



OA Shop Website

by

Mr. Grairit Rattanasiriwanich

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

November 2004

**OA Shop Website**

by  
Mr. Grairit Rattanasiriwanich

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

November 2004

Project Title            OA Shop Website

Name                    Mr. Grairit Rattanasiriwanich


Project Advisor        Rear Admiral Prasart Sribhadung

Academic Year        November 2004

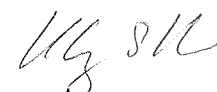
---


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

Approval Committee:

  
(Real Admiral Prasart Sribhadung)  
Dean and Advisor

  
(Prof. Dr. Srisakdi Charmonman)  
Chairman

  
(Dr. Ketchayong Skowratananont)  
Member

  
(Assoc. Prof. Somchai Thayarnyong)  
CHE Representative

November 2004



## ABSTRACT

OAShop.com is an online business to customer website of office automation products such as copiers, facsimiles, projectors and etc. These transactions include retail transactions with individual shoppers. Office automation has changed the nature of office work. Today, less time is required for traditional responsibilities, while tasks requiring organizational and management skills are becoming more important. Now more than ever, employees need trainings in the business world: professionalism, effective writing skills and methods of increasing personal productivity and efficiency. Office automation are key to success for your business. Staying automated and up-to-date with the latest technology is also necessary.

The project is to develop an online shop, OAShop.com and provide product information, registration process and order process. Electronic commerce, or e-commerce, is the process of using digital technology as the medium for transmitting information between organizations. Digital technology replaces paper-based processes, resulting in lower costs, greater accuracy, higher speed and larger scale inter-company collaboration.

There are two major problems here in e-commerce. One is the commercial websites with security system both consumers and suppliers feel uncomfortable with purchasing and selling on-line. The second problem is the number of Thai's surfing the Internet is small. Without a good number of users making opportunities to profit from the on-line sales does not seem promising. Both problems can be solved by setting term of use, privacy policy, SWOT analysis about our website and competitors and setting marketing plan for success in the e-commerce website.

## ACKNOWLEDGEMENTS

Several people made contributions for this project. I would like to acknowledge their efforts and thank them for their contributions.

I would like to thank Rear Admiral Prasart Sribhadung, my project advisor, for his valuable suggestions and advice given in the preparation of this project.

I also would like to extend my appreciation to my family and my best friend for their helpful comments and information which make this project possible. Above all, I am very grateful to parents who give me strength to overcome any obstacles.

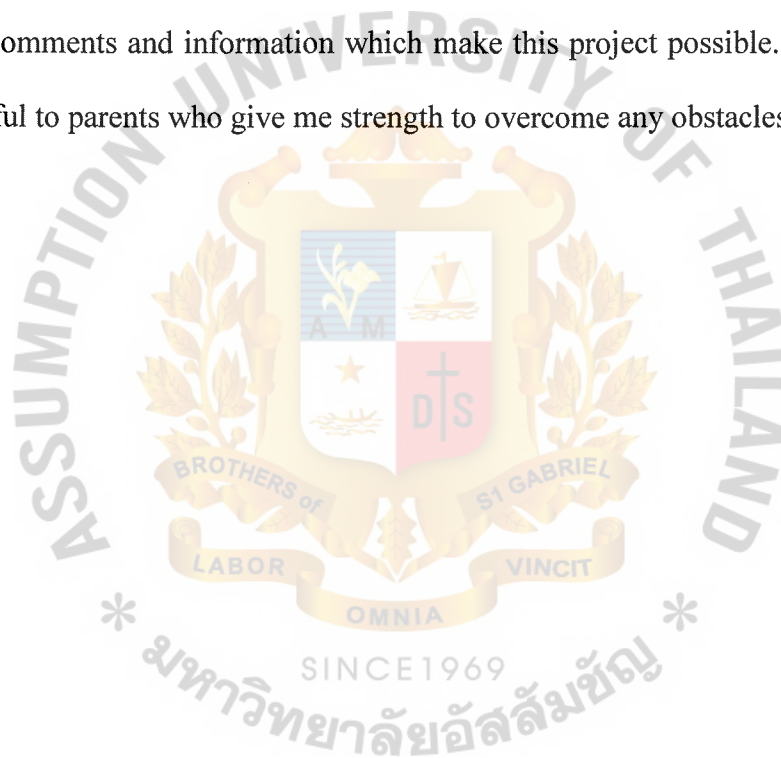


TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
LIST OF FIGURES	v
LIST OF TABLES	vi
I. INTRODUCTION	1
1.1 Background of the Project	1
1.2 Objectives of the Project	2
1.3 Scope of the Project	2
1.4 Deliverables	2
II. LITERATURE REVIEW	3
2.1 History of E- Commerce	3
2.2 Why is E-Commerce so Important	4
2.3 Future of E-Commerce	5
III. STRATEGIC PLANS IN MARKETING 1969	7
3.1 Mission	7
3.2 Short Term Goals	7
3.3 Long Term Goals	7
3.4 Competitor Analysis	8
3.5 Market Segmentation	11
3.6 Target Market	12
3.7 Five Forces Analysis	12
3.8 SWOT Analysis	14

<u>Chapter</u>	<u>Page</u>
3.9 Market Mixes	15
IV. THE PROPOSED SYSTEM	20
4.1 System Design	20
4.2 System Specification	20
4.3 Security and Control	22
4.4 Benefit Analysis	25
4.5 Future Plan	26
V. FINANCIAL ANALYSIS AND FORECASTING	27
5.1 Sources of Income	27
5.2 Sales Forecast	27
5.3 Start-up Cost	28
5.4 Estimated Income Statement	30
5.5 Break Even Analysis	31
VI. PROJECT IMPLEMENTATION	32
6.1 Overview of Project Implementation	32
VII. CONCLUSIONS AND RECOMMENDATIONS	37
7.1 Conclusions	37
7.2 Recommendations	38
APPENDIX A WEB INTERFACE DESIGN	39
BIBLIOGRAPHY	43

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
2.1 Worldwide B2C Ecommerce Revenues	5
3.1 Web Image of Officedepot.co.th	9
3.2 Web Image of Officecentre.co.th	10
4.1 Break Even Analysis	31
6.1 Layout Design of OAShop.com	33
6.2 Site Map of OAShop.com	34
A.1 OAShop.com – Home Page	39
A.2 OAShop.com – Product Category Page	40
A.3 OAShop.com – New Customer Page	41
A.4 OAShop.com – Login Page	42





## LIST OF TABLES

<u>Table</u>	<u>Page</u>
4.1 Hardware Specification for the OAShop.com's web Server and Client	21
4.2 Software Specification for OAShop.com	22
5.1 Sale Forecast of OAShop.com for Five Years (Baht)	27
5.2 Start-up Cost	28
5.3 Cost Prediction for the Five Year Operation	29
5.4 The Forecasted Income Statement for the Five Year Operation	30



## I. INTRODUCTION

### 1.1 Background of the project

E-Commerce is an ever growing area of business that shows no signs of slowing down. Everyday more and more people are buying products online. Searching for a product within an E-Commerce website is different than browsing the aisles of the local department store. Electronic Commerce seems to be everywhere these days. It is nearly impossible to open a newspaper or magazine without coming across an article about how Electronic Commerce is going to change all our lives.

www.oashop.com is a website on the Internet to sell office automation (OA) that is often used in offices today to our customer. Our site's name is www.oashop.com . The name is easy to remember. When OAShop.com gets an order we send the order to our partner. When the partners receive the order, then they will send the product to the customer and receive money. The main task of OAShop.com is to receive orders. Our website has 2 partner companies, namely.

- (1) P.S.N Center Company Limited: 129/13 Moo 8 Chloempragiat Road  
Praveht, Bangkok 10250 Thailand.
- (2) Siam Worachak Electric Company Limited: 360/1 Worachak Road  
Pomprab Bangkok 10100 Thailand.

OAShop.com will get profit from the margin of product when the customers place an order to our website and banner advertising.

## **1.2 Objectives of the Project :**

- (1) To create an office automation online shop.
- (2) To support and help customers find information about each product type and solve customer's problem.
- (3) To provide the order process on the website.

## **1.3 Scope of the Project:**

The project will cover the major parts of the OA website which include the following areas.

- (1) Design and structure of the e-shop website.
- (2) Marketing analysis.
- (3) SWOT analysis.
- (4) Programming the order process on the website.
- (5) Programming administration page for the management of the online shop.

## **1.4 Deliverables:**

Deliverables for this project will be as follows:

- (1) A final report in detail covers the scope mentioned earlier.
- (2) A prototype of a web site shows the concepts of the report being applied

## II. LITERATURE REVIEW

### 2.1 History of Electronic Commerce

Computers first made their way into commercial applications in the 1960s, with ERMA (the Electronic Recording Machine Accounting). Banks were swamped with the growing volume of checks that needed to be processed. By automating the function with ERMA, the first bank to use the computer, Bank of America, reported that nine employees could do the job that previously took 50 people.

The commercial use of computers quickly spread as companies in a variety of industries used them to keep accounting ledgers, administer payroll, create management reports, and schedule production.

In the 1970s and 1980s, businesses extended their computing power beyond the company's walls, sending and receiving information with business partners and suppliers electronically via EDI (Electronic Data Interchange). This process transmitted standardized data that streamlined the procurement process between businesses, so that paperwork and human intervention were nearly eliminated.

EDI often occurred over private communication networks called value-added networks (VANs). The cost of installation and maintenance of VANs put electronic communication out of the reach of many small and medium-sized businesses. For the most part, these businesses relied on the fax and telephone for their business communications. Even larger companies that used EDI often did not realize the full potential savings because many of their business partners did not use it.



Today, electronic commerce increasingly refers to business conducted over the Internet. EDI, for example, is being brought to the Internet and allowing companies to save money by eliminating the old system's expensive private networks and by expanding to include more businesses on the supply chain. Other business-to-business transactions are simply moving to the Web without using the standardized forms required by EDI.

Companies of all sizes can now communicate with each other electronically, through the public Internet, Intranet networks for company-use only (Extranets) or for a company and its business partners use (extranets), and private value-added networks.

## **2.2 Why is Electronic Commerce so Important**

Many people and businesses can enjoy low cost. So much potential revenue is available to businesses online. This is why e-commerce has become a necessity for businesses today.

- (1) There are 5 million servers on the Internet.
- (2) 30 million individual users use the Internet.
- (3) 118,000 domain names are issued for businesses, representing 51% of all domain names issued.
- (4) The number of web pages doubles every 53 days, and stood at 110,000 in 1995.
- (5) 61% of Canadian small businesses are currently using the Internet.
- (6) 27% of Canadian small business owners currently conduct financial transactions online, and another 41% plan to do so.
- (7) 92% of international executives believe the Internet will reshape the global marketplace.
- (8) Value of electronic commerce transactions in 1996 was US\$12 million.

- (9) Value of electronic commerce transactions in 2000 predicted to be US\$2 billion.
- (10) Estimated amount of business to business web purchases in 2001 is 80% of US\$220 billion.

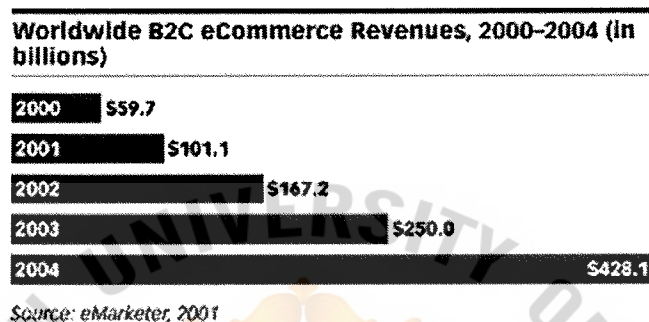


Figure 2.1. Worldwide B2C Ecommerce Revenues.

### 2.3 The Future of Electronic Commerce

The future of e-commerce isn't far off in the distance—it is so close you can practically touch it. The technology is there, you just have to use it. The costs are down; you just have to budget for it. The shoppers are browsing; you just have to get them to buy.

There are improvements to be made. Security systems can be stronger and more standardized, and the process of setting up a store can always be made simpler. But even now secure transactions can be conducted electronically and you can even build a store in 30 minutes by using the Internet.

Whether shoppers are willing to buy over the Internet is no longer an issue. Forrester Research predicts that by 2001, the amount of purchases online will jump to \$17 billion, up from \$2.4 billion in 1997. The Consumer Direct Cooperative predicts

that 200,000 U.S. households will be buying food and household goods and services online in 1998. By the year 2007, that number is supposed to reach as many as 15 to 20 million. And it's not only the U.S. that is likely to see a major boom in Web-based purchases. Computer giant Intel predicts that Western Europe's online sales will reach \$26 billion in 2001. That is up from \$3 billion in 1997.

Widespread electronic commerce is becoming as inevitable as a credit card in every wallet, an automatic teller in every grocery store, and a toll-free number for every mail-order catalog. The future is here, it is just a matter of grabbing it.



### **III. STRATEGIC PLANS IN MARKETING**

#### **3.1 Mission**

OAShop.com offers office automation products online. We offer product and useful and valuable information of OA products to everyone who are interested to purchase our products to use in their office. We provide many products with reasonable prices for visitors.

The products and service development are continuously made to meet customers' satisfaction. We must retain our customers. The website has to be easy to use. Customer satisfaction is given the first priority.

#### **3.2 Short Term Goals**

- (1) To promote [www.oashop.com](http://www.oashop.com) to sell new office automation products via the Internet
- (2) To reach the sales value of about 2,500,000 Bath for the first year.
- (3) To have about 5,000 new visitors per month and the sales volume can be increased by 8% from new customer each month.
- (4) To create customers' confidence in the security and payment system of our website.

#### **3.3 Long Term Goals**

- (1) To increase product category.
- (2) To increase the sales volume of the same product line that sells via the Internet.
- (3) To expand the marketplace from being national to international



### 3.4 Competitor Analysis

Referring to the competitors of OAShop.com, we can classify them as direct and indirect competitors in online market.

(1) Direct competitors are considered as other office automation product online web sties such as [www.officecentre.co.th](http://www.officecentre.co.th), [www.officedepot.co.th](http://www.officedepot.co.th) and the other

(2) Indirect competitors are office automation product offline such as OA physical shop, etc.

The examples of the competitors are shown here.





### Strengths:

- (1) The web design is attractive with a proper design in color schema and pictures.
- (2) The name of the website is easy to remember.

### Weaknesses:

- (1) The website uses many text styles and sizes.
- (2) Website hyperlinks are shown on different homepages. Some visitors have difficulty reaching the webpage that they want to go.

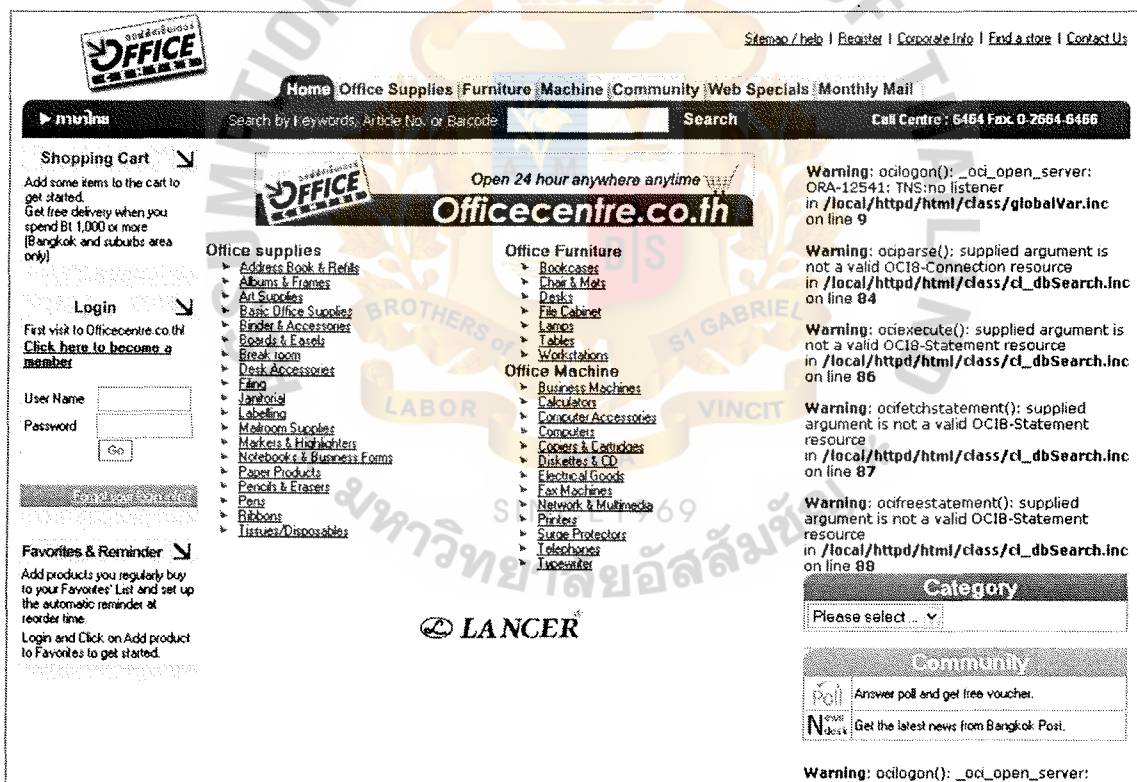


Figure 3.2. Web Page of officecentre.co.th.

Strengths:

- (1) Officecentre.co.th has a famous website for office automation product.
- (2) The site design is orderly arranged. There are sets of navigation, providing simple text navigations for the user through the entire web site. So user will not get lost easily.

Weaknesses:

- (1) There are errors on the homepage which is a problem for visitors.
- (2) The web design is unattractive. It is a very simple design.

### **3.5 Market Segmentation**

Oashop.com would divide the market into geographic segmentation, demographic segmentation and behavioral segmentation. Segmentation is performed in order to formulate effective marketing strategies that appeal to specific consumer groups.

- (1) Geographic Segmentation

For the short term, we put the emphasis on people who live in Bangkok and other big cities in Thailand. They have the ability to use the Internet. They are our potential customers.

For the long term, we plan to go all over Thailand and some countries. This means we expand our business to new market.

- (2) Demographic Segmentation

OAShop.com takes the visitor's age, occupation and income into consideration for demographic segmentation. Customers have their own needs and demands. This segment can help us in designing the web, selecting products to be sold on the web.



### (3) Behavioral Segmentation

OAShop.com also takes “usage rate” into consideration. This segment helps our website to set promotion for visitors.

### 3.6 Target Market

From the segmentation of the market, in the short term, our main target is the people who live in cities. They have opportunities to use the Internet and they are our potential customer. Oashop.com wants our business to grow within a year and run smoothly in next steps. For in the long term, we would like to expand our business all over Thailand and foreign countries.

Our primary target is to create a website for both men and women whose age is between 18-40 years working in offices. The secondary target is all ages and every occupation.

The customer’s usage rate is how often peopling visit our website. This is our target because we can set promotion for them.

### 3.7 Five Forces Analysis

We should identify five forces that need to be evaluated to determine whether a website can maintain a competitive advantage and also to identify potential strategies for the e-commerce. Introducing the five forces analysis as the marketing influence factors that reflect the management pattern in our business would be described in the following topics “the threat of new entrants to the market”, “the bargaining power of the website’ supplier”, “the bargaining power of buyers”, “the threat of substitute product and the intensity of rivalry among competitors”.

#### (1) The Threat of New Entrants to the Market

It will be like paving the way for new competitors to this business if we can not fulfill customer satisfaction; if we fulfill their satisfaction, the customer will not go to other sites to find out the same service. OAShop.com is an early office automation website and has gained the upper hand in the market share. This makes new entrants to take online market share.

#### (2) The Bargaining Power of the Website's Supplier

The power of suppliers is quite high; especially in the early stages only. OAShop.com has two partners to get order for our website. They have close relationship with our website. There are many OA physical stores in the physical market so it is not difficult to find a new partner in future. Now the new businesses change the power of the buyers which is high and reduce the power of the suppliers.

#### (3) The Bargaining Power of buyers

In contrast to the supplier, the bargaining power of the buyer would be higher than that of the supplier because our web site wants to meet customer's satisfaction. The bargaining power of the buyer could be considered high.

#### (4) The Threat of Substitute Products

The substitution problem should be taken into consideration because of new developments made in Information Technology. The Internet and other copiers could provide the same service or same pattern as our business does. However, our business has the upper hand as we have a new website in the market already for market share.

### (5) The Intensity of Rivalry among Competitors

As our website is an early entrant in the office automation market, the challenge is not too high and not too low. The price of product is the strength of our website. Our website can lower the price than other websites because the competitors have high operation cost. Low investment and being more flexible than other big websites, is the advantage of our website.

## 3.8 SWOT Analysis

The analysis identifies and lists the competitor's strengths and weaknesses and its opportunities and threats. A good S.W.O.T analysis helps our website focus on a strategy that will ensure opportunities and strengths for our web while avoiding its weaknesses and threats to its success.

### Strengths

- (1) The information will be updated frequently.
- (2) The online website can help the customer save cost, time and traveling.
- (3) Customer relationship is enhanced.
- (4) Catalog and price are updated.
- (5) The website is well known in OA products.
- (6) Strong financial status and backup for overseas head office.

### Weaknesses

- (1) Lack of touch and demo product for customers.
- (2) High investment required.
- (3) Having errors in some functions of the webpage.
- (4) The products price set is high.

#### Opportunities

- (1) Online business can serve people 7 days a week 24 hours a day.
- (2) It is a new alternative channel for customer.
- (3) Fewer competitors.
- (4) The online website can help the shop to expand the market to overseas countries.
- (5) OA products market will grow in future.

#### Threats

- (1) Security and privacy problem.
- (2) People still do not trust online business transactions or lack of customer confidence.
- (3) Insufficient telecommunication facilities and infrastructure in Thailand.
- (4) It is easy for new competitor to enter same business online.
- (5) Some competitors have effective price lists.

### **3.9 Marketing Mixes**

Traditionally the marketing mix co-ordinates strategies for, price, promotion and place are developed for the products to be purchased over the physical shop. The internet is changing the way we sell our products and services. This is the fact. Consumers now use the Internet to research and purchase products/services online. Our organization now needs online strategies to attract and retain customers. The e-marketing mix considers the elements of presenting the marketing mix online. The e-marketing mix must work together and support each other if our website wants to have a successful online marketing strategy.



## Product

Oashop.com would provide office automation products and services such as copiers, calculators and other products. The revenue will come from the sales margin of OA products, by advertising the banners of the sponsors, by manufacturing and selling OA products. Our website offers clear information on products and their specification. To achieve the goal in the short and long term, the site must be attractive and satisfy visitors' needs.

## Price

The Internet gives consumers the power to shop around for the best deal at a click of a button. Price is the most important element in doing a business through the Internet. Customers always look for better deals for their spending. However, the quality of product and services are equally important too. Price from OAShop.com is lower than our competitors as our strategy can lower the price. Customers prefer to buy cheaper price when they compare the price with that of the physical shop.

## Place

OAShop.com is an online distribution channel of the business for all over Thailand. Consumers can order products direct from our website.

## Channel Intermediaries – The Internet

- (1) The Internet is a geographically dispersed market.
- (2) The main benefit of the Internet is that niche products can reach out to a wider audience. Creating online customer service builds one to one relationship and has continual interaction with customers individually.
- (3) There are low barriers to gain entry as set up costs are low.
- (4) E-commerce technology is used.

## Promotion

OAShop.com has run a new business to sell its the products and service online. As Public brand awareness is one of the major goals of our business, it should be raised in public. Having a recognizable domain name is the first stage towards e-promotion. So we use the name OAShop.com. It is easy to remember. We believe that the effective promotion tools will stimulate the demand of the customers. There are several methods that OAShop.com can use to promote the online website.

### (1) Advertising

It is used to develop attitudes, create awareness, and transmit information in order to gain a response from the target market.

#### Direct Mail

OAShop.com will print materials about our website's service and products and send mail to our target market. The mail is sent out to the potential consumers and responses are carefully monitored.

#### Banner Promotions

Placing banner advertisements on other webpage is a common form of e-promotion. Banners are regularly used in online advertising. When visitors click on the banner, they will have access to our website. These strategies help people to access the website easier. Banner ads must be placed where potential customers browse. We can make banner exchanges and link with our partners' website.

#### Search Engine

Search engine is powerful tool for search webpages or websites that contains the keyword for searching. Our website will be registered for a website search engine to keep our URL and the description of our website.

The seeker insert keyword “Office automation or OA” will show our website and description. The famous website search engines are [www.google.com](http://www.google.com) and [www.yahoo.com](http://www.yahoo.com).

#### Promotion through the web board

Web board is an important tool for promoting websites. The user’s web board allows its user to play the Internet so they have more chances to visit our website. The present web board is more powerful in decision making because the user can make comments within the web board.

#### (2) Sale Promotion

Sale promotion stimulates the interest, trial, or purchase of the final customer. The objective of sale promotion is to focus on short-term actions. The following are the methods that will be implemented by OAShop.com.

##### Special Price or Discount Rate

OAShop.com offers a special price and discount rate for some items at a certain period of year. We have set a special price for each month. This method may lead our customers to a quick purchasing decision for OA products.

##### Cumulative Purchasing

When customer purchases our products on the website we keep the record about our customers and their purchase files. Our website offers a special gift to the customer who purchases our products most in each month and year.

### (3) Web Public Relations

Web public relations (WPR) is another approach to promote our brand, products and services online. WPR articles sent to the review sites for customers to read. The WRP programs also aim to build and enhance OAShop.com image among customers such as newsgroups.



## **IV. THE PROPOSED SYSTEM**

### **4.1 System Design**

The design of the new website can also reach all the objectives set under the scope of implementation and serve the objective of the project. The process of site contents will organize the information by identifying the contents and functional requirement as well as the contents for the target group to reach easily and do not get lost while visiting. The site map helps design the website easier. General information will be presented on the first page and deeper details will be shown on the click.

### **4.2 System Specification**

In this section we cover the process of estimating the present and future workloads of an online business and the process involved in evaluating the ability of computer hardware and software to handle workloads adequately. The requirement of the proposed systems is as follows;

#### **(1) Hardware Specification**

In the process of developing the project, a computer will be both the server and the client. This project will be implemented on Internet Information Services (IIS): Manage IIS, the web server for the Internet and Intranet web sites. So this computer needs a high performance to develop the proposed system.



Table 4.1. Hardware Specification for the OAShop.com's web server and client.

HARDWARE	SPECIFICATION
Central Processor Unit (CPU)	Pentium 4 or higher
Memory (RAM)	256 MB or higher
Cache Memory	256 KB cache
Hard Drive	40 GB
Floppy Disk	3.5 inch (HD 1.44 MB)
Keyboard	Thai English key caps
Mouse	2 buttons (scroll option)
Monitor	15 " Super VGA Monitor or higher
Main Board	Support CPU, PCI slot , VGA on board

## (2) Software Specification

The development of a new website requires a careful decision on software as well as hardware. All the hardware and software must be compatible to the whole system. For creating the new website to the e-commerce online we need to use the following software:

Table 4.2. Software Specification for OAShop.com.

<b>SOFTWARE</b>	<b>SPECIFICATION</b>
Operating System Software	Microsoft Window XP Professional
Web Server	Internet Information Services (IIS)
Database Server	Microsoft office XP Access
Web Design	Macromedia Dream weaver MX
Web Editor	Macromedia Home site
Animation Editor	Macromedia Flash MX
Photo Editor	Photoshop 5
Web Browser	Internet Explorer

## 4.3 Security and Control

Security is of paramount importance when deciding to participate in e-commerce over the Internet. Any business must have confidence in the safety and reliability of its "place of business" - because the information contained within its walls is what keeps the business alive. Just like a business owner locks his door when leaving each day, or verifies credit card signatures, a virtual company must ensure proper walls are in place to protect its data and legitimacy of transactions.

One of the most important factors which should be taken into consideration in the development of oashop.com is security. With the rapid growth of e-commerce, things have changed. Consumer use internet technology to purchase goods and service online, millions of individuals use their personal data for registration to purchase products and services. So e-commerce website must implement the security mechanism to protect both visitors and customers.

(1) Physical Security

Every file must be scanned for viruses before it is uploaded to the host. The administrator must back up daily for the website file, customer information and storage in security area. An important but often overlooked aspect of Website security is controlling physical access to your Web server and its programs and data. For a determined saboteur or thief, it is often easier to simply abscond with a floppy disk — or, worse yet, with your whole computer — which holds the data your password system protects so well. The UPS (uninterrupted power supply) is important to prevent electrical failure.

(2) Logical Security

Privacy policy is protecting the fundamental rights and freedom of Natural persons, and in particular their right to privacy with respect to collecting and using personal data. The example of OAShop.com privacy policy in our website.

It is OAShop's policy to respect and protect the privacy of our customers and the users of [www.oashop.com](http://www.oashop.com). Through this Internet Privacy Statement, we want to reassure users of the Site that we will not sell, share, or rent user information to others.

### **Information Collection and use**

In order to purchase from [www.oashop.com](http://www.oashop.com), a user must first complete the registration form. Required information to process orders include: name, email address, street address, and phone number. This information is essential for customer's orders to be processed and delivered.

### **Sharing**

We use our partners to ship orders and handle all financial transactions. These companies do not retain, share, store or use personally identifiable information for any secondary purposes. Shipping from [oashop.com](http://oashop.com) is handled by two partners which requires a physical street address.

### **Security**

This website takes every precaution to protect our users' information. When users submit information via the website, your information is protected both online and off-line.

All of our users' information is restricted in our offices. Only employees who need the information to perform a specific job are granted access to personally identifiable information. Furthermore, as well as any time new policies are added, our employees are notified and/or reminded about the importance we place on privacy, and what they can do to ensure

our customers' information is protected. Finally, the servers that we store personally identifiable information on are kept in a secure environment.

### **Links**

This web site contains links to other sites. Please be aware that we OAShop.com are not responsible for the privacy practices of such other sites. We encourage our users to be aware when they leave our site and to read the privacy statements of each and every web site that collects personally identifiable information. This privacy statement applies solely to information collected by this website.

The new customer must be registrated and a password must be sent to him before purchasing products. The customer must login every time for every purchase. This method is called authentication customer.

Here are some tips for password security:

- (1) Use at least 1 non-alphanumeric character (such as ";" or "=") in your password.
- (2) Change your password frequently.
- (3) Do not share your password (if someone legitimately needs access, then they need their own password) with any one.

### **4.4 Benefit Analysis**

By using the e-commerce website, a lot of tangible and intangible benefit can be obtained.

#### **Tangible Benefits**

- (1) Faster and easier operation which can better sever the customers.
- (2) Lower cost structures without brick and mortar burdens.
- (3) Better customer service due to proper customer information.



- (4) Lower telecommunication costs.

#### **Intangible Benefit**

- (1) Reduce the volume of paper to be produced and handled.
- (2) Faster service.
- (3) New ways to purchase.
- (4) Extending your business's brand to new markets.
- (5) Communicate with current customers and attract new customers through e-mail marketing and other forms of Internet advertising.

#### **4.5 Future Plan**

Our future plans are as follows:

- (1) To improve the design of each webpage.
- (2) To increase service functions via the website.
- (3) To ensure 100% security and privacy for customers.
- (4) To create more websites in other languages for each area such as Thai, Chinese.
- (5) To expand the product line on the website

## V. FINANCIAL ANALYSIS AND FORECASTING

### 5.1 Sources of Income

- (1) The first sources of the website's income are the margin of product cost.

The OAShop.com adds about 10% mark up for each item sold online.

- (2) The second source of income is obtained by advertising the banners of the sponsors. When OAShop.com becomes famous and popular, the charges for banners ads will be higher. However, in the first year of operation, the charge should be cheaper in order to attract sponsors.

### 5.2 Sales Forecast

Sale forecast is the estimation of how much an industry or firm hopes to sell to its market segments. OAShop.com expects the following amounts of income shown below.

Table 5.1. Sale Forecast of OAShop.com for the third year, Baht.

<b>Year</b>					
<b>Income</b>	<b>Year 2004</b>	<b>Year 2005</b>	<b>Year 2006</b>	<b>Year 2007</b>	<b>Year 2008</b>
<b>- Product Sales</b>	(60,000*12 months)	(80,000*12 months)	(120,000*12 months)	(140,000*12 months)	(160,000*12 months)
<b>- Banner adv</b>	(4,000*12 months)	(5,000*12 months)	(6,000*12 months)	(6,500*12 months)	(7,000*12 months)
<b>Total sales</b>	<b>768,000</b>	<b>1,020,000</b>	<b>1,512,000</b>	<b>1,758,000</b>	<b>2,004,000</b>

### 5.3 Start-up Cost

OAShop.com is an e-commerce website. Low investment cost is the main strategy of the company's web site. There are three factors that must be considered when developing the proposed website.

Table 5.2. Start-up Cost.

<b>(1) Investment cost</b>	
<u>Hardware specification</u>	<b>Baht</b>
Computer Server/client	60,000
Peripherals	10,000
<u>Software specification</u>	
Operation system	26,400
Web Develop Tool	45,000
<b>(2) Implementation Costs</b>	
Domain Name Registration	850
Hosting Service	1,250
ISP hour	5,000
Web Development	24,000
<b>(3) Annual Operating Costs</b>	
Stationary	1,200
Maintenance Costs	5,000
Miscellaneous Costs	2,500
<b>Total Start-up Cost</b>	<b>181,200</b>

Table 5.3. The Costs Prediction for the Five-Year Operation.

Cost Items	Years				
	1	2	3	4	5
<b>Development Cost:</b>					
Hardware Depreciation Exp.	14,000	14,000	14,000	14,000	14,000
Implementation Cost	31,100	7,100	7,100	7,100	7,100
Office Equipment Cost	1,200	1,200	1,200	1,200	1,200
<b>Operating Cost:</b>					
Salary 2 persons@11000 (Increase 5% per year)	22,000	23,100	24,255	25,458	26,741
Maintenance Cost (Increase 5% per year)	5,000	5,250	5,513	5,788	6,078
Utility Cost (Increase 5% per year)	8,000	8,400	8,820	9,261	9,724
Operating Cost (Increase 5% per year)	4,000	4,200	4,410	4,631	4,862
<b>Total Cost</b>	<b>85,300</b>	<b>63,250</b>	<b>65,298</b>	<b>67,438</b>	<b>69,705</b>
<b>Cumulative Cost</b>	<b>85,300</b>	<b>148,550</b>	<b>213,848</b>	<b>281,286</b>	<b>350,991</b>

#### 5.4 Estimated Income Statement

Income statement is a financial report that summarizes revenues and expenses, showing the annual net profit or loss of OAShop.com

Table 5.4. The Forecasted Income Statement for the Five-Year Operation.

	Year				
	1	2	3	4	5
<b>Revenues :</b>					
Sales of Product	720,000	960,000	1,440,000	1,680,000	1,920,000
Sales of Adv	48,000	60000	72,000	78,000	84,000
<b>Net Sales</b>	<b>768,000</b>	<b>1,020,000</b>	<b>1,512,000</b>	<b>1,758,000</b>	<b>2,004,000</b>
Cost of goods sold	648,000	864,000	1,296,000	1,512,000	1,728,000
<b>Total Gross Profit</b>	<b>120,000</b>	<b>156,000</b>	<b>216,000</b>	<b>246,000</b>	<b>276,000</b>
<b>Expense :</b>					
Implementation Cost	31,100	1,700	1,700	1,700	1,700
OfficeEquipment Cost	1,200	1,200	1,200	1,200	1,200
Salary	22,000	23,100	24,255	25,468	26,741
Operation Cost	4,000	4,200	4,410	4,631	4,862
Maintenance Cost	5,000	5,250	5,513	5,788	6,078
Utility Cost	8,000	8,400	8,820	9,261	9,724
Depreciation Cost	14,000	14,000	14,000	14,000	14,000
<b>Total Expense</b>	<b>85,300</b>	<b>57,850</b>	<b>59,898</b>	<b>62,048</b>	<b>64,305</b>
<b>Net Income</b>	<b>34,700</b>	<b>98,150</b>	<b>156,102</b>	<b>183,952</b>	<b>211,695</b>
<b>Cumulative Income</b>	<b>34,700</b>	<b>132,850</b>	<b>288,952</b>	<b>472,904</b>	<b>684,599</b>



## 5.5 Break Even Analysis

The Break-even Analysis lets us determine the volume of sales on a monthly or yearly basis to cover the costs of doing business. OAShop.com will reach the break even point within 2years 1 month.OAShop.com expects to gain profit in the third year of the operation online.

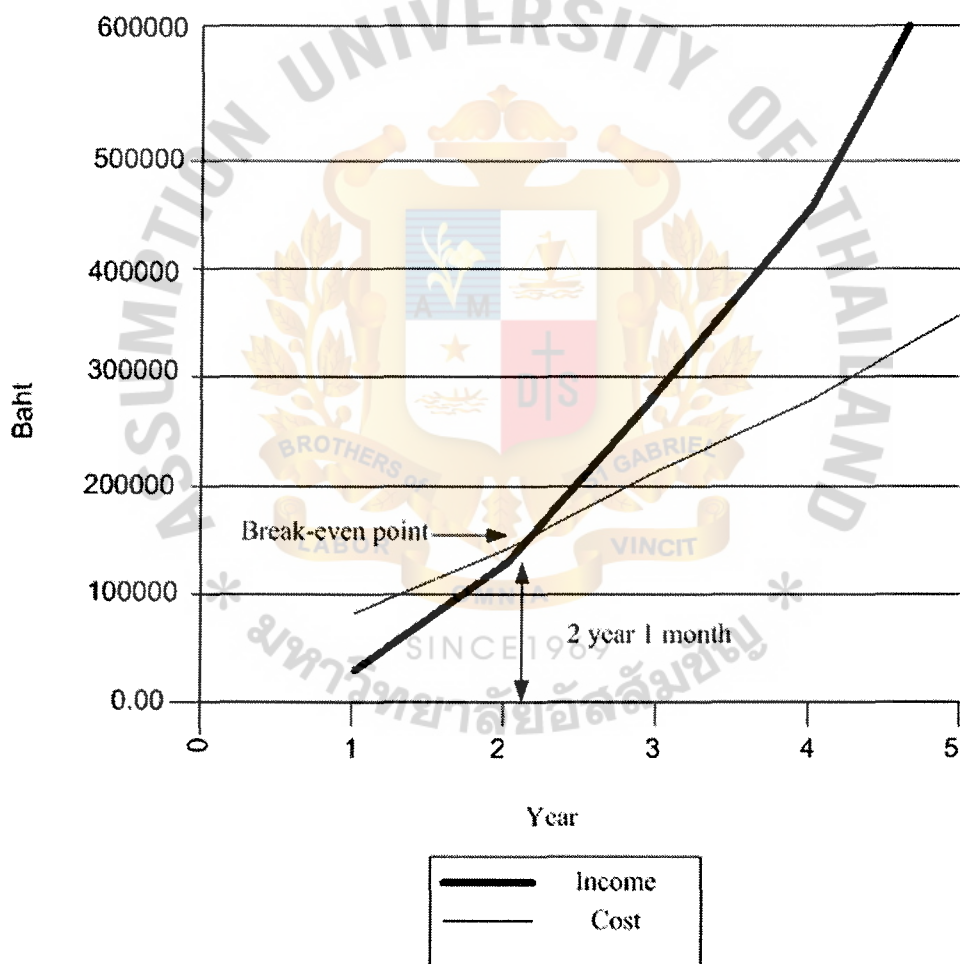


Figure 5.1. Break Even Analysis.

## VI. PROJECT IMPLEMENTATION

### 6.1 Overview of the Project Implementation

Project implementation is the process building, testing and training of OAShop.com in order that the webmaster can check the errors. OAShop.com needs to ensure that the website and the functions can work properly, that they are compatible to different browsers and the operation system and that it can handle a large number of visitors at one time.

The steps to be taken to implement are as follows:

- (1) The setup and installation of hardware and software
  - (a) Design hardware
  - (b) Installation hardware
  - (c) Setup hardware configuration
  - (d) Install the operation system and application program
- (2) Designing the website

Designing the website is important for website's success. We are interested in a simple and easy to use design for visitors. Every single one is expected to be attracted to the beautiful and easy to use web. The impressive web will attract audiences to make frequent visits and introduce the website to their friends. Web design is the only thing to show the image of the store to visitors and to compete with the competitors. Audiences would evaluate the website according to our design and its credibility. Web design can even determine whether that particular web site will be a success or not. To design website, the designer has to clearly determine the objective and target group. The structure and information must be analyzed before creating the most

appropriate design to be parallel with the assigned objective and target. The site's contents will be categorized and organized systematically for convenience in surfing. Navigation bars, graphics, colors and written characters will make the website attractive and eye-catching.

Site structure combines the contents of the pages based on the objective and goals of the company. To arrange the convenient usage of the web, scenario and site structure must be planned thoroughly by taking the content's relationship into consideration.

Logo	Animate Image	Date/Time
Main Link		
Search	Main Page Content	S c r o l l  B a r
ProductCategories		
Sponsor Banner		
Term of Use / Privacy Policy		

Figure 6.1. Layout Design of OAShop.com

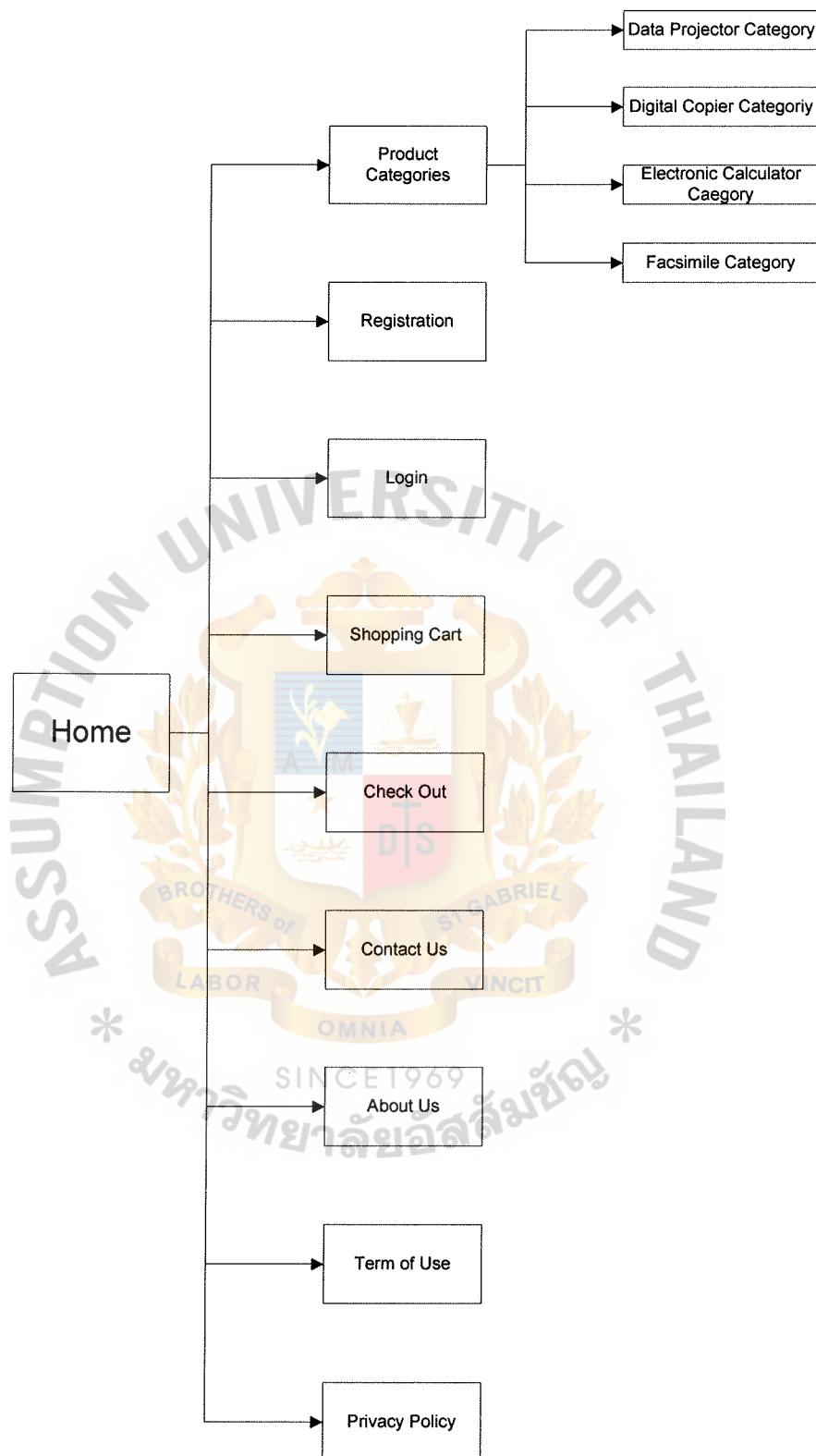


Figure 6.2. Site Map of OAShop.com.

(3) Building the webpage

OAShop.com builds the webpage by the web editor tools such as Macromedia Dreamweaver MX, Macromedia Dreamweaver Flash MX, Macromedia Home site, Photoshop 5 and others.

(4) Coding function for the website

OAShop.com uses Active server page (ASP) to create the function of e-commerce website.

(5) Building the database

OAShop.com is an e-commerce website so it has the database to store the data of customers, products, orders and others. Our website uses Microsoft Access XP for the database.

(6) Testing

Testing is done to check the functions of OAShop.com before the actual use of the customers.

Website Testing

The purpose of the website testing is to validate all software, input and output, procedure and database. The tests are to check whether the functions work properly or the website is compatible with multiple operation system and browser. And all input and output must be validated.

Data Testing

Data testing must be done with live data, the data that have already been processed through the website. This test provides the assurance that website will work properly after the implementation.



(7) Maintenance

After the implementation, OAShop.com still needs to maintain the website and help the visitor with their problems when using the program.



## VII. CONCLUSIONS AND RECOMMENDATIONS

### 7.1 Conclusions

E-commerce will continue to grow and the competitive pressure of the new net economy will only accelerate. Businesses will respond to the demands of the net economy with an increased emphasis on relationships and shared information, and investors will include these factors in their assessment of business value.

OAShop.com is an office automation product the e-commerce website offering service and products that aims to serve and satisfy its target customer's needs. The website has to be easy to use. Customer satisfaction is an ultimate priority. It is also used as a tool to observe the needs of the target market and it will be a communication channel which is effective in generating a relationship with our customers. The design of the OAShop.com can also reach all the objective set under the scope of implementation and serve the objective of the project.

OAShop.com has already implemented the online website. The main task of OAShop.com is to receive orders. Our website has 2 partner companies. The website needs time to verify functions and security of the website before it is used as a commercial website. As a result, OAShop.com is believed to gain profit from our sales margin and advertising. We expect about 100,000 Baht profit each month. This site will become profitable within less than 2 years and 1 month and have continuous growth income rate from online sales margin and advertising. With the growth of the office automation industry and efficient market strategies, OAShop.com plans to capture the market coverage by 15% within 3 years which can create a barrier for new competitors who may plan to launch the same business online.

## 7.2 Recommendations

In order to make the OAShop.com website more beneficial in the future it is recommended that:

- (1) More emphasis should be placed on security and payment.
- (2) More payment functions should be developed.
  - (a) Pay with Credit card
  - (b) Pay with Debit Card
- (3) More promotion should be launched because it is cheaper than offline.
- (4) More products must be manufactured for the future.
- (5) The design must be improved to be more attractive.
- (6) Maintenance is an important factor for all businesses. An online business requires a particular attention.



## APPENDIX A

### WEB INTERFACE DESIGN

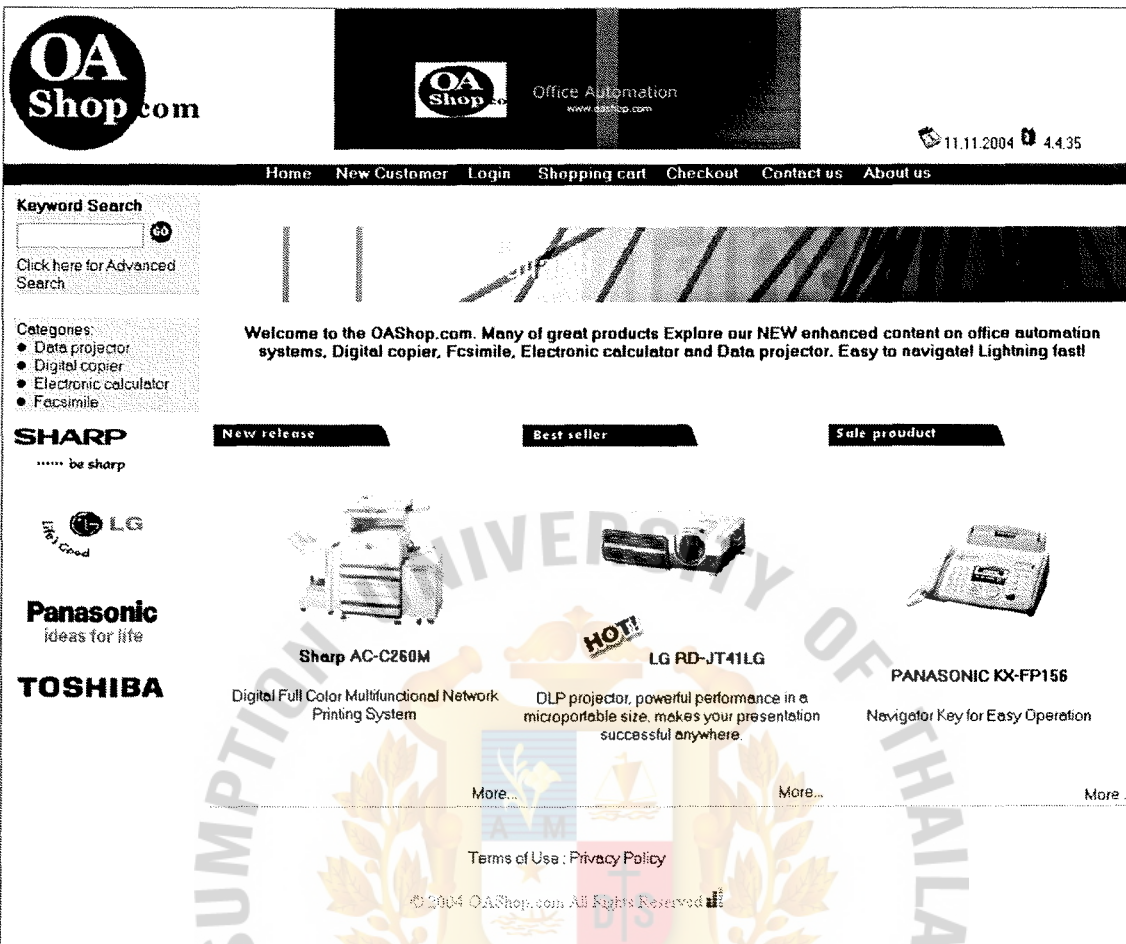


Figure A.1. OAShop.com - Home Page.








11.11.2004 4:16:25

[Home](#)
[New Customer](#)
[Login](#)
[Shopping cart](#)
[Checkout](#)
[Contact us](#)
[About us](#)

**Keyword Search**  
   
[Click here for Advanced Search](#)

**Categories:**

- Data projector
- Digital copier
- Electronic calculator
- Facsimile

**SHARP**  
..... be sharp



**Panasonic**  
ideas for life

**TOSHIBA**



**Name :** LG RD-JT41  
**Categories :** Data projector  
**Description :** LG DLP projector, powerful performance in a microportable size, makes your presentation successful anywhere.  
**Price :** 85,000.00 Baht  
**Special price :** 79,000.00 Baht



**Name :** PANASONIC PT-L6600E  
**Categories :** Data projector  
**Description :** Polysilicon TFT LCD, 3600 ANSI Lumen, SXGA+ (1365x1024), 495 mm, 13.8 kg, 36 dB, power lens focus, power lens zoom  
**Price :** 45,000.00 Baht  
**Special price :** 42,500.00 Baht



**Name :** SHARP XG-P25X  
**Categories :** Data projector  
**Description :** Unsurpassed Functionality to Enliven Your Presentations  
**Price :** 65,000.00 Baht  
**Special price :** 60,500.00 Baht





**Name :** TOSHIBA TLP790  
**Categories :** Data projector  
**Description :** Polysilicon TFT LCD, 3000 ANSI Lumen, XGA (1024x768), 95 mm, 4.2 kg, 38 dB, manual lens focus, manual lens zoom  
**Price :** 79,000.00 Baht  
**Special price :** 75,400.00 Baht

**This categories 4 product**

[Terms of Use](#) ; [Privacy Policy](#)

© 2004 OAShop.com All Rights Reserved

Figure A.2. OAShop.com – Product Category Page.



Office Automation  
www.oashop.com


11.11.2004 4:23:25


[Home](#)
[New Customer](#)
[Login](#)
[Shopping cart](#)
[Checkout](#)
[Contact us](#)
[About us](#)


**Keyword Search**  
   
[Click here for Advanced Search](#)


**Categories:**

- Data projector
- Digital copier
- Electronic calculator
- Facsimile


  
..... be sharp


  
Life's Good


  
ideas for life



## Register

**Your billing information**

Name  \*  
Surname  \*  
Company   
Address  \*  
Subdistrict   
District   
Province   
Country  --choose country-- \*  
Zip   
Tel  \*  
Fax

**Your login information**

Email  \*  
Password  \*  
Repassword  \*

[Terms of Use](#) : [Privacy Policy](#)

© 2004 OAShop.com All Rights Reserved

Figure A.3. OAShop.com – New Customer Page.

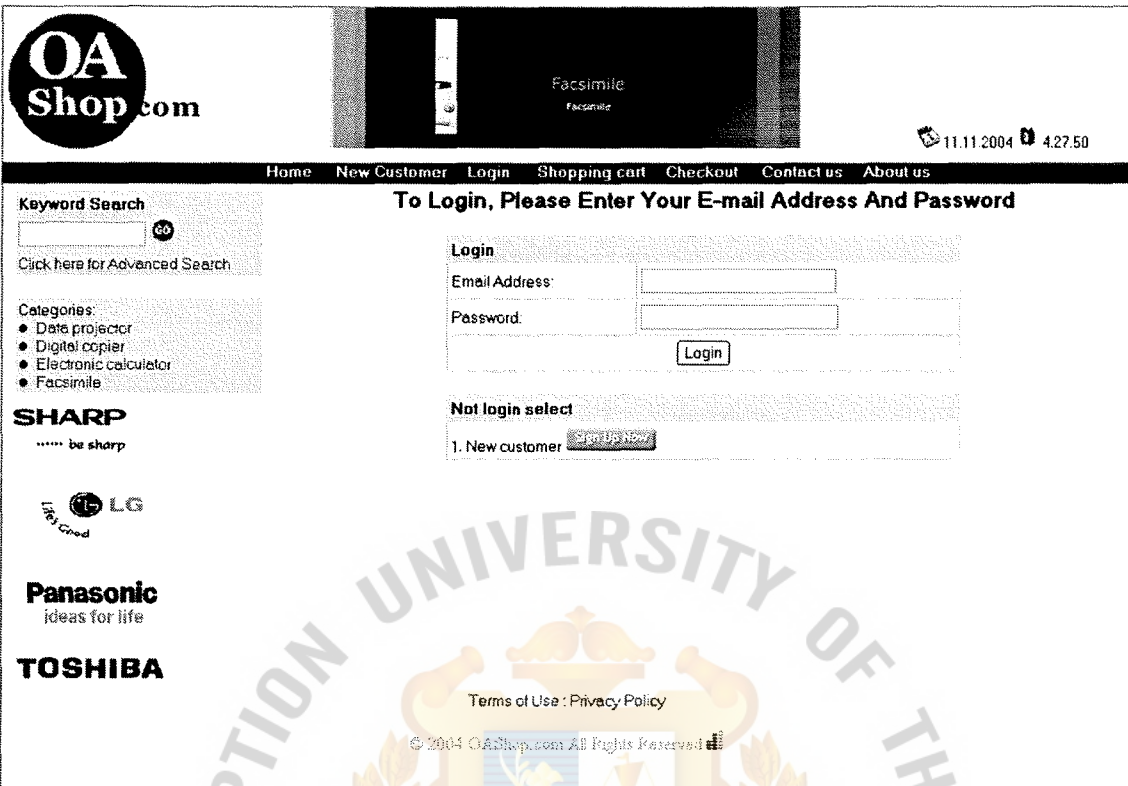


Figure A.4. OAShop.com – Login Page.

## BIBLIOGRAPHY

### English References

1. Donna L. Baker, HTML Complete Course. Wiley Publishing, Inc.
2. Gary B. Shelly, Thomas J. Cashman, Harry J. Rosenblatt. Systems Analysis and Design, Third Edition. Course Technology, 1998.
3. Kenneth E. Kendall, Julie E. Kendall. Systems Analysis and Design, Fourth Edition. Prentice Hall, 1996.
4. Kotler, Philips. Marketing Management. Upper Saddle Rive, NJ: Prentice Hall, 1999.
5. Laudon, Kenneth C. Management Information System, 6 Edition. New Jersey: Prentice-Hall International Company, 2000.
6. Turban, E., J. Lee, D. King, and H. M. Chung. Electronic Commerce: A Managerial Perspective. New Jersey: Prentice-Hall International Company, 2002.
7. William D. Perreault, Jr. E. Jerome McCarthy. Basic Marketing A Global-Managerial Approach. MC Graw Hill International Edition, 1999.

### Thai References

1. พันจันทร์ ชนวนนเสถียร, สิทธิพัฒน์ จำนงศิลป์, ยุทธชัย วุจิรวิมล. Macromedia Dreamweaver MX ฉบับเรียนลัด. บริษัท ชัคเชส มีเดีย จำกัด.
2. รองศาสตราจารย์ศิวรรณ เสาร์รัตน์, อาจารย์ ดร.ปริญ ลักยตานนท์, รองศาสตราจารย์สุกร เสาร์รัตน์, ผู้ช่วยศาสตราจารย์อองอาจ ปทะวานิช, การบริหาร การตลาด ยุคใหม่ ปรับปรุงใหม่ล่าสุด. Diamond in Business World. 2541.
3. จิตเกษม พัฒนาศิริ. เสริมแต่โฮมเพจให้มีชีวิตชีวาด้วย Java Script, พิมพ์ครั้งที่ 5. บริษัท วิตดี กรุ๊ป จำกัด.

### Web Site References

1. <http://www.psncenter.com/>
2. <http://www.sharp-th.com/>
3. <http://panasonic.co.th/>
4. <http://www.officemate.co.th/>

5. <http://www.lge.co.th/>
6. <http://www.toshiba.co.th/>
7. <http://www.officedepot.co.th/>
8. <http://officecentre.co.th/>





