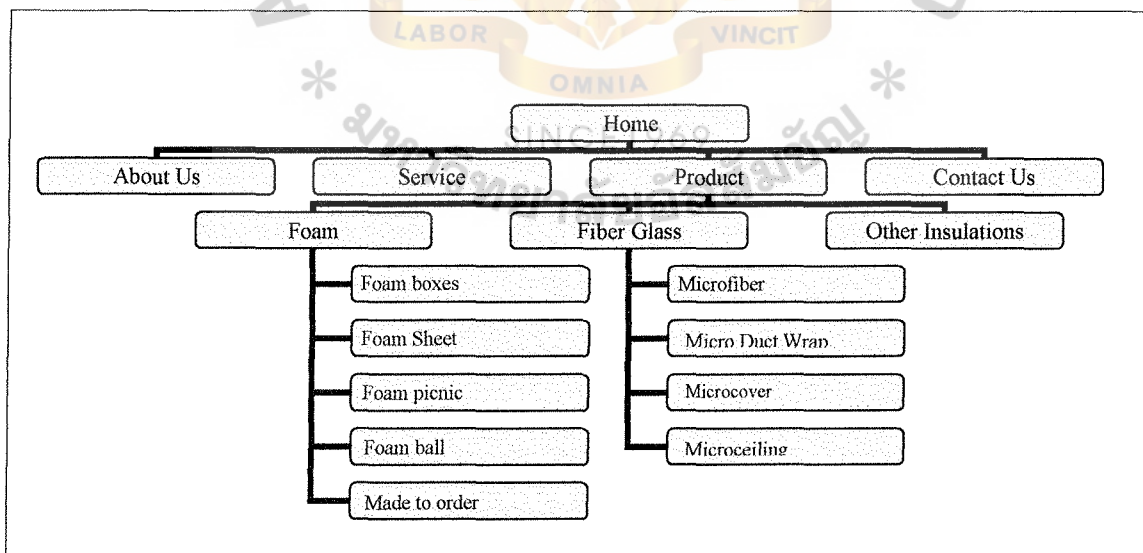


Figure 7.8. Site Map of PS Foam Website.

7.7 Hardware and Software Specifications of the proposed website

The Hardware and Software requirements for PS Foam Website Project are as follows:

Table 7.1. Hardware and software specifications.

| Hardware | Specification |
|--------------------|---|
| CPU | Celeron 1.7 and Pentium IV |
| Cache | Tower |
| Memory | 1G |
| Hard Disk | 80G |
| CD-Rom Drive | 52x max |
| Floppy Drive | 1.44, 3.5 inch floppy drive. |
| Network Adapter | 3com |
| Monitor | Fujitsu, 15 inch monitors. |
| Display Adapter | TNT |
| Display | 600 x 800 |
| Software | Specification |
| Operating System | WindowsXP |
| Web Server | Window 2000 /and Internet Information version 5.0 |
| Web Browser | http://www.psfoamplastic.com |
| Application Server | Nil. |
| Script language | Html, Javascript |
| Web Design tools | Macromedia Dreamweaver 3, Microsoft Front page 4.0 |
| Graphic Tools | Photoshop 7 |
| Database Server | Nil |

7.8 Security System

On the website of PS Foam, although there is no online selling or any order tracking, it should have the security method to protect the data when transmitting.

- (1) Firewall
- (2) Copyright & Trademark
- (3) SSL (Secure Socket Layer)

This is to ensure the transmission of data so that it cannot be altered. The Secure Sockets Layer protocol is used as an access control. The company's server is authenticated and the client is optionally authenticated SSL, which can provide the channel security (privacy and authentication) through encryption and reliability through a message integrity check.

SSL uses three parts of process.

- (a) The information is encrypted to prevent unauthorized disclosure.
- (b) The information is authenticated to make sure that the information is being sent and received by the correct party.
- (c) SSL provides message integrity to prevent the information from being altered during interchanges between the source and link.

When the customer submits a request, the company responds with a public key that the customer's computer uses to encrypt sensitive information. The process is transparent to the customer because it is handled by the browser.

7.9 Future Plan

We plan to use Window Server and Internet Information version 5.0 Server. After this website has been operated, PS Foam will have to continue developing the web site.

Besides, PS Foam also has the future plan to implement the web site to be more effective and fully function of EC to reach the customers' satisfaction soon.

- (a) Search engine
- (b) Exchange banner
- (c) Quotation system
- (d) User ID and password for registration
- (e) Database of the customers



VIII. CONCLUSION AND RECOMMENDATIONS

8.1 Conclusion

As mentioned earlier, this project website is created and developed for the existing company, PS Foam Plastic Co., Ltd. The scope of this website is only intended for the visitors, customers, as well as suppliers to view what the company sells and what are the functions of various products.

PS Foam Plastic Company Limited is the existing company that operates the insulation business. The physical office is located at the centre business area in Bangkok. For more than sixteen years, the company has been operated by the old traditional trading. The sale volume is slightly increased by the existing customers and the prospected clients from the advertisement in yellow pages and the other magazines. Due to the limitation of advertising budgets and computer knowledge caused the company cannot expand more market shares as they need. And with high competitions of insulation business, it is necessary for the company to find the new market channel. Creating the website is the new channel that can make the company to achieve the increase of sale volume and gain more shares. Since PS Foam has only one traditional office with not much advertising and no branch elsewhere, thus it would be hard to promote the company with low cost to nationwide scale. Therefore, to post the website on the Internet can give the company many benefits with low cost of expenses. Then the company products can be viewed by the prospective customers, visitors, or others any time they want as its twenty-four hours availability.

PS Foam Company sells all kinds of insulations products, but the highest sale volume of the company's products are "Foam and Fiber glass". As per the result of existing customers analysis (Figure 3.3), it can be seen that most of fiberglass users are

are “construction” and most of foam users are “consumption field”. So the company can know and develop the products and service with concentration on this field of customers and approach for the new business group of prospected customers. For the company’s competitors, there are direct competitors and indirect competitors. After doing the competitors analysis, the company can realize that direct competitors are the companies or factories that sell the same type of PS Foam’s products. Indirect competitors are the companies that sell the under qualified products or can be substituted used as PS Foam products. Hence PS Foam can find and prepare the market solution to compete with. Moreover, by considering the financial analysis of this project website, it is forecasted at the minimum profit the company may gain. It is shown that the breakeven point is quite interesting since it does not spent longer time. From the figure of cost and benefit analysis, the company can know that the minimum revenue they expected each month can cover all the costs by spending the time period not exceed one and a half year. So creating the website of PS Foam can surely generate more revenue for the company with needed more than one year approximately time frame for pay-back period. This strategy let the company knows the possibility in the near future.

Presently the prototype of PS Foam website is finished, the official trademark of PS Foam is used as the logo of the website. There are only two simple colors based on the website’s background to indicate the formal and business view. Although it is looked quite dark, it does appeal the visitors to find more details by easily click indicative. The security we used are, copyright, trademark, firewall. In addition, we also plan to use the server of Window 2000 and Internet Information version 5.0. However, we need some period of time to conduct the website analysis at the beginning period of promoting and creating the awareness for both existing customers and those new and

prospective customers. Finally, the Website of PS Foam Plastic Company can be effectively run and served the Internet users with fully function.

8.2 Recommendations

According to the future plan section, PS Foam Website will be developed and modified in every month during the earlier period. And we will consider the other features and below issues whether it should be added in each section.

PS Foam website should add the following issues:

- (1) Create the database of search engine, Hence the users can effectively find the information they need concerning the insulation products.
- (2) Link to the relevant website of insulation fields which have the products that are not available at PS Foam.
- (3) Users and customers registration to be the record of PS Foam Company.
- (4) Ordering and sending the quotation by online
- (5) Improve web program and database system to support user interface
- (6) Providing Thai language on the website

After that the website will be continuous improved and added the additional design together with promote the website by using exchange banner with the other website. We will exchange the company's banner with the famous website or search engine website like Sanook Website as well as the other relevant business websites to be known by the Internet users. Finally, PS Foam website will serve the visitors with its fully function of E-commerce.

BIBLIOGRAPHY

English References

1. Efraim Turban, Jae Lee, David King, H.Michael Chung. "Electronic Commerce: A Managerial Perspective". USA:Prentice-Hall International , 2000.
2. Norris, Mark, SteveWest, and Kevin Gaughan, "Ebusiness Essentials". West Sussex: John Wiley & Sons, 2000

Thai Reference

1. E-Commerce Edition, คู่มือการเปิดร้านค้าออนไลน์, Dr. Wuttipong Pongsuwan.

Web Site References

1. <http://www.google.com>
2. <http://www.investorwords.com>
3. <http://www.expertlogic.com.au>
4. <http://www.baycorporation.com>
5. <http://www.miccell.com>
6. <http://www.thepvimol.com>
7. <http://www.easternpolymer.com>

