Viva Food Products Online Shop

by
Mr. Varavut Bhechsonggram

A Final Report of the Three-Credit Course
IC 6997 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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Project Title	Viva Food Products Online Shop
Name	Mr. Varavut Bhechsonggram
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Academic Year	July 2003

The Graduate School of Assumption University has approved this final report of the three-credit course, IC 6997 E-Commerce Practicum, submitted in partial fulfillment of the requirements for the degree of Master of Science in Internet and E-Commerce Technology.

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July 2003

ABSTRACT

VIVA FOOD PRODUCTS Co., Ltd. is the one of the companies, which export-import the products. They are providing a variety of products. It is classified by 4 types composing of candy from France, wine from Spain, hand cream from Monaco and Thai Folk Wisdom to export.

In the business world, several organizations attempted to extend their marketing channel by advertising in any medium, for the purposes of increase awareness and reliability that lead to maximize profit. Online website is the one medium that will play an increasing role in connecting customers with sellers.

The online marketing objective is to actively support continued growth and profitability of company through effective implementation of the strategy. The online marketing and sales strategy will be based on a cost effective approach to reach additional customers over the web to generate attention and revenue for business. The website will focus on its selection, providing any information, competitive pricing, and customer service to differentiate itself among other Internet options.

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I. INTRODUCTION

1.1 Background of the Project

In the world of business, they attempted to extend their marketing channels by promoting their products or services, to build reliability and awareness that lead to increased revenue. Electronic commerce is an important tool in this time that facilitates them to make more contacts with customers via online technology.

Electronic commerce is a relatively new concept that crept into the business vocabulary during the 1970s. A picture of electronic commerce is emerging in which the Internet will become the essential dial tone for conducting business by the year 2003. This contribution addresses definitional, theoretical and contextual issues including the nature, drivers, enablers, and the magnitude of electronic commerce. The author discusses the role of electronic markets, the effects of information technology on electronic commerce, interactivity, and the evolution of disintermediation to reintermediation. A definition and typology of electronic commerce are offered. Theoretical and conceptual approaches to electronic commerce are offered. Theoretical and conceptual approaches to electronic commerce are advanced in terms of (1) transaction cost theory, (2) marketing, (3) diffusion, (4) information retrieval, and (5) strategic networking. Lastly, the author poses the question of how electronic commerce adds value.

There are many models for e-commerce solutions available. Today's key models include buy-side systems, sell-side systems, electronic market places, online trading communities and Internet auctions.

(1) **Buy-side systems** are those that address the issue of control. In this model, an organization might negotiate with a vendor for fixed prices on some portion of their catalog. This portion of the catalog could then be brought to the buyer's site for direct ordering by staff. One fourth of all buyers plan on using buy-side systems. This model is the one PeopleSoft has partnered with Commerce One to use.

(2) **Sell-side systems** are administered by the selling organization. 64% of all buyers use or plan to use this model. There is low risk and little or no investment by the buyer. Two examples would be Dell and the SU Bookstore.

(3) **Electronic market places** are aggregated supply sites. Generally they include catalogs of suppliers in a vertical industry and are offered as a one-stop sourcing solution. This is a subscription-based model without transaction costs for buyers and no participation fees for the suppliers. This model improves on the individual sell-side model by providing a more visible site for buyers in a particular market place. In higher education, E&I Cooperative Service, an educational and institutional buying coop would be the closest thing to this model. Currently, there is not an electronic model available, but this example is relevant to the educational market.

(4) **Internet auctions** are used to sell off excess and obsolete inventory. E Bay is an example of this model; they control 80% of the market today.

(5) **Online trading communities** This model gives the most flexibility to buyers and sellers and does not require a huge initial investment. This model also uses subscriptions that give an immediate benefit to the buyer without a large investment or long commitment to the e-commerce vendor at a time

when the industry is in state of continuous technological changes. An Amazon shop is an example of this model.

1.2 Objectives of the Project

To develop an online shop for the purpose as following:

(1) To expand the marketplace.

(2) To interact with the customer directly.

(3) To provide the company's information.

(4) To reduce cost of company.

(5) To keep the customer's information.

(6) To increase customer service.

(7) To generate revenue and profit.

1.3 Scope of the Project

(1) To apply the knowledge learnt in the Master of Science in Internet and E-Commerce Technology into this project.

(2) To provide the marketing plan by setting target market, market positioning and promotional mix.

(3) To design and develop the web site effectively allowing users to find information easily and use the website as a tool to support the company.

1.4 Deliverables

(1) A Complete Final Report

(2) A Web's online of Viva Food Products Company

II. THE EXISTING SYSTEM

2.1 Background of the Organization

Viva Food Products Co., Ltd. was established in 2000 with initial registered capital 1 million baht. The company has been considered as one of Export-import business, with providing four categorizes of product that compose of Candy under brand of Anis, Wine from Spain, Hand Cream under brand Vita Citral and Thai Folk Wisdom Products for export. The company operates as a distributor and provides the product to the luxury hotels, department stores and also direct sell.

Our customer lists shown below:

(1) Grand Hyatt Erawan

(2) Westin

(3) The Grand

(4) Ambassador

(5) Conrad

(6) Plaza Athenee

(7) Radisson

(8) Meridien President

(9) Foodland

(10) Villa

(11) Fuji UFM Supermarket

(12) Top Supermarket

(13) Health Support House

(14) Etc.

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Main Products:

Anis Candy

Wine from Spain

Vita Citral Hand Cream

Thai Folk Wisdom

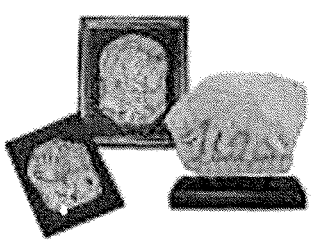

Figure 2.1. Main Products.

2.2 Business Plan

In the past, the company had mainly focused on the outlet shop. However, since 2000, the company has adjusted the policy to import the products from Europe and distribute to the luxury market in Thailand.

What the company has done is to continuously find new products from the overseas countries in order to satisfy the customers' needs.

For the product, the company has focused on Economy of Scale to economize the costs per unit.

Product Description

(1) Anis Candy

The new product discovered is a candy made with Anis (which is a plant with a quite strong flavor). Our sweets are also manufactured in ten others flavors: Anise, Coffee, Cinnamon, Orange Blossom, Jasmine, Mint, Licorice, Rose, Vanilla, and Violet. It is a new flavor of sweets in the market. Our products are very appreciated due to their nice packaging, with their fashionable designs. The people identify them as traditional and natural taste from France. It can be perfect as a gift.

(2) Wine from Spain

RED GRAPE JUICE MOSTO DON SIMON

If you care about your health, this is the only pure grape juice. The settled acidity hidden in sweetness reminds of the Spanish sun.

ANDIMAR

Pale in color but its crisp dryness is a must in the hot weather.

VINA MORENA

The ruby red wine with the aroma of fresh grape and strawberry.

VINA ALBA

A semisweet wine with an elegant sweetness.

VINA PENA

A red wine with dark color and the taste that justify the color, yet it has not forgotten the lightness of the air of its origin Spain.

BARON ROMERO

A semisweet red wine specially prepared for French consumers by Spanish producer. A wine most suitable as an accompaniment of heavy dessert.

MADERO

A serious heavy table wine with darkest color and deep tannin. If you enjoy English leather and casserole, this is the wine.

CASTILLO SAN SIMON

A very well behaved dry wine that is made of a modest grape such as MONASTRELL but manages to transmit the taste of grape to the drinker.

SOLAR DE CARRION

A RIOJA wine made to the true tradition. Being a year wine but manages to transmit the art of wine making with the help of good grape.

ANTANO

This is a little sweeter and smoother to the palate. Being a year wine it lacks the intricacy of oak barrel.

JAUME SERA CABERNET SAUVIGNON

A wine solely produced with the grape from its own estate. The plant is still young in Spain but together with the oak cigar box it makes an excellent drink.

MAYORAL RESERVA

A wine made of MONASTRELL AND TEMPRANILLO, but so surprisingly near to the product of Bordeaux at this price the bottle is full of quality.

(3) Vita Citral Hand Cream

These products are manufactured exclusively in the principality of Monaco.

Vita Citral presents these different hand treatment cream creams:

TR Treatment Healing Gel (Red)

(a) Used for damaged, sore and chapped hands.

(b) This treatment repairs and regenerates with vitamin A. Aloe Vera soothes and removes any irritation.

(c) This gel is non-greasy and non-sticky and is quickly absorbed.

Hydrating Treatment-regenerating cream (Blue)

(a) Used for dry and very dry hands.

(b) This treatment, with Nut Butter and vegetable glycerin and vitamin E, helps dry skin.

(c) First result is visible within an hour.

Anti-Aging Treatment (Green)

(a) Used for damaged, wrinkled hand, age spots.

(b) Vitamin E, organic silica complex neutralizes free radical, which cause skin aging.

(c) This cream preserves and restores your hand's youth while preventing and slowing down this formation of wrinkles and brown spots.

(4) Thai Folk Wisdom

We have responsibility to promote and support the development of technology for upgrading the capabilities of small medium scale industries to sustain competitiveness in local as well as world markets. We can therefore assure you of our outstanding products qualified with an industry standard.

For price, the company has set the price of the product depending on a variety of essential factors such as, competitive circumstance and sale volume.

For place, the significance of the channel distribution is what the company has concerned by *JIT* method. We are distributing the products through general retails and also applying direct sale through the ultimate users and industrial users such as hotel and restaurant to cover as much as possible.

Physical of Distribution

1. Indirect

2. Direct

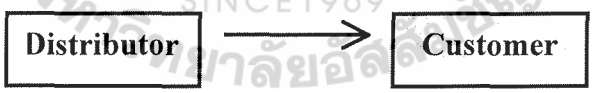

Figure 2.2. Physical Distribution.

For promotion, this is the tool to stimulate the customers' need. It classified by 4 promotion mix, composed of:

(1) Advertising

It is the new product series both on offline media such as magazine and online media on http://www.vivafood.com

(2) Public Relation

We are using Pull & Push strategy to attract the customers.

(3) Sales Promotion

We are classifying by 3 levels as follows:

(a) Consumer Promotion

(b) Trade Promotion

(c) Sales-Force Promotion

(4) Personal Selling

To build the company's image we use the product consultant at the outlet to stimulate the customers. The customer can easily gather the product information and try the demonstration.

2.3 Analysis Consumer Behavior in Cyber Market

2.3.1 The Online Shopping Experience

In the first stop, the consumer browses for items. Using a Web browser, consumers view an online catalog on the merchant's World Wide page. The consumer selects items to be purchased. He does this by comparing prices and gauging the best value based on brand name, price, quality, and other variables.

The merchant presents the consumer with an order from containing the list of items, their prices, and total prices, which include shipping, handling and taxes. This

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order from maybe delivered from the merchant's server to the consumer's PC. Some online merchants may provide the consumer with the ability to negotiate pricing.

The consumer selects the means of payment. The different means of payment include digital cash, electronic checks or credit cards. The consumers send the merchant a completed order and a means of payment. The merchant ships the goods or performs the requested services according to the order. The merchant requests payment from the consumer's financial institution.

2.3.2 Analysis of Customer's Needs

The first mission is to gain the best possible understanding of online customers. People shop and buy online for different reasons. Some reasons for online shopping are that they can turn into competitive advantages for the business. You will find what customers want or need and what is affecting them for repurchasing at online shopping web site.

The customers do not feel safe to go shopping, because at shopping malls there are criminal cases every day and shopping online makes them feel safer. So you should provide security and a trust worthy system in the web site, by including your telephone number in your e-mail signature, ad, or storefront information. Most customers feel better talking to someone and their required order. In addition, the web site provides references to satisfy customers, or includes a few testimonial phrases in the marketing information. Mail – order catalogs use testimonials to reassure their customers.

Convenience is the best reason that attracts shopping through online web site. It is a lot easier to pull a chair up to own PC and shop from the den than it is to get in the car, fight traffic, burn up some gas, find a parking space, and plunge into a crowd. Your attack should emphasize this convenience. Remind your customers about the difference.

You might even offer a "Fuel Efficiency Special" to emphasize the convenience and economy of shopping at home.

About the services, the customers left shopping mall stores without buying because they couldn't find sales assistants. It is hard to get required service during holidays Therefore, it is convenient for customers to do online shopping so that they can avoid long queues at the cashiers, big crowds and shop worn merchandise at the shopping malls, In addition, they can use online serviced 24 hours a day, seven days a week.

2.3.3 Thai Consumer Behavior Concerning with the Web Site.

Business concept is developed following the environment. Firstly, thaidecor.net started with a barter system that created a production concept. Now we must concentrate on customer – oriented concept because environment and consumer behavior have changed. Therefore we must know about consumer needs to their satisfaction.

Accurate and effective decision making often depends on the quality of information provided. Marketing research plays an essential role in providing accurate and useful information. In today's aggressive competitive marketplace, the marketing concept has become greatly important. The marketing concept states that the principle task of the marketing function is to serve the interests of the customer rather than the interests of the business.

Marketing research is a function, which links consumers with the organization through information. The information is used to identify and define marketing problems and generate, refine and evaluate marketing actions, monitor marketing performance and improve understanding of marketing as a process. Much research is done to measure consumer wants and needs. Other research assesses the impact of previous adjustments in the marketing mix or gauges the potential impact of new changes. Some

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research deals directly with the environment such as studies of social values and business trends. When the viable opportunities are uncovered, marketing research provides estimates of their size and scope, so that marketing management can better assess the resources needed to develop them.

Overview of the Present Situation and Future Prospects

The General Situation in ASEAN Country

(1) Internet expansion in ASEAN country

It was in 1993 that the Internet was first opened to commercial use. Before that, it was only used by the nonprofit sectors, such as academic, state, and military institutions. In Asia the number of host computers connected to the Internet started to increase from around 1996, which were considered as the first year of the Internet age. Singapore, however, was more advanced than other countries in this respect and the Internet use started to grow from 1995.

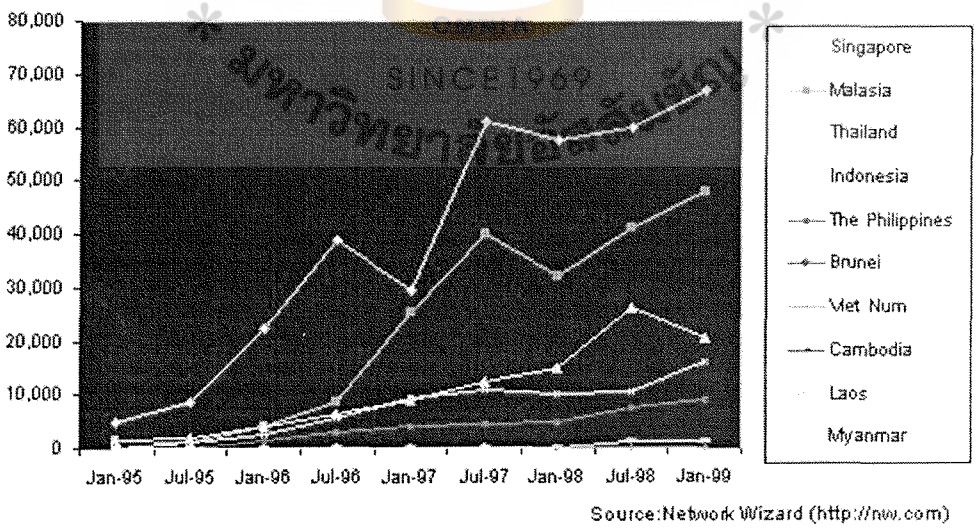

Figure 2.3. Growth in the Number of Internet Hosts in ASEAN Countries.

Comparing the number of Internet hosts in each ASEAN country with its total population can assess the extent of Internet use. Thus, the countries can be divided into three groups. The first group consists of the countries with widespread Internet use. Singapore, Malaysia and Brunei belong to this group. The second group consists of the countries with moderate Internet use with one host for every 4,000 to 20,000 people. This group includes Thailand, Indonesia and the Philippines. The last group consists of the countries with scarce Internet use. This group includes Cambodia, Vietnam, Myanmar and Laos. Therefore, in assessing the spread of the Internet and electronic commerce in ASEAN countries other than Singapore and Malaysia, such countries as Thailand, Indonesia and the Philippine come to have more importance.

How the Internet and Electronic Commerce Are Developing in Thailand

(1) Current extent of the Internet in Thailand

According to National Electronics and Computer Technology Center (NECTEC), the government organization that promotes diffusion of information technology in Thailand, the extent of Internet service and use in Thailand is as follows:

(a) Number of ISPs: 15

(b) Transmission Capacity of Internet to abroad: 36 Mbps.

(c) Number of host computer: 15,146

(d) Total number of IP address: 586,064

(e) Number of Internet users: 200,000-300,000

According to Thailand Network Information Center (THNIC), the registry of Internet domain name in Thailand, 2,380 domain names have been registered in Thailand at present and 80 percent of those are corporate domains.

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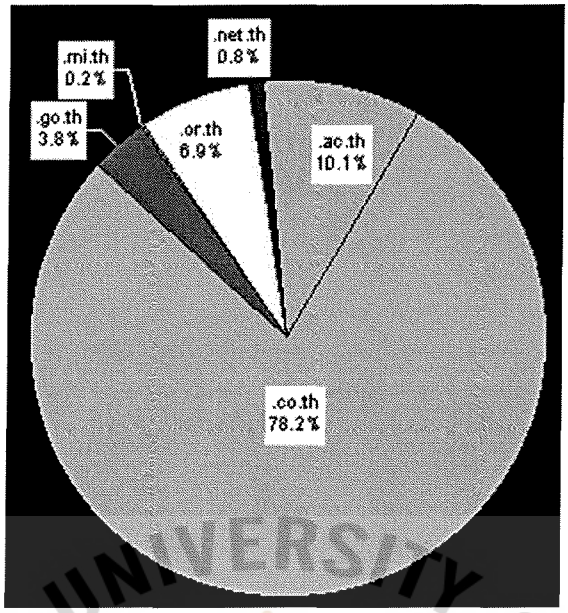

Source: ThNic (March 02,1999)

Figure 2.4. Internet Domain in Thailand (Total: 2,380).

Profile of the Internet User

From the result of the survey of Internet users on the Net, the image of the typical Internet users in Thailand emerged: a young, highly educated male of 25 years old or older and lives in Bangkok. Typical respondents use the Internet relatively frequently and many of them access it from home. Their main purpose is sending and receiving e-mail, downloading files and Web surfing. Few have any experience of online shopping. But the people who actually use online shopping have revealed that they utilize the Internet in many different ways from purchase of pc software, books and CDs to hotel reservation. This suggests that the online shopping market in Thailand has passed the experimental stage and is about to take off.

2.2 Government Policy on the Internet and Electronic Commerce

The Thai government has set up a National IT Committee (NITC) for the creation of IT related policy. Based on its master-plan called IT-2000, the government is pursuing policies in the following three areas:

(1) Create the telecommunications infrastructure that gives equal access throughout the country.

(2) Invest in projects of direct benefit to the public.

(3) Improve government service and promote a strong information industry The projects undertaken by the Thai government are as follow:

(a) Draft an electronic commerce law

(b) Government aid to the information superhighway

(c) Kanchanapisek Network Project

(d) Academic and Research Network (ThaiSan)

(e) EDI-TradeSiam

(f) Government Information Network (GINet)

(g) Thailand Software Park

On the other hand, the Ministry of Commerce, working independently of MOSTE (the Ministry of Science, Technology, and Environment), is undertaking an experiment in electronic commerce and has established an online shopping site called Thaiecommerce.net in order to promote exports. The experiment is conducted in the following three sites:

(a) Thaiecommerce.net.

(b) Virtual Trade Embassy.

(c) Amazing Mall.

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In Thailand, there are 15 private ISPs in active operation. These ISPs can be divided in to three groups depending on the size of company.

Large ISP	**Medium size ISP**	**Small ISP**
KSC	Samart	A-Net
Loxley Information Service	Internet Thailand	Asia Access
	Asia infonet	Chomanan
	CS communication	Data Line Thai
		Far East Internet
		Info news
		Siam Global Access
		The Idea Net
		WorldNET

2.4 SWOT Analysis of Website

Strength

(1) Decrease any cost lead to maximize profit.

(2) Easy to access at anywhere and any time.

(3) Easy to search by search engine.

(4) Functional and attract website.

(5) Provide up-to-date information.

(6) Provide security.

Weakness

(1) Need for skilled user to access.

(2) Need the update version browser to open.

(3) Specification for customers.

Opportunity

(1) Increase selling channel.

(2) Increase awareness of company.

(3) Get a new international market.

(4) Attracted by fashionable products.

(5) Extend the promotion worldwide.

Threats

(1) Technology advances making our online shop obsolete.

(2) New competitors entering the market.

(3) Competitors have superior access to channels of distribution.

(4) Taxation is barrier.

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III. THE PROPOSED SYSTEM

3.1 System Specification

The site map *of http://www.vivafood.com* that consisted as below:

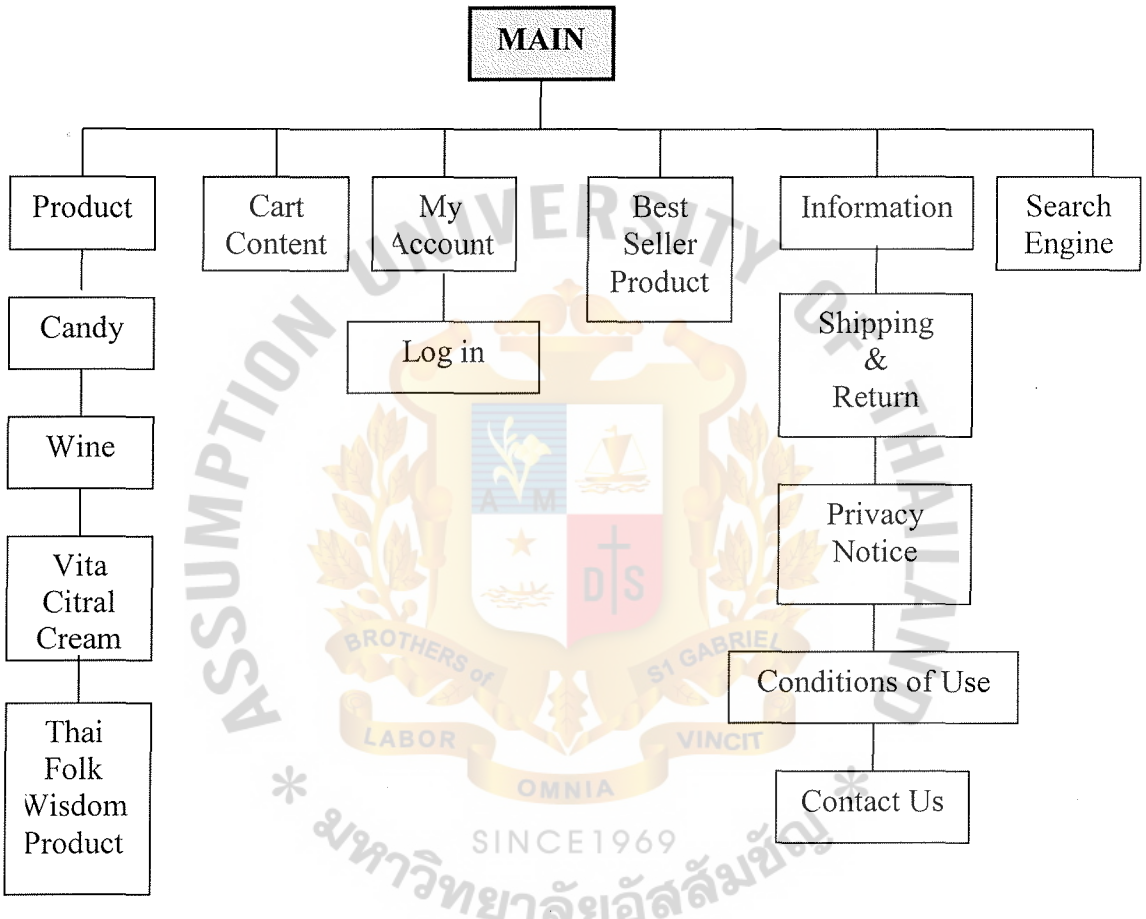

Figure 3.1. Site Map of http://www.vivafood.com.

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3.2 System Design

The following features have been taking into consideration when we started to design the application, which are as follows:

(1) Customer accounts

(2) Customer address books (other shipping destinations)

(3) Order history

(4) Temporary (not logged on) and permanent (logged on) shopping carts

(5) Search catalog for products or manufacturers

(6) Product reviews by customers

(7) E-mail notifications

(8) Foreseen checkout procedure

(9) Secure transactions with SSL

(10) Number of products in each category are shown

(11) Bestseller lists

(12) Display what other customers have purchased (relating to the current product displayed)

3.3 Hardware and Software Specification

Table 3.1. Hardware Specification.

Hardware	Detail
SERVER	Intel PIII 1.3 MHz
MEMORY	1 GB ECC SDRAM
HARDISK	36 GB SCSI HDD
HDD Config	Raid-5 with 2 spare disks
BACKUP	Dell Autoloader 8

Table 3.2. Software Specification.

Software	Detail
Operating System	Window XP Professional
Web Server	Apache 1.3.27
Web Browser	Internet Explorer
Graphic Tools	Paint Brush
HTML & ASP Editor	VI Editor
Web Design Tools	Dream Weaver MX
Database	My SQL 4.0.13

3.4 Security and Control

This web site includes the functionality of secured transaction by implementing the 128-bit SSL encryption. The server is running apache web server with the latest Open SSL 0.9.7b to ensure the customers' authenticated transaction of their personal information such as credit card from security vulnerability. In addition, the design of the user information table in the database for instance, we apply the MD-5 encryption function so that it will not be exposed to others. We also configure the firewall and applying the NAT method for out web server to map the public IP address to our internal private IP address. Furthermore, we create the access rules by blocking every TCP/UDP ports excepts port 80 and 443 for only http and https respectively.

3.5 Cost and Benefit Analysis

Cost and Benefit analysis is important for the business set up. To establish the system, Viva Food online need to consider total cost analyses. Return on investment will be calculated by subtracting revenue with integrating capital investment cost as well as pre-operation cost. The annual fixed cost and variable cost every year is included.

Forecasting the sales

Population of Bangkok is 6.32 million

The average people per household is 3.2 people per house

→ The Bangkok household is 1.97 million household

As we set our target group to high-end customer in the medium income rank.

Revenue per household

50,001+	5%
20,001-50,000	60%
5,000-20,000	35%

We expected from the second year at least 50 families would order our product 1 piece a year. The average price of product is 50 baht. The expense and revenue summary in the first five years is shown below.

Estimation of Income per Year (Year 1-4)

Viva Food online estimate the sales to increase 10% with larger distribution channel.

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Table 3.3. Costs and Benefit Analysis.

Expense	Year			
	1st	2nd	3rd	4th
Proposed System Cost				
Hardware cost	80,000	-	-	-
Domain name registration	1,500	1,500	1,500	1,500
Web hosting fee	800	800	800	800
Total Proposed System Cost	*100,300*	*2,300*	*2,300*	*2,300*
Operating Cost				
Salaries expense	180,000	240,000	300,000	360,000
Transportation	20,000	22,000	24,000	26,000
Advertisement	200,000	200,000	200,000	200,000
Miscellaneous expense	40,000	40,000	40,000	40,000
Total Operating Cost	*440,000*	*502,000*	*564,000*	*626,000*
Total Expense	***540,300***	***504,300***	***566,300***	***628,300***
Revenue				
Sales	2,000,000	2,200,000	2,400,000	2,600,000
Cost of Sales	1,000,000	1,100,000	1,200,000	1,300,000
Gross Margin	**1,000,000**	**1,100,000**	**1,200,000**	**1,300,000**
Gross Margin (%)	**50.00%**	**50.00%**	**50.00%**	**50.00%**
Contribution Margin	**459,700**	**630,300**	**633,700**	**671,700**
Percent of Sales	**27.02%**	**22.90%**	**23.60%**	**24.17%**
Contribution Margin/Sales	**22.99%**	**28.65%**	**26.40%**	**25.83%**

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IV. PROJECT IMPLEMENTATION

4.1 Overview of Project Implementation

This web site was designed to provide a user-friendly interface for customers. It is written using the popular open source language, which is PHP 4. Acquiring the open source database, My SQL as well does the backend database system. The first criterion that we took into consideration is the ease of use. Secondly, we consider the functionality of the web site such as search engine for products, etc. Last, we utilize the maximum security for the best protection to our customers.

Payment Method

The customer's financial information is extremely crucial. We took a great consideration towards the security. Our first priority is to protect the safety and confidentiality of our customers' personal information.

Personal information entered into our Web site is secured using Secure Sockets Layer (SSL) encryption, which creates a protected connection between users and the Web server. This means your credit card numbers and personal data are never sent over the Internet unencrypted.

The server is protected from outside access by a series of firewalls deployed on every network in the server room. State-of-the-art intrusion detection technology is used to monitor, in real time, all activity at the web site. Only authorized personnel can access the server room, and they must submit multiple forms of identification including biometric authentication (hand print scan).

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For the payments, we currently support 3 types as follows:

(a) Credit Card – Visa or MasterCard

Customer data is stored in encrypted format in a database and is transmitted in that encrypted format within the network. In addition, your credit card number is encrypted in such a manner that if someone hacks into the system cannot decrypt the number. We have a merchant account with the Electronic Clearing House, Inc. (ECHO). The data is validating through their secure credit card processing software. We are in a process of acquiring the debit card processing account as well.

(b) Pay Pal

Pay Pal is an account-based system that lets anyone with an email address securely send and receive online payments using their credit card or bank account.

(c) Cash on Delivery

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V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The growing of the food industry owes itself to a changing trend in Thailand that was observed and quickly acted upon by entrepreneurs. These observers noted the increasing interest in online shop.

For interface design, I use PHP 4, which is popular open source language to design the web site. Acquiring the open source database, My SQL as well does the backend database system. The server is running apache web server with the latest Open SSL 0.9.7b to ensure the customers' authenticated transaction of their personal information such as credit card from security vulnerability. The server is protected from outside access by a series of firewalls deployed on every network in the server room.

We currently support 3 kind of payment compose of credit card, pay pal and cash on delivery.

As we set our target group to high-end customer in the medium income rank. We expected from the second year at least 50 families would order our product 1 piece a year. The average price of product is 50 baht. Viva Food online estimate the sales to increase 10% with larger distribution channel.

The marketing strategy is needed to create and maintain customer satisfaction. "Viva Food online" offers high quality of products and services. The effective and efficient distribution is also focused. The price must be acceptable with 15-30 percent mark-up from total unit cost. The combination of traditional and online advertising methods are used to promote the shop, including banner swapping, banner exchange, and registering URL with search engines, etc.

5.2 Recommendations

In order to survive in this highly competitive industry, Viva Food online also needs to have further plans that can effectively attract more customers in the future.

The followings are the plans that will be implemented in the future:

(1) Invest more in advertising and Public Relation campaigns

After a certain period of operation, we will also employ more advertising media (some conventional methods may be used), if the evaluation result of the web site (in terms of number of visitors) is below the standard that we set. And we will also organize a press conference to promote our web site. Some exhibitions of the web site will be held at some leading shopping centers as well.

(2) Improve the efficiency of the services

In order to make our Cyber shop successful, we have prepared effective Advertising Plan, Delivery Plan, Experienced Sales Team, Excellent Customer Service with Satisfaction Guarantee and Reliable & Sales Transaction Process.

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APPENDIX A

WEB INTERFACE DESIGN

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Main Page

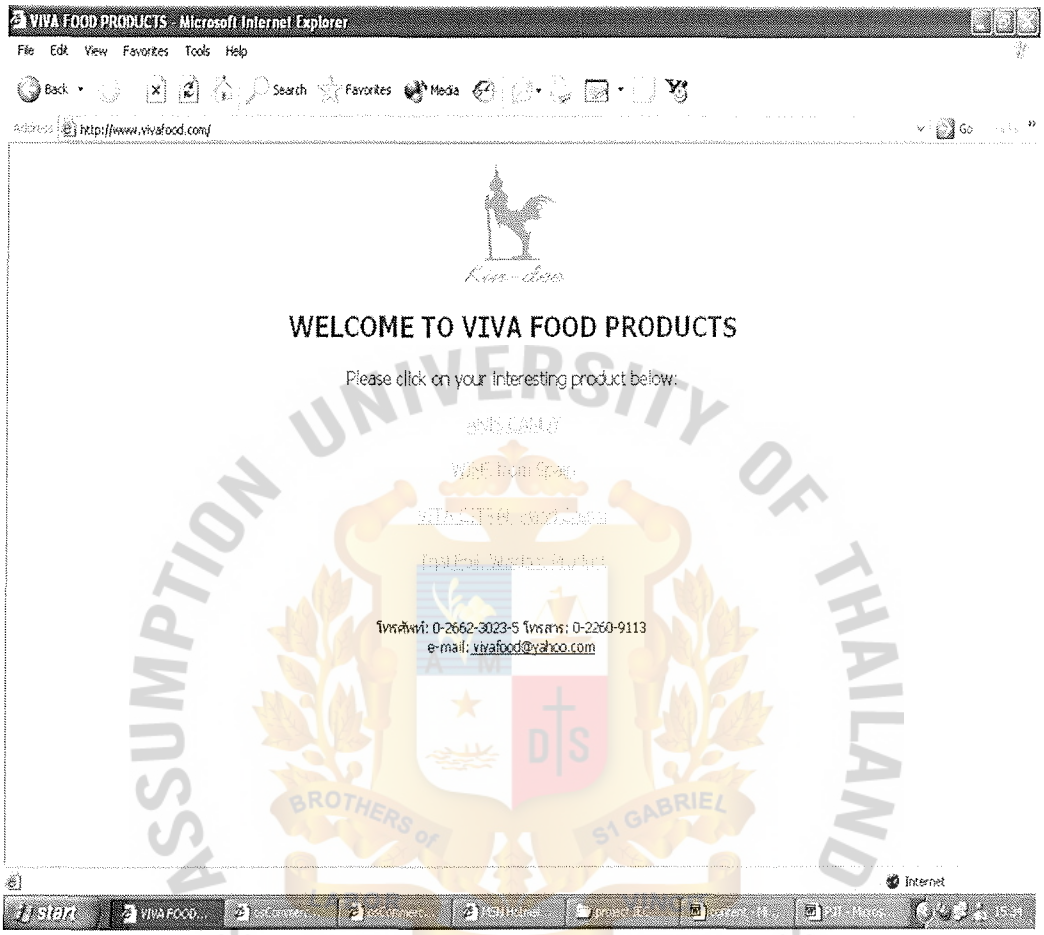

Figure A.1. Main Page.

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Display of Flash

After should the product, flash will shown each product.

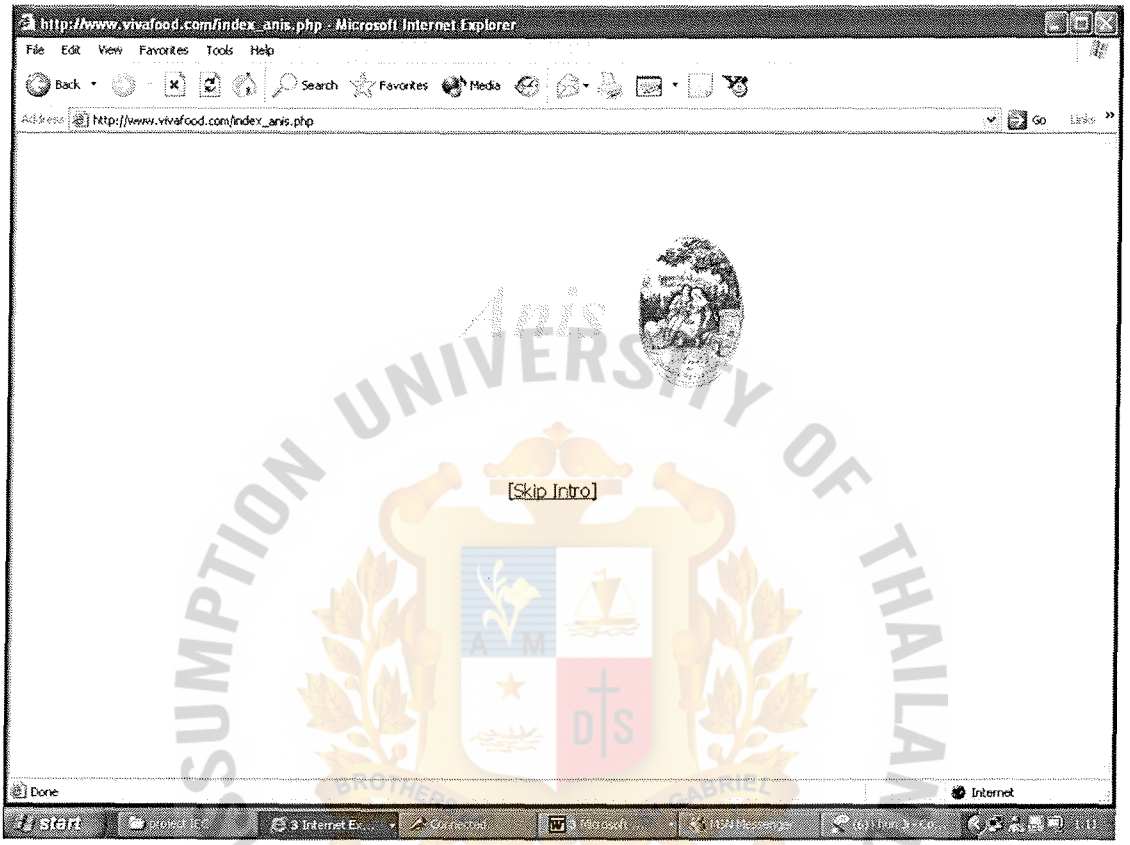

Figure A.2. Display of Flash.

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Download Catalog

After display of flash, customer can choose to download the catalog.

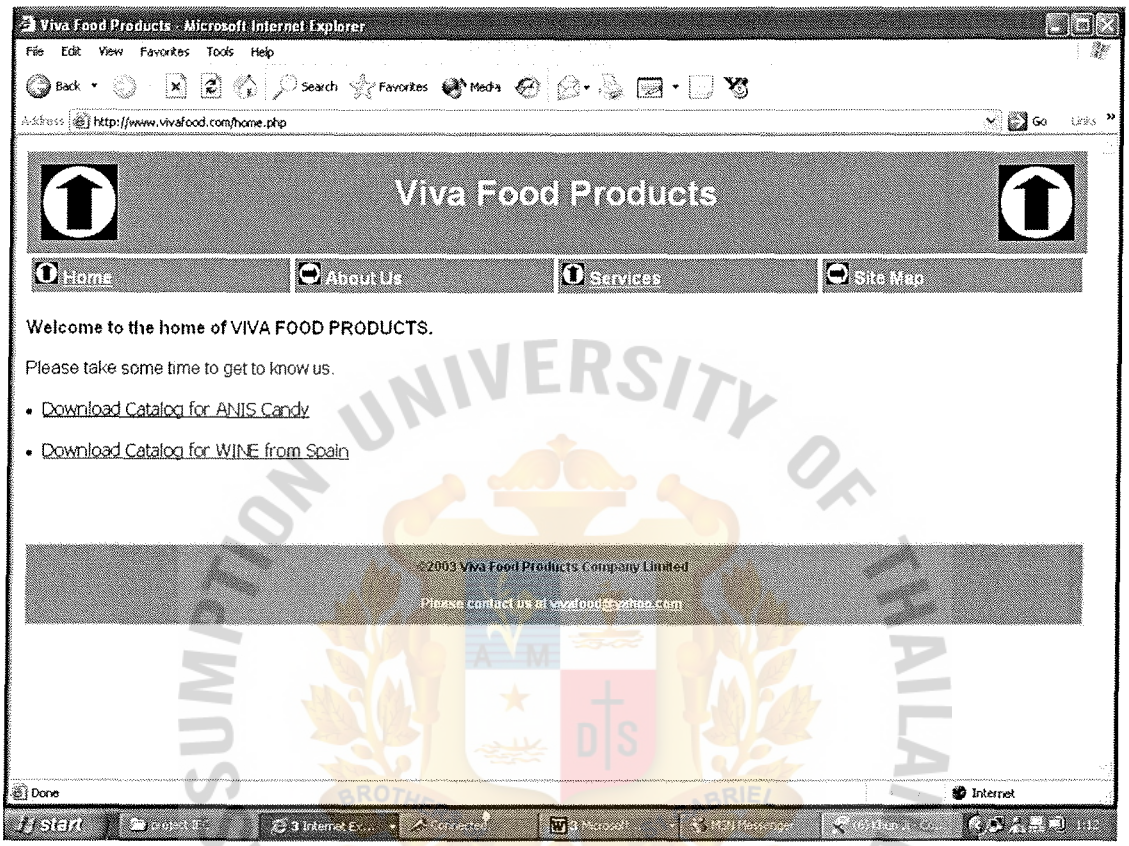

Figure A.3. Download Catalog.

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Candy's Catalog

This page is showing Candy's catalog.

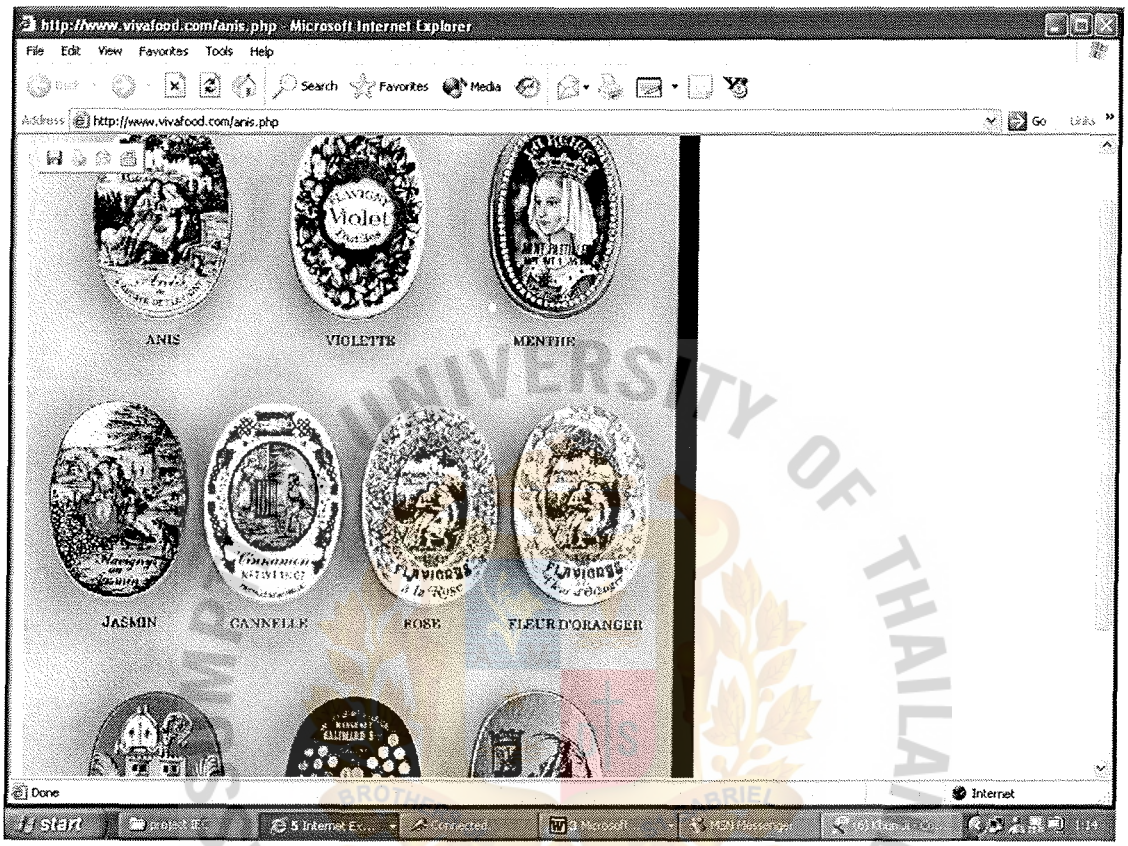

Figure A.4. Candy's Catalog.

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Wine's Catalog

This page is showing Wine's catalog.

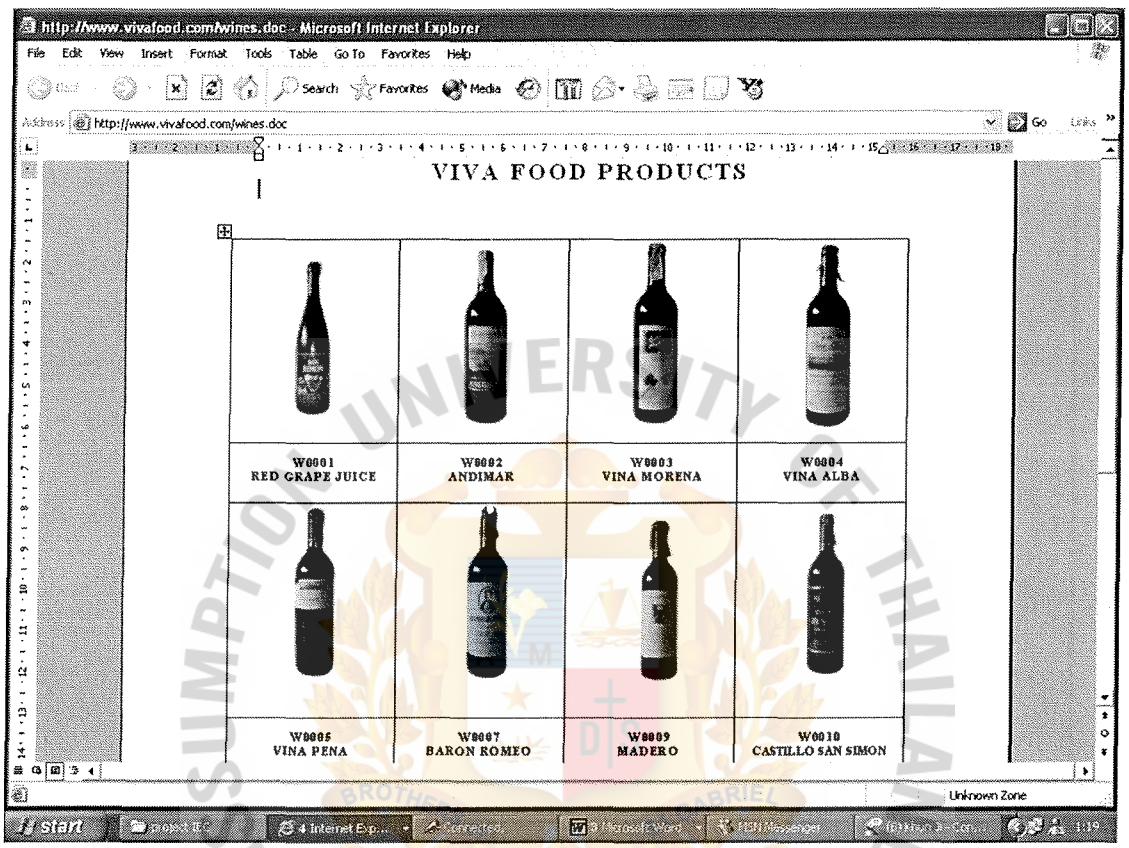

Figure A.5. Wine's Catalog.

Product Categories

This page is showing product categories.

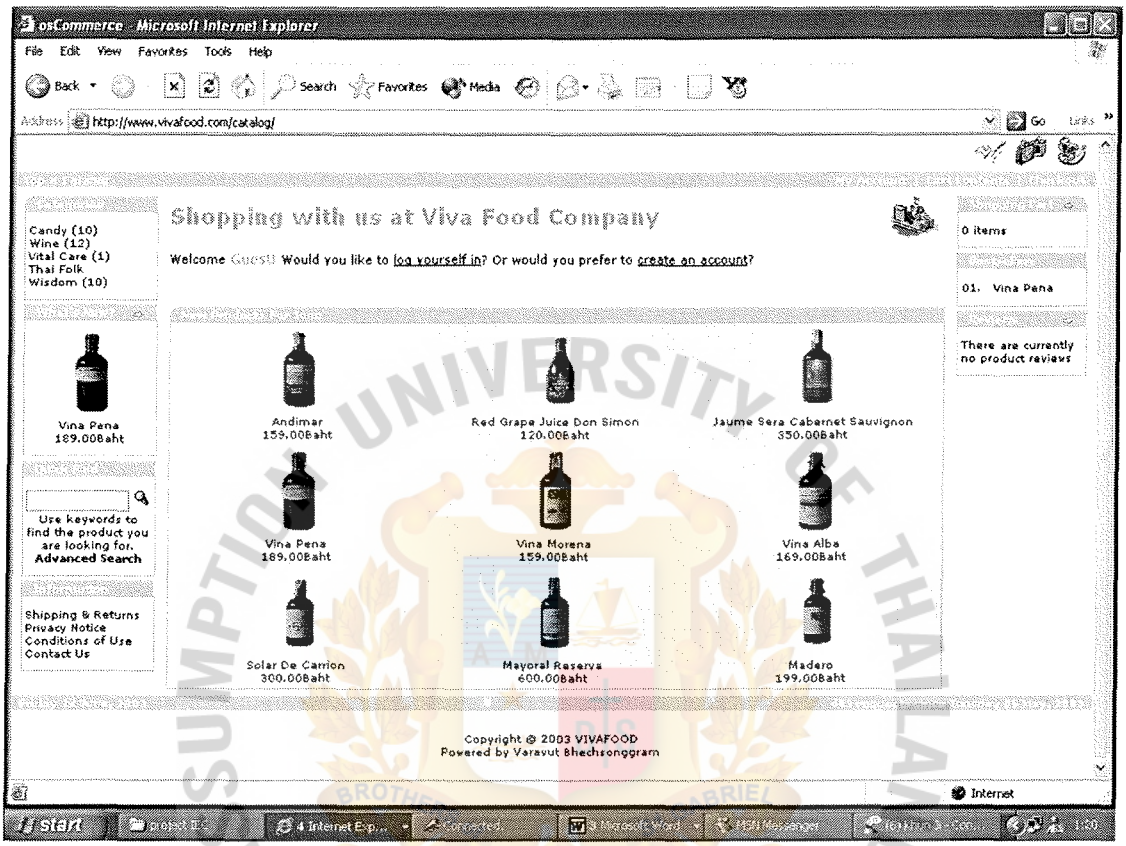

Figure A.6. Product Categories.

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Registration Page

This page is registering for customer.

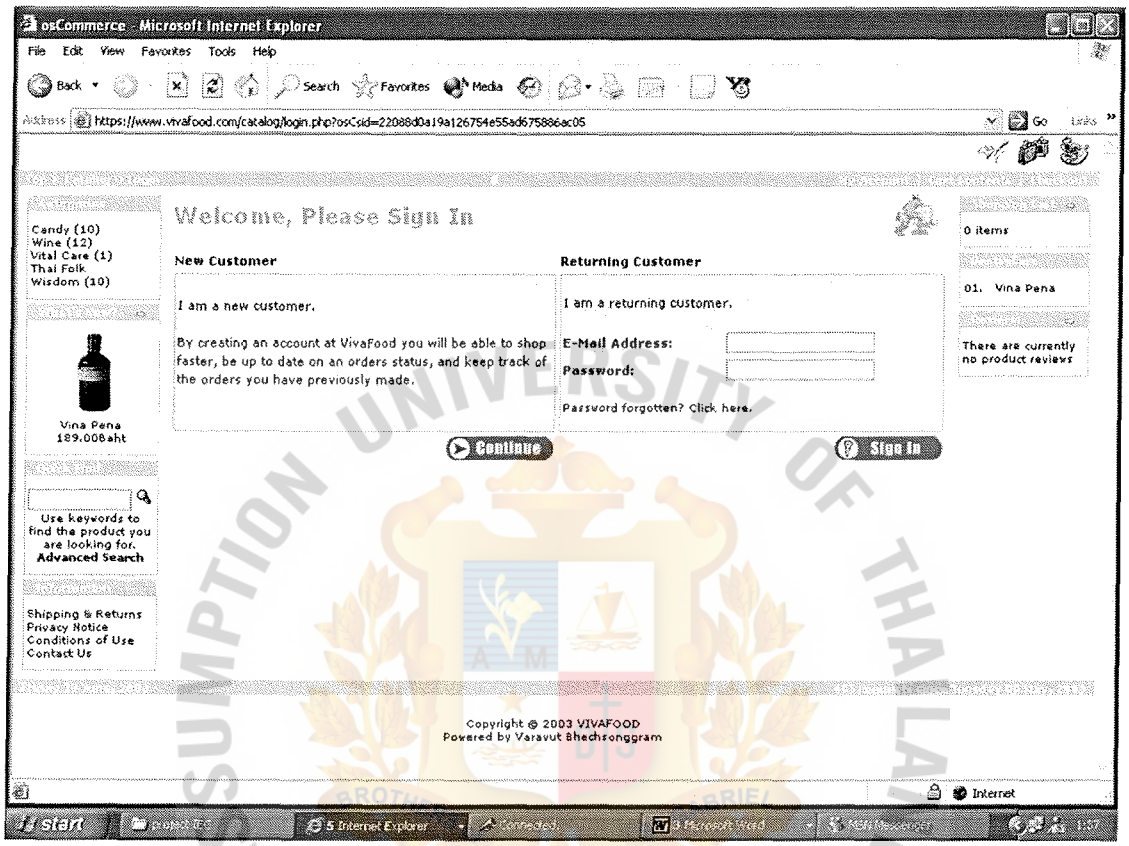

Figure A.7. Registration Page.

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Account Information Page

This page is record the information of customer.

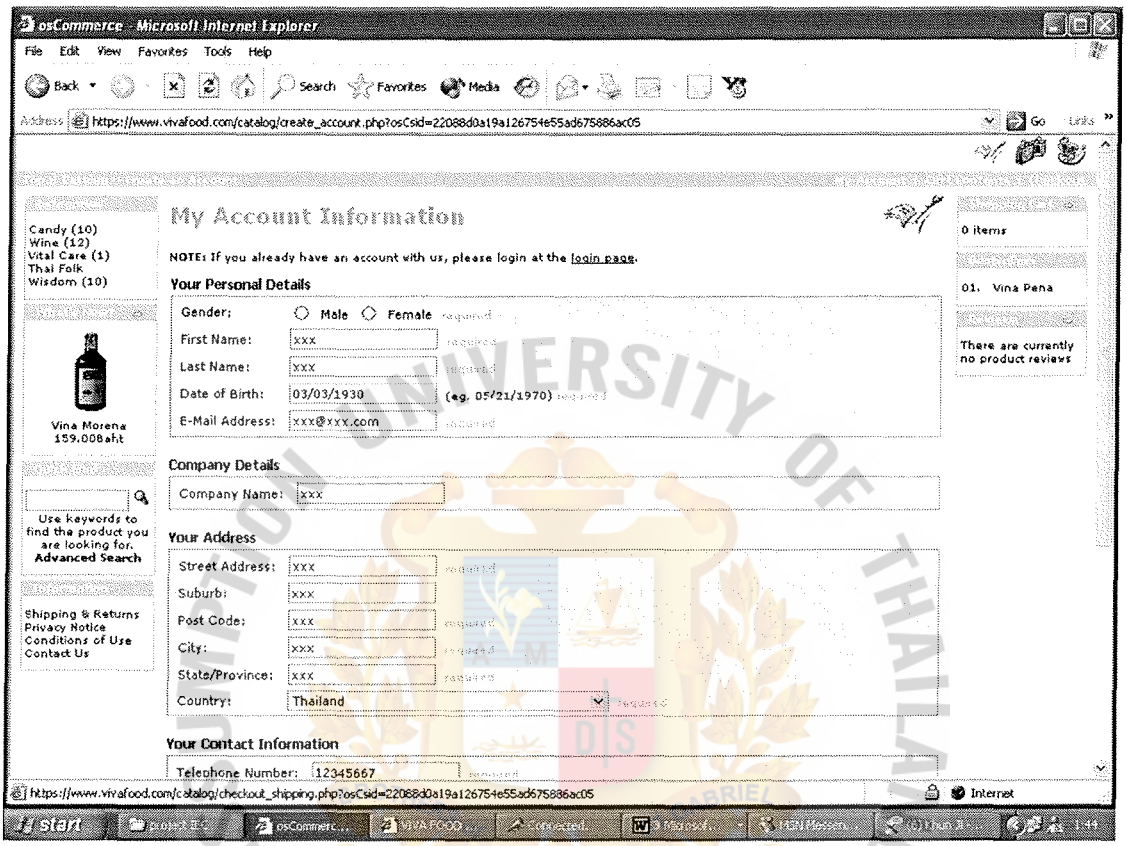

Figure A.8. Account Information Page.

Responding of registration page (1)

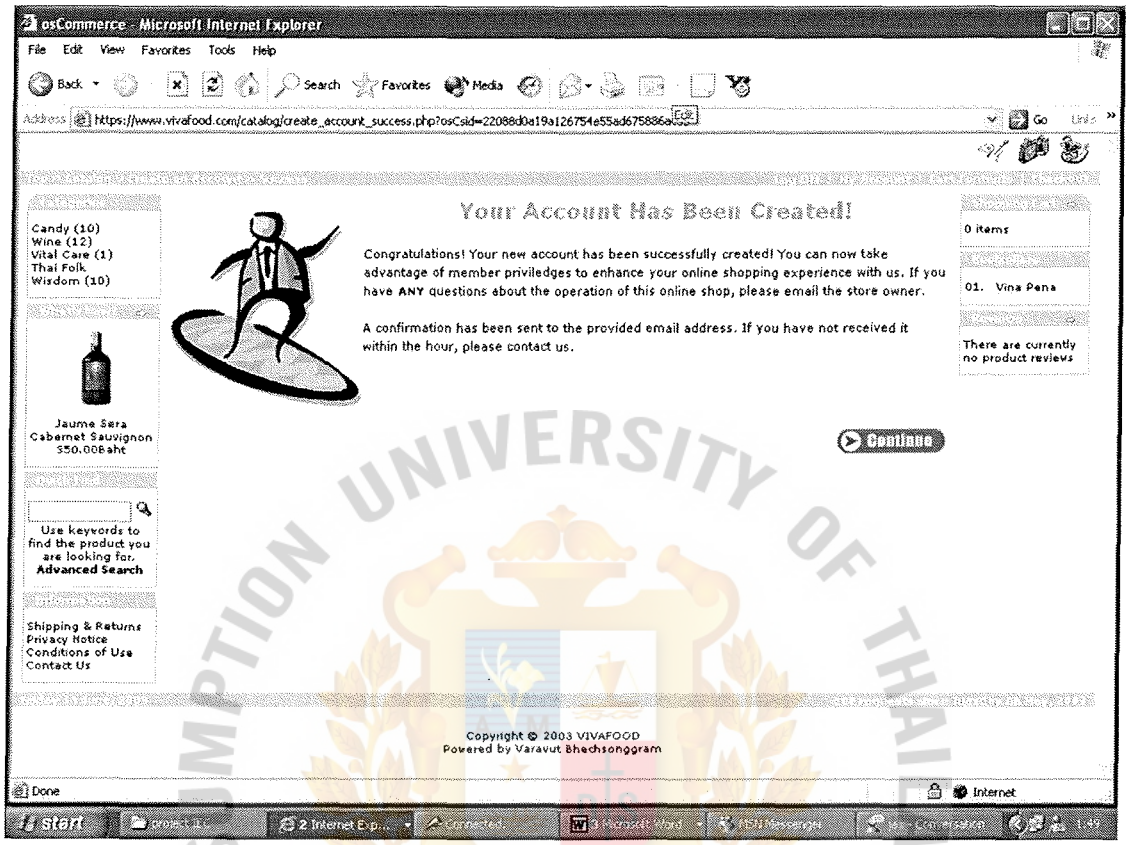

Figure A.9. Responding of Registration Page (1).

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Responding of registration page (2)

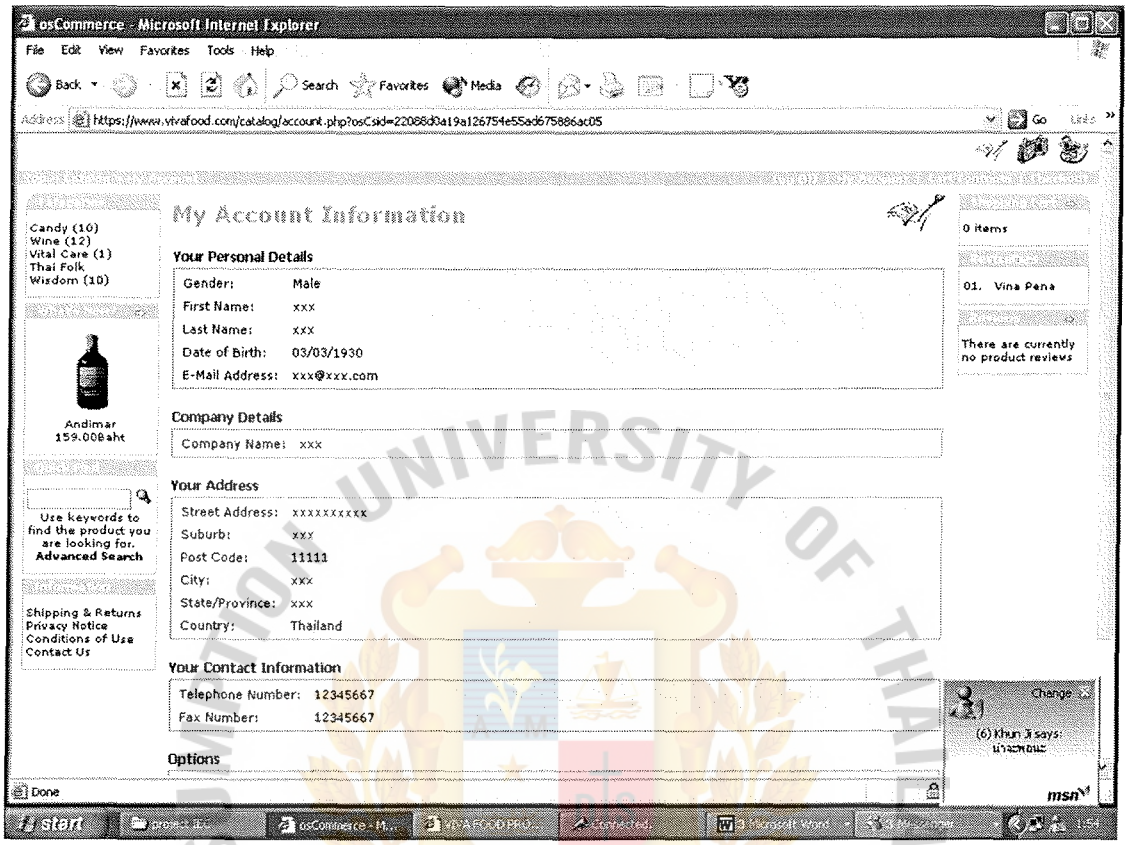

Figure A.10. Responding of Registration Page (2).

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Product Detail

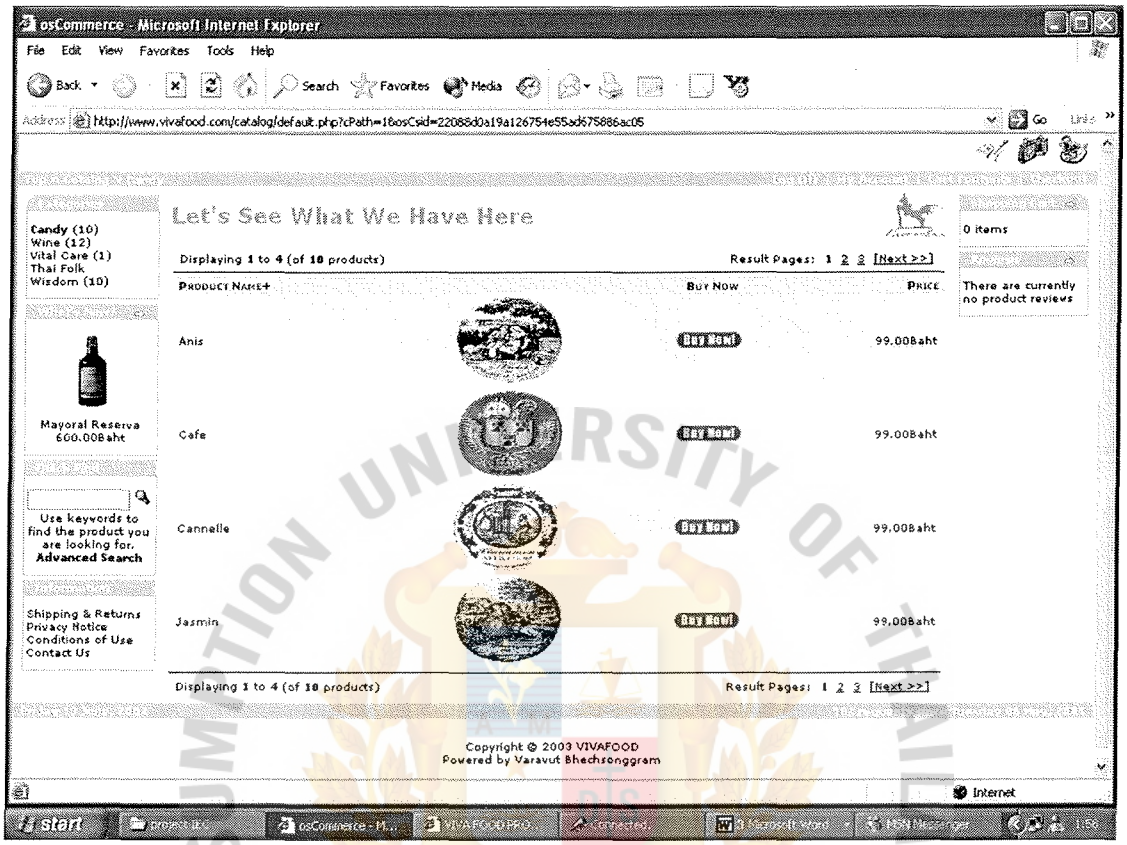

Figure A.11. Product Detail.

Product Detail

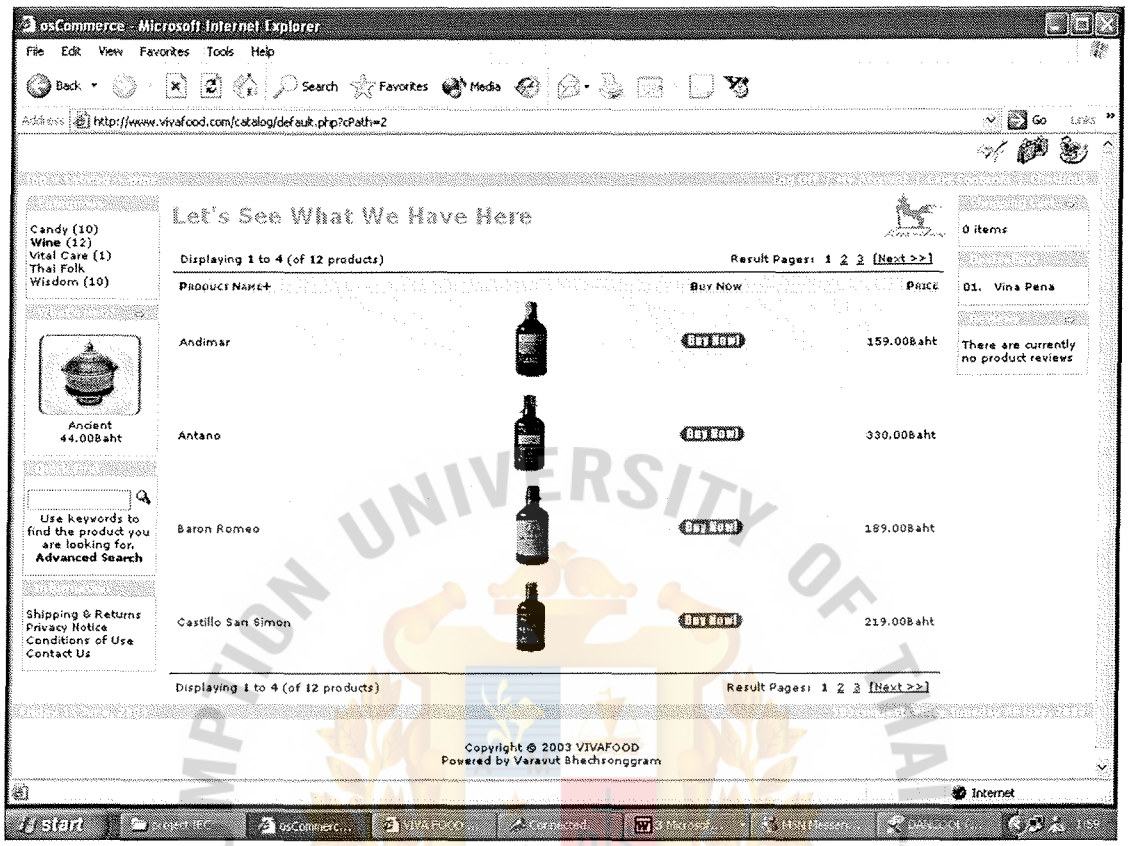

Figure A.12. Product Detail.

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Search Engine

The customer can search any product with our search engine

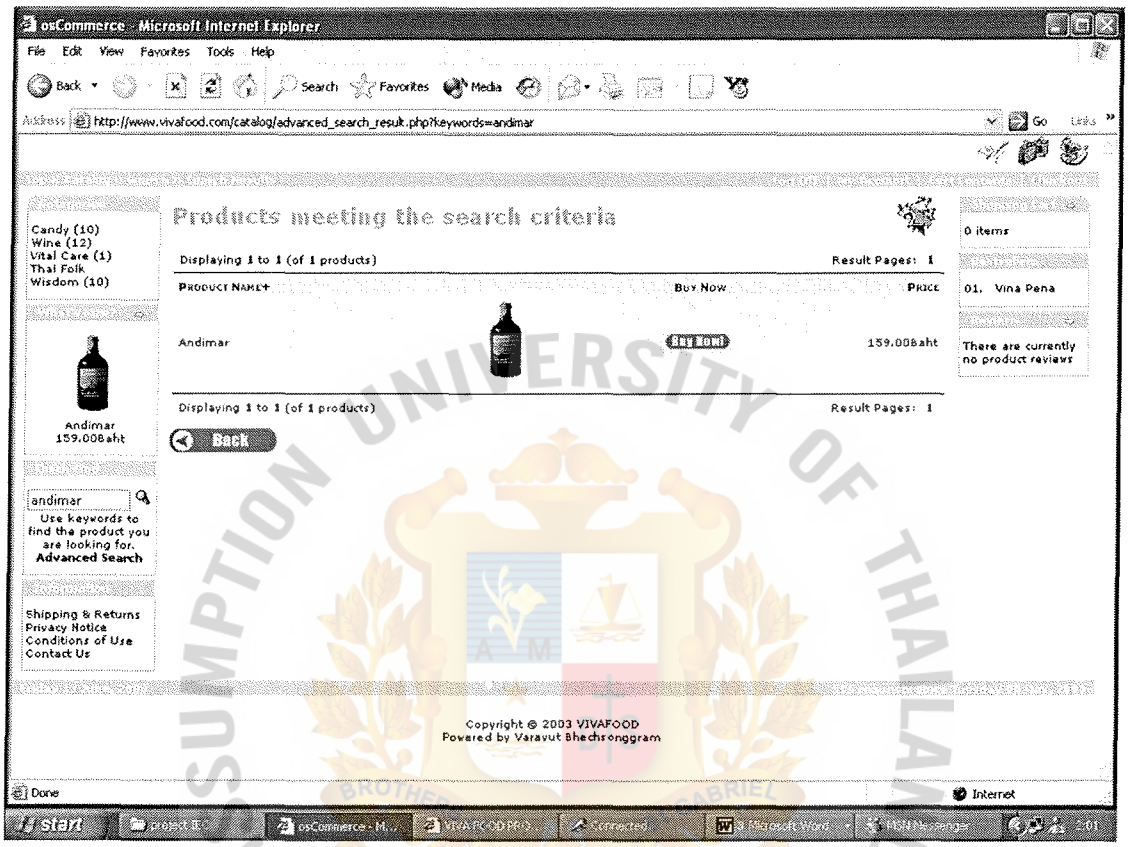

Figure A.13 Search Engine.

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Product Enlargement

The customer can enlarge the product picture.

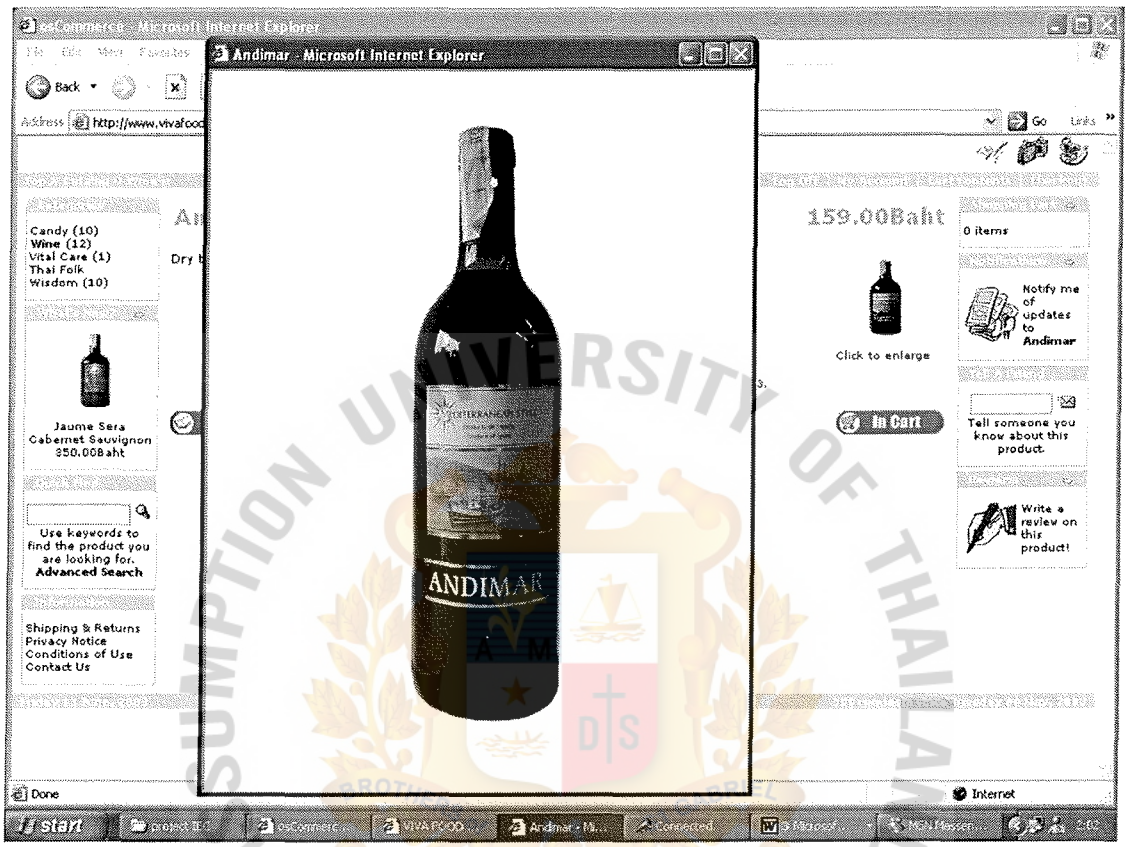

Figure A.14. Product Enlargement.

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Detail of Order

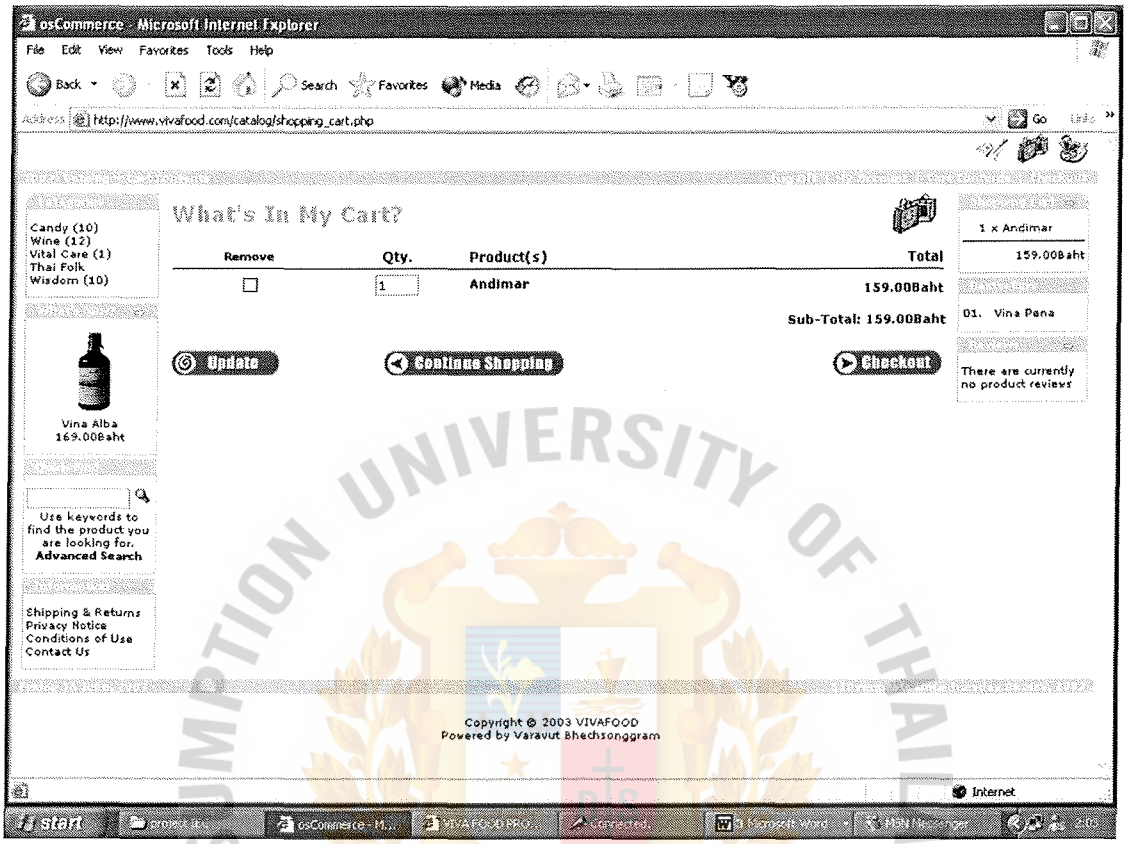

Figure A.15. Detail of Order.

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Delivery Information

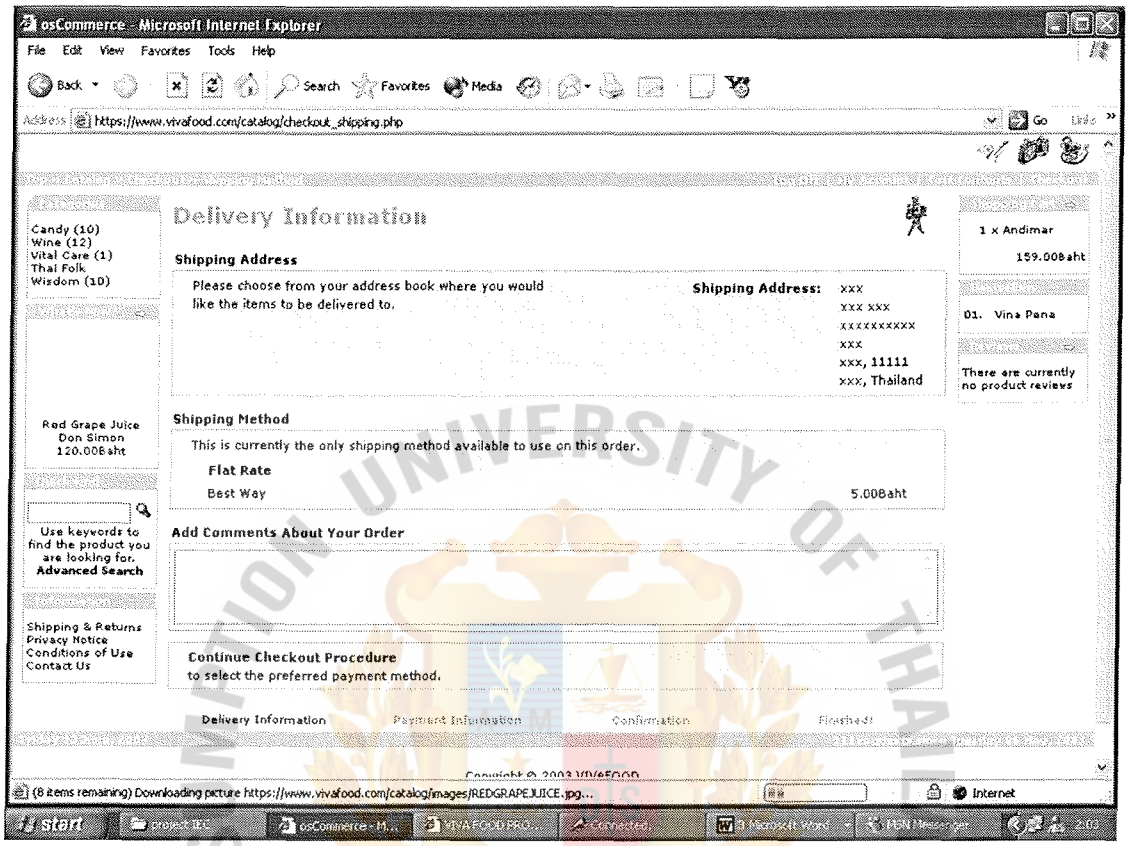

Figure A.16. Delivery Information.

Payment Information

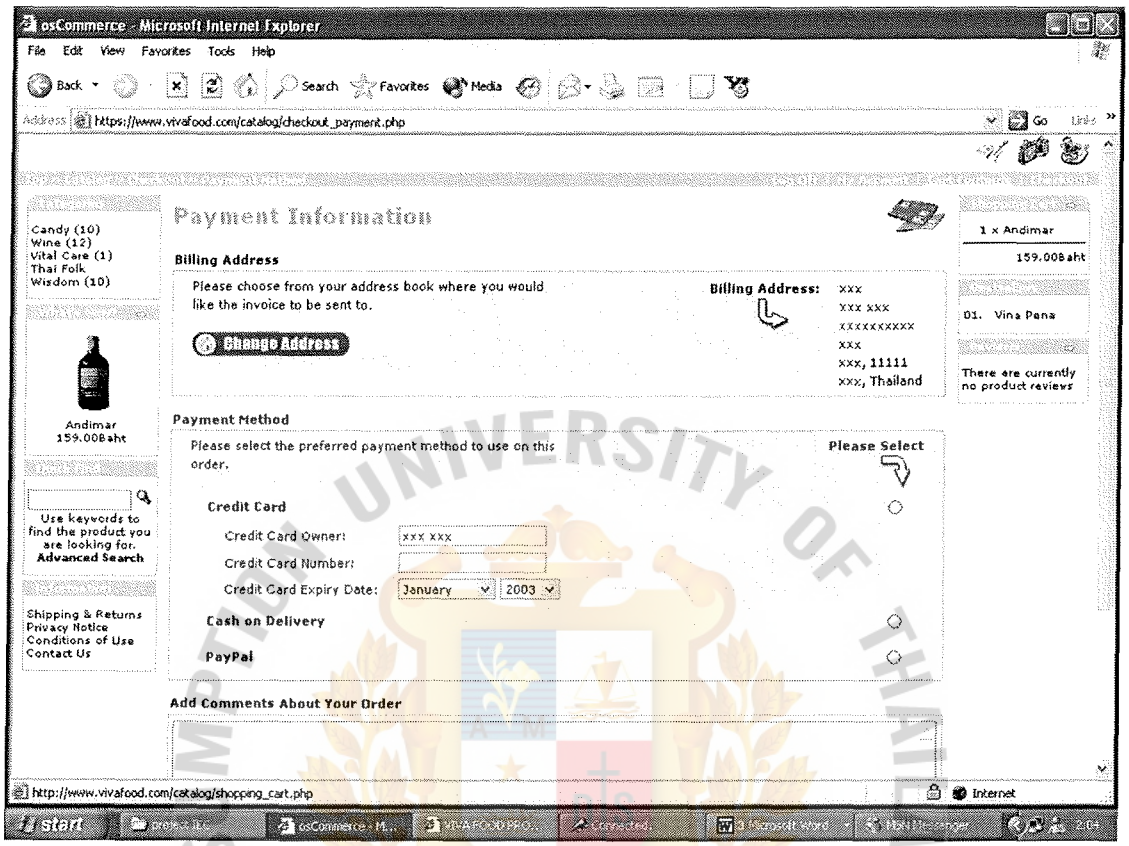

Figure A.17. Payment Information.

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Order Confirmation

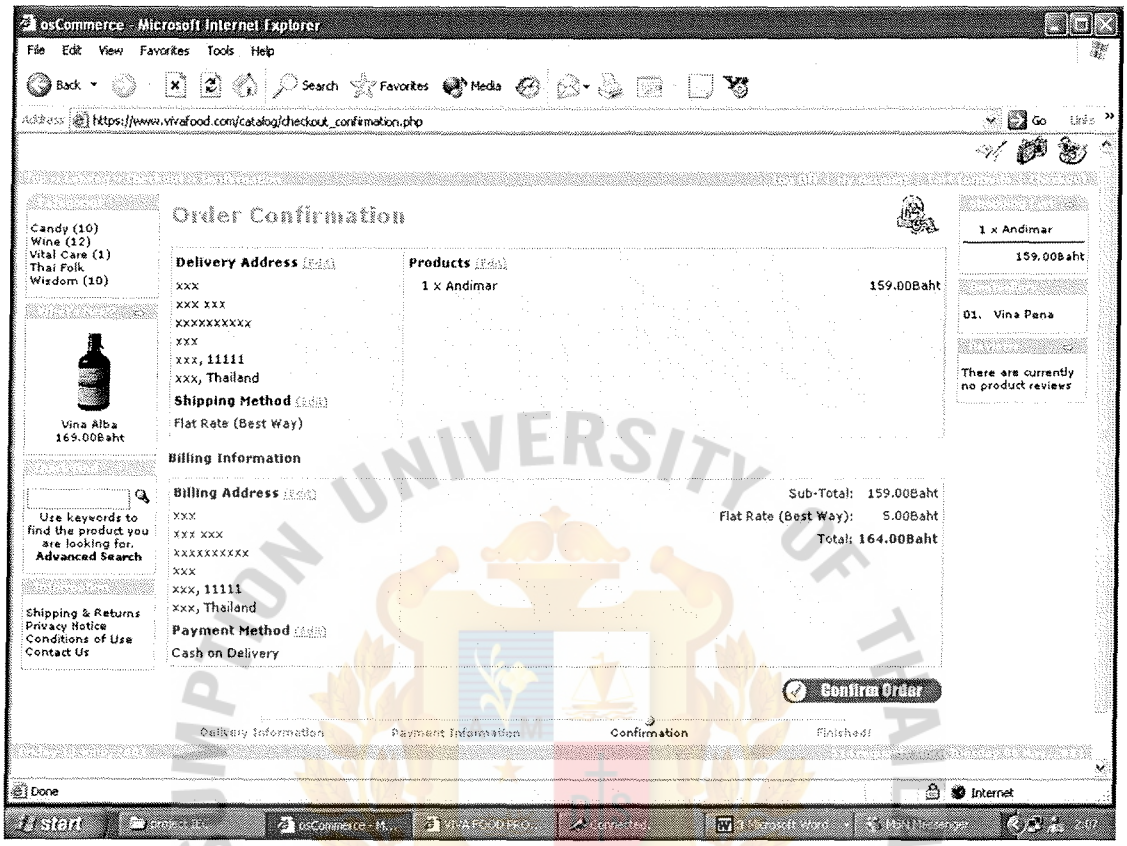

Figure A.18. Order Confirmation.

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Order Confirmation

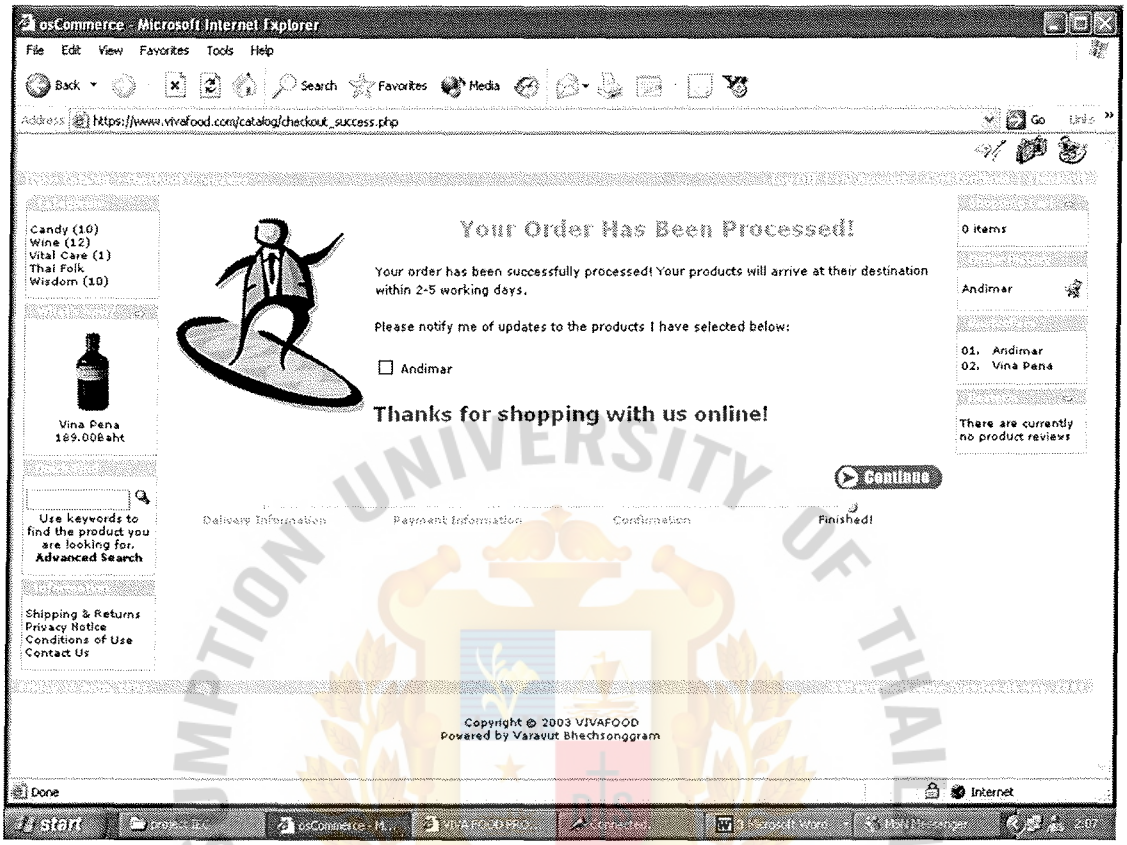

Figure A.19. Order Confirmation.

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Log Off Page

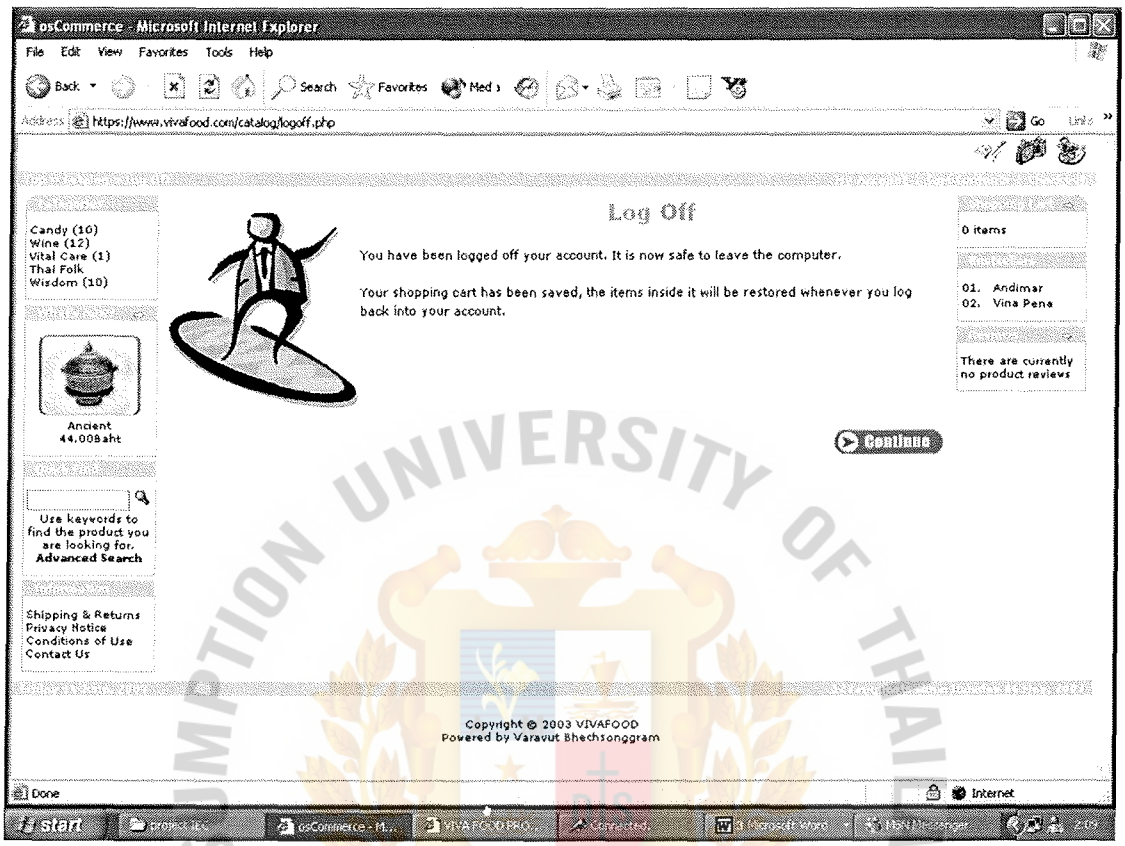

Figure A.20. Log Off Page.

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BIBLIOGRAPHY

1. Kotler, Philip. Marketing Management, 10th Edition. New Jersey: Prentice-Hall, 2000.

2. Laudon, Kenneth C. and Jane P. Laudon. Management Information System, 6th Edition (International). New Jersey: Prentice Hall, 2000.

3. Perreault, William D., Jr. and E. Jerome McCarthy. Basic Marketing, 13th Edition (International). Bangkok: McGraw-Hill, 1999.

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