

An Online Catalog for Samsara Antique Shop

by

Mr. Sinad Gantanant

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

Report

November 2004

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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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ABSTRACT

Samsara Antique Shop was established since 1987 by Mrs. Sasivimol Jirakarnjanakorn. It sells the antique clothing and ornament.

The current system of the shop is based on manual without catalog provided to the customers. The Online Catalog will be developed to expand the market-space to national and international markets. It also helps the shop improve image of a company and customer services. Furthermore, the shop has to deal with intangible benefits that are difficult to quantify when the systems justify.

This project report also includes SWOT analysis, Marketing Strategy, Cost and Benefit Analysis and Breakeven Point.



ACKNOWLEDGEMENT

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The author also would like to thank Mrs. Sasivimol Jirakarnjanakorn, Samsara shop owner, for her contribution in providing all useful assistance and information to write this project.



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I. INTRODUCTION

1.1 Background of the project

Over the past few years, many innovative e-commerce ideas have been considered. Such ideas reveal new value propositions, which are enabled by new technological possibilities, such as the widespread use of the Internet and technologies on top of it.

During 1998-1999, the e-commerce has reached its top. Recently, it became clear that many e-commerce ideas are not successful. Many enterprises doing e-commerce have not been able to create profit with their e-commerce ideas. Some of these companies who relied entirely on future e-commerce profit have gone bankrupt.

An important reason for the failure of e-commerce ideas is the lack of a sound value proposition to customers. Moreover, many ideas did not contribute sufficiently to profitability of enterprises. Rather, many enterprises focused on maximizing market share and establishing a trusted brand name.

However, Samsara Antique shop's owner still believes that many potential successful e-commerce ideas exist, which utilize enabling Internet related technical innovation in a profitable way. Samsara shop sells many product lines which based on antique a historical heritage which carry the world history in certain period and link together the modern time with the previous time. It is an evidence to demonstrate the culture and tradition of the former age which transmit an impact to the descendants and the later world. Antique is an elaborate work from the ancestor which is scarce to find at present, especially, East Asian Arts which admitted to be the miracle achievement of the world.

Nowadays, both Easterner and Westerner give importance and admiration on East Asian Antique clothing and ornament. Consist with Internet-based era which Internet becomes a powerful marketing tool, I aim that it is a good opportunity to expose the world elaborative heritage onto the advance technology by opening up the Online Catalog.

The process for implementing Online Catalog into the company has been started by studying and gathering the company's information and relevant information, interviewing with the shop's owner for the information including its operations systems, marketing strategy, attribute and nature of product. Finally, submitting the web-page framework to the shop's owner to receive the feedback in order to improve and adjust to fit the requirement.

1.2 Objective of the project

Create online catalog website to display the information of the shop and its product.

1.3 Scope of the project

- (1) The website retrieved product information from database to create online catalog.
- (2) The report will include Hardware and Software specification requirement, SWOT analysis, Financial and Cost Analysis, Data Flow Diagram, Entity-Relationship Diagram, and Database Design. This website will be created by applying HTML, PHP, JavaScript, Adobe Photoshop7.0, Macromedia Dreamweaver MX, and MySQL.

1.4 Deliverables

- (1) Project report
- (2) Website Prototype

II. LITERATURE REVIEW

The Internet began in 1960, it was designed by the U.S. Army for research, not for commercial purpose. Originally, the Internet operated in a single domain of trust and security. It generally relied on the mutual respect and responsibility of users, so the Internet is lacking in security service. However, after two decades, the Internet is one of the most important ways of financial currency. The commerce market on the Internet has also developed tremendously. A great number of people buy and sell merchandise in the online market every day. Nowadays, e-commerce is used all around us through the Internet and online mobile-commerce. E-commerce occupies over 15% of the world market. From 1900 to 1999, the e-commerce market made remarkable progress both in the quantity of its market and quality of its merchandise. However, the year 2000 was the worst fiscal year for e-commerce. Many companies went bankrupt or were merged or acquiesced by other major-commerce companies. This shows that not all e-commerce companies would be able to make profits last year and in the future. However, many economic analysts and specialists expect that e-commerce market is making profit rapidly. Also, many Internet users believe in the future power of the e-commerce market. Four Models of Successful Internet Business Sites:

One of the best methods of learning how to succeed in our Internet business is to first find a successful site to model our business on.

Model No.1 - Opt-In List Builder

This is a good model to build our site around by providing a free newsletter or ezine. If we are building a mailing list this way, then we must provide high quality information to our list on a weekly or monthly basis. Never send just ads or useless information. If our newsletter is just an excuse to push ads we can be certain it will not

grow. On the contrary, our subscribers will opt-out quicker than we can replace them, and we'll probably not make any sales anyway.

Learn how to write effective testimonials instead of blatant ads. These should be a small part of informative articles. They should fit in nicely and naturally along with this information, indeed be a part of it! Once our list gets into the thousands, we should start to see an almost guaranteed income. Continue to use our website to build our list up each month and watch our monthly income grow alongside it.

It can be an effective way to create income, but we have to be willing and able to write a weekly or monthly newsletter. It doesn't have to be long, in fact it shouldn't be. But it does have to be informative. If we hate writing this may not be the route for us. Model No.2 - Free Services

There are many services on the Internet that people like to use, or even desperately need. Examples include such services as providing an autoresponder service, traffic generating services, providing free web space, reciprocal link checking etc. Sites which provide something valuable for free can often become extremely popular. Once this popularity is achieved, and we start getting a lot of daily traffic, then we can start to charge for allowing advertising on our site.

We're probably thinking something like "how could I possibly provide such a valuable free service, surely we need lots of programming knowledge and experience to run such a thing?". In reality it isn't that difficult. All we need is the right pre-written script to add to our website. http://www.cgi-resources.com provides many CGI programs, many of which are low or NO cost. Some of their scripts could make great traffic generators for us if we use them on our site in a highly relevant fashion.

One of the biggest advantages of this web business model is we don't necessarily have to pay for any advertising. A good press release might be all we need, particularly if we are providing something unique. The hard part is coming up with a good idea. But if we can, because we are providing a valuable free service, word of mouth can get round very fast.

Model No.3 - One Product Page

If we have a hot product that we want to sell, then create a good sales page and focus all of our marketing efforts towards bringing that page to people's attention. When we present just one choice at our site, we decrease any distraction which may come from offering multiple alternative pages.

Getting interested people to click through to this web page can produce excellent profits, but this is also the hard part. We will probably have to pay for all of our traffic so a well thought through pay-per-click campaign may be our best choice for this business model.

Model No.4 - Affiliate Programs

A popular website model for new webmasters is to create a site that catalogs many different (but hopefully related) products within their site. To do this we will either need a number of different affiliate programs to sign up with, or we'll need to join an affiliate network such as Commission Junction or Clickbank. These bring a huge number of affiliate programs together - under one roof as it were (i.e. all available through the same intermediate provider).

In order to make this work we have to develop a specialized site. It needs to be an information source primarily, but definitely not a sales pitch. Our visitors will want to be provided with up to date information related to their subject of interest which brought them to our site in the first place.

Within this context we can then have recommended products directly related to whatever we think people will be interested in, so long as it is genuinely related and of

value to our readers. If our visitors value our site and are interested in our opinion we will make sales.

The real beauty of developing this kind of site is we can potentially do very well in the search engines, and that can provide us with a lot of free traffic. Working our pages around popular keywords is how it's done, and when people type these words into their favorite engine, we want our site to come out as close the number one spot as possible.

Each of these website business models represents a possible online business for us. Can we integrate the one which interests us the most in with our favorite hobby or pastime? What do we enjoy doing the most? What do we like to think about when we have the free time? Whatever this is, there's probably a wide audience of people with the same interest. Why not build them a website they can visit. We could find it relatively easy to make money at the same time.

III. THE MARKETING ANALYSIS

3.1 Marketing Mix

The marketing mix referred to as the 4 Ps of Product, Price, Place, and Promotion that is used as an essential part of formulating implementing marketing strategy by many practitioners.

Product

Product means the need-satisfying offering of the shop. Most customers think about a product in terms of the total satisfaction it provides. That satisfaction may require a "total" product offering that is really a combination of excellent service, a physical good with right features, useful instructions, a convenient package, a trustworthy warranty, and perhaps even a familiar name that satisfied the consumer in the past.

Products of Samsara Antique Shop are be categorized as the special products that include antique clothing and ornament such as earring, bracelets, necklace, etc. made from silver; some of them; decorated by the different kinds of stones, for example, jade, bead, etc.

Price

Price is amount of money that is charged for "something" of value. Of course, price may be called different things in different setting.

Price-level decisions are especially important because they affect both the number of sales a firm makes and how much money it earns. From a customer's perspective, price is what must be given up to get the benefits offered, so it plays a direct role in shaping customer value. As Samsara products have been categorized as them special product, the price has been set in reasonable high price that can give the most value to the customers.

Place

Place make goods and service available in the right quantities and locations when customer want them. Samsara prefers to distribute directly to the final customer and locate the shop near the target market that is Silom Complex where many tourists can find many souvenirs around there.

Promotion

Promotion is communicating information between seller and potential buyer or others in the channel to influence attitudes and behavior. Samsara adopt advertising, any paid form of non-personal presentation of ideas, goods, or services, to promote the both new products and current product available in the shop in the catalog form that send to each customer who has potential to be the Samsara's customer.

3.2 SWOT Analysis

Strengths

(1) As the name of topic is mentioned, the products are the antiques so they are unique, valuable, and scarce to find. They are also the original handmade products from the local people in certain regions so that the products will be able to attract the foreign and Thai customers' mind.

Weaknesses

(1) Because the company's marketplace is too specific. There are also not enough spaces to show all its products in its small physical store. Finally, it is high cost to hire more employees.

Opportunities

(1) With the technological pressure that is the technological obsolescence, increased innovation, and new technologies and information overload grant us the opportunity that can easily contact the customers.

- (2) There is strong demand for wide variety of product all over the world.(Potential demand in foreign markets)
- (3) Expand the marketplace to national & international market.

Threats

- (1) With the market and economic pressures that are the strong competition causing the saturation of domestic market and because the global economy is in downturn.
- **3.3** Marketing Strategies Marketing strategies match offerings with markets.
 - (1) Market Penetration: Get existing customers to buy more existing products/services
 - (2) Market Development: Get new customers (in new market segments) to buy existing products/services.
 - (3) New Offering Development: Offer new products/services to existing markets
 - (4) Diversification: Offer new products/services to new markets

Purchasing Decision Making Processes

Consumers will not simply go to a store or online catalog and spend their money in a rush. Purchasing takes place usually as a result of steps of decision making processes.

- (1) Awareness: Consumers are aware of certain products/services.
- (2) Information Gathering: Consumers gather information regarding the products/services.
- (3) Purchasing Decision: Consumers will either buy or ignore our products/services based on value, price, pride, convenience and other factors.

Building Mailing List

In almost every business building a loyal client base is important to the overall success of our business. Internet marketing is no exception. In order to build our client list we need to capture email addresses from prospects that either sign up to receive our newsletter or buy a product or service from our website.

One of the most important elements of building our mailing list is that we build a trust relationship with our prospect. According to The National Sales Executive Association 80% of sales are made after the 5th contact with a potential client or customer. So this should tell us that we need to have quality content in our newsletter so the prospect will stick around to receive our newsletter past the 5th attempt. Another good thing about building our mailing list is that we can notify our prospects about up coming events or special offers we may be working on or know would be of interest to the prospect. Let me examine some of the different ways in which we may be able to build our mailing list.

Pop Up Ads

If we have access the web for anything we have undoubtedly found a site or two that use pop up ads to promote various ideas and opportunities. Most Internet marketers use pop ups to capture prospects emails for their newsletters or promotions. Recently, a new type of pop up is being used, it's called a pop over or hover ad that just appears on our site and will not be blocked by various pop up blockers that are installed in the Google toolbar and the like. These type of ads are very good for promoting our newsletter. The prospect signs up using their name and email address and are automatically added to our autoresponder.

Website Forms

If for whatever reason we do not want to use a pop up ad we can create a subscription form on our website that will accomplish the same purpose. Write up an ad

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that promotes our newsletter and the benefit to our prospect and give them the opportunity to sign up that way. Using subscription forms and pop ups are great if we have a lot of targeted traffic to our website.

Lead Services

Lead and subscription services offer us the opportunity to get a prospects name and email address. These are usually people looking to start a home business. We write an ad about our newsletter, advertise it with the subscription service and prospects sign up to receive it. There are plenty of companies that offer these types of services for various amounts of money. We buy a certain amount of prospects each month and they get delivered to our autoresponder where we have our newsletter.

Linking Strategies

If our pages offer value for targeted audience, they will be linked by other webpage authors over time. Some of the average web pages created in early years of the Web (1995-1997) are still ranked very high in search engines even though the content of those pages has never been updated and is obsolete. In the early days of the Web, not many web pages were available and some modest pages were overwhelmingly linked by many other modest pages. The problem has not been adequately addressed by any search engines. Besides waiting passively for other authors to link our pages, we can proactively build links for our pages.

(1) Directories - Popular directories, such as Yahoo and Open Directory will either cost our big money, or take forever to get listed. They may not necessarily generate qualified traffic to our site. On the other hand, many small directories targeting niche markets will welcome our contributions of links. Those niche directories will generate traffic for our site and boast the

- ranks of our pages in search engines. This should be our first step to promote our sites.
- (2) Reciprocal Links Asking other Web page authors for a reciprocal link is another popular practice to promote our sites on the Internet. Not all our requests will be honored. Relevance is the key factor to increase the success of reciprocal links.
- 3.4 Marketing Channels Products/services can be distributed directly or indirectly to consumers. Variations in distribution channels demand different channels for marketing. The Internet has been dramatically shortened the distribution chain and saved large chunk of money for businesses.
 - (1) Brokers or Agents: The marketing of offerings is outsourced to brokers or agents, who may in turn to sell the products/services to wholesalers, retailers or consumers.
 - (2) Wholesalers: Products or services are distributed to wholesalers, who may in turn sell the products/services to retailers. The wholesalers usually don't sell products/services directly to consumers to avoid conflict of interests. This is a commonly used model for large corporations. A few wholesalers themselves are among fortune 500 companies.
 - (3) Retailers: They sell the products/services directly to consumers.
 - (4) Ultimate Buyers: Businesses prefer to offer products/services directly to consumers to cut the distribution cost. The Internet and the Web have turned this dream to reality for many corporations.

IV. THE EXISTING SYSTEM

4.1 Background of the Organization

Mrs. Sasivimol Jirakarnjanakorn names the company, as "Samsara Antique Shop" which was established since1987. It sells the antique clothing and ornament belonged to minority nationalities such as Yi people, Yao people, Miao people, Bai people, and Dong people in Southwest of China and Balinese people in Bali and Java Islands of Indonesia. The clothing includes the hand made textile and embroidery that is made to be the breast or shoulder cloth, the ancient costume on the ceremonies, as well as the wonderful masterpiece of Chinese people, Lotus shoes (Splendid Slippers). Beside, there is also the antique ornament such as earring, bracelets, necklace, etc. made from silver; some of them; decorated by the different kinds of stones, for example, jade, bead, etc. The profile of the shop is as follows:

(1) Location

Samsara Antique Shop is located in room343 (opposite the entrance to Central Department store) Silom Complex building, Silom road, Bangrak, Bangkok, Thailand 10500. Fax and Telephone number 066-2231-3241.

(2) Delivery(Nature of the market)

Samsara Antique Shop acts as Retailer for the retailing transaction with individual customers; the tourists and Thai customers; in business-to-customer (B2C) transaction. At the same time, it is also the Merchant wholesaler in business-to-business who deals with the foreign retailers; such as Japanese, American, Singapore, Denmark, Dutch, French, and Swiss; as well as Thai retailers who buy to resell to their customers. So Samsara Antique Shop takes part in traditional channel of distribution; Producer-Wholesaler-Retailer-Consumer; to distribute the products.

(3) Customer

The company's existing main targets include the foreigners who collect the antique and who buy for giving, as souvenir as well as Thai middle-class to high-class customers. In addition, the company expects to increase the number of existing customers to all over the world as the prospective.

(4) Suppliers

The main suppliers supply antique clothing; including textile and embroidery; and ornaments made from silver. They also supply the antique masterpiece such as lotus-shoes, which are difficult to find. The main suppliers includes Chinese antique shop, Balinese gallery and antique shop, as well as the minorities people in Southwest of China: Yi and Miao in Yunnan, Dong in KwangSi, Bai in GuiYang, Miao in GuiZhuo, who assemble in each region's week-end market, end of season carnival, as well as who offer their own heritage in their own places.

The main suppliers which are able to identify as following:

- (1) Liu Zong Yan: The Old Embroidery

 37 Zhoufu Road, Kaili, Guizhuo, China 556000. Tel 008 855
 8260602
- (2) Erica's nationality fashion company70 Huguo road, Dali, Yunnan, China 671003. Tel 0086-872-2191165
- (3) Kalijaga Antique&Artifacts
 JL.Raya Seminya67, Bali, Indonesia 60215. Tel 081-2361549
- (4) The Ancient Arts: A complete collection of Antique and Genuine Ancient Arts
 Jalan Tirtodipuran 27, Yogyakarta, Java, Indonesia 55143.

Tel 0274 - 378067

(5) Majapahit Gallery: Traditional textile and Primitive art JL. Mangkuyudan 2, Yogyakarta, Java, Indonesia 55143. Tel 0274 -378067

(5) Competitors

The company considers the shops and companies that sell the related product line as its competitors which include

Tan's Asian Art, Jatujak Market Phase 3 Soi 2, Tel 01-8694690

- (a) Tum Chinese Antique, Jatujak Market Phase 22 Soi 1, Tel 02-9314081
- (b) Khong Luang, Central Plaza Pinklao 3rd flr, Tel 01-8833044
- (c) Sib Song Panna, River City Arts & Antique center 3rd flr,
 Tel 02-237007
- (d) Nok Antique, Silom Galleria 1st flr, Tel 09-0208054
- (e) Siam Family Company, Silom Complex Building 3rd flr
- (6) Existing Information Technologies

The company has used telephone, fax machine, and electronic mail to contact the customers.

V. THE PROPOSED SYSTEM

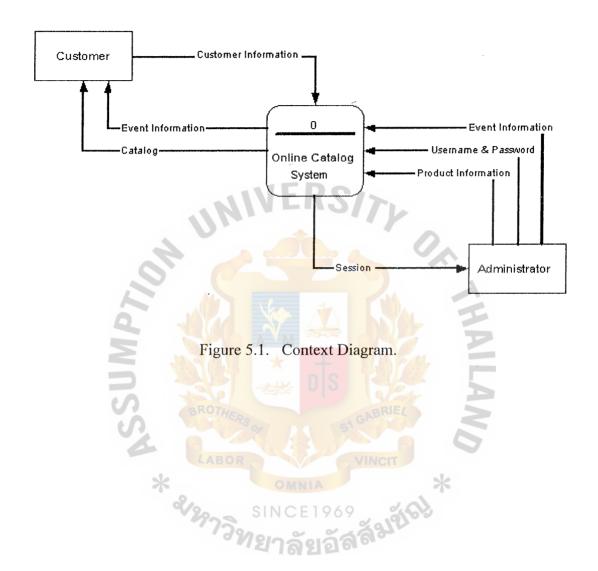
5.1 System Specification

According to the existing system, the Online Catalog development is required in order to expand its market which helps the shop retain its competitive advantage.

In order to achieve the goal, the new proposed Online Catalog System should have components as follows:

- (1) Webpage designed and developed to be the site for shop's information and Online Catalog
- (2) Products Database designed and developed to be displayed in the Online Catalog with ability to add, delete, and update product data for administrator.
- (3) Customer Database designed and developed for customers who would like to register for receiving updated Online Catalog quotation via e-mail.
- (4) Administrators Database designed and developed for generating security of accessing administration page that contains add, delete, and update in all of database.

5.2 System Design



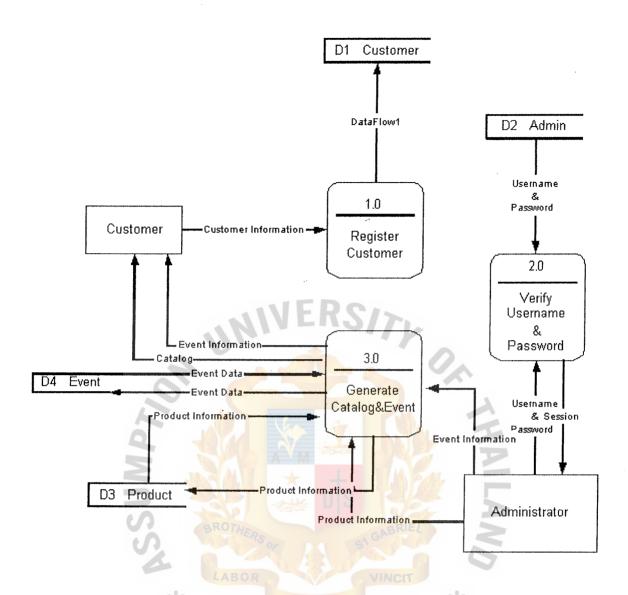


Figure 5.2. Data Flow Diagram Level 0.

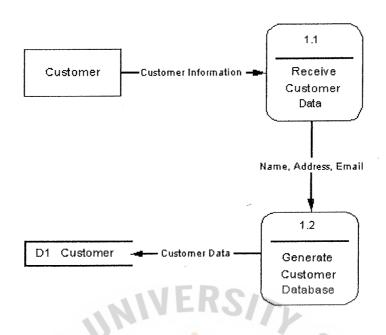


Figure 5.3. Data Flow Diagram Level 1, Process 1.



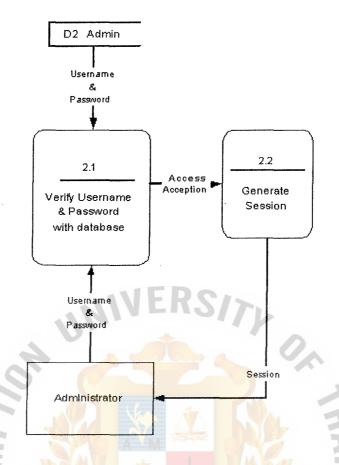


Figure 5.4. Data Flow Diagram Level 1, Process 2

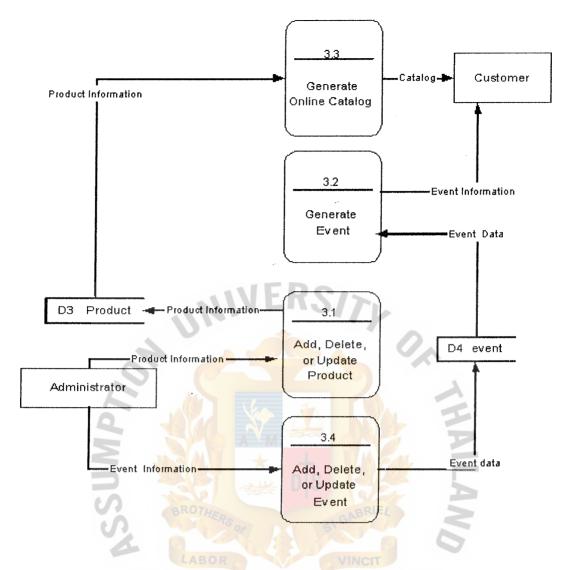


Figure 5.5. Data Flow Diagram Level 1, Process 3.

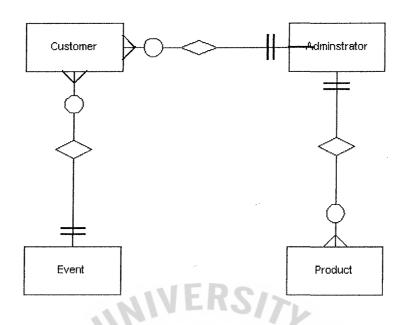


Figure 5.6. Entity-Relationship Diagram.



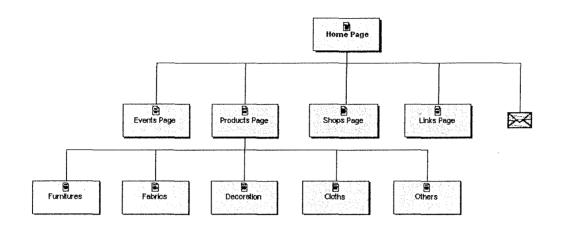


Figure 5.7. Samsara Site Map.



5.3 Hardware and Software Requirement

By installing the server for the shop, it will not be worthwhile as the high cost of the server itself, software licenses, and network interconnecting. We recommend the shop to lease the storage space from available Web Hosting that we do not need to consider the Hardware cost and specification. However, we need to consider the software specifications as the option for selecting the Web Hosting. The software specification for the proposed Online Catalog is shown in Table 3.1.

Table 5.1. The Software Specification for the Online Catalog.

Software	Specification
Operation System	UNIX or LINUX
Web Server	Apache
Application Server	PHP compatible
Database Server	MySQL

The Online Catalog will not be applicable if the customers can not access the shop's website. We need to consider the hardware and software specifications for client in order to develop the most applicable and compatible Online Catalog website to the customers.

Table 5.2. The Hardware Specification for Each Client Machine.

Hardware	Specification
CPU	486 Dx4-100, Pentium, or higher
Cache	256 KB or higher
Memory	64MB or higher
Hard Disk	1 GB or higher
CD-ROM Drive	1x or Higher
Floppy Drive	1.44 MB
Network Adapter	33.6 Kbps modem or higher
Display Adapter	SVGA card
Display	14" SVGA monitor

Table 5.3 The Software Specification for Each Client Machine.

Software	Specification
Operating System	Microsoft Windows 95
Web browser	Microsoft Internet Explorer 3.0 or higher
Browser plug-in	Shockwave plug-in

5.4 Security and Control

Physical Security

Physical security refers to securing the computer facility, its equipment, and software through physical means that is that responsibility of the web hosting which the website resided.

Logical Security

Logical security refers to logical controls within software itself. The logical controls familiar to most users are password or authorization codes of some sort. When used, they permit the user with the correct password to enter the system or a particular part of a database.

Special encryption software has been developed to protect commercial transactions on the web, and business transactions are proliferating. One way for networks to cut down on the risk of exposure to security challenges from the outside world is to build what is called a firewall or a firewall system which is the responsibility of the webhosting which the website resided. Firewalls are intended to prevent communication into or out of the network that has not been authorized, and which is not wanted.

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5.5 System Cost & Benefit Analysis

Table 5.4. System Cost and Benefit Analysis, Baht.

Items		Years				
		1	2	3	4	5
Revenue		720,000.00	864,000.00	1,123,200.00	1,572,480.00	2,358,720.00
Merchandise Cost		360,000.00	432,000.00	561,600.00	786,240.00	1,179,360.00
Fixed Cost Personal Computer Calculator Website Implementati Computer Server Ren Domain Name Cost Store Rental Total Fixed Cost		60,000.00 2,000.00 25,000.00 3,588.00 500.00 360,000.00 451,088.00	3,588.00 500.00 360,000.00 364,088.00	3,588.00 500.00 360,000.00 364,088.00	- - 3,588.00 500.00 360,000.00 364,088.00	- - 3,588.00 500.00 360,000.00 364,088.00
Operating Cost Salary Cost: Manager	1 person@15,000	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Receiving clerk Store Officer	1 person@8,000 1 person@7,000	96,000.00	105,600.00	116,160.00 101,640.00	127,776.00 111,804.00	140,553.60 122,984.40
Dispatch Officer Total Annual Salary C	1 person@8,000	96,000.00 456,000.00	105,600.00 501,600.00	116,160.00 551,760.00	127,776.00 606,936.00	140,553.60 667,629.60
Office Supplies & Miscellaneous Cost:		SINC	E1969	्रार्श्वासी		
Stationary	Per Annual	3,000.00	3,300.00	3,630.00	3,993.00	4,392.30
Paper	Per Annual	6,000.00	6,600.00	7,260.00	7,986.00	8,784.60
Utilities	Per Annual	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00
Total Office Supplies & Misc. Cost		33,000.00	33,900.00	34,890.00	35,979.00	37,176.90
Total Annual Operating Cost		522,000.00	535,500.00	586,650.00	642,915.00	704,806.50
Total Cost		1,333,088.00	1,331,588.00	1,512,338.00	1,793,243.00	2,248,254.50
Net Income/(Loss)		(613,088.00)	(467,588.00)	(389,138.00)	(220,763.00)	110,465.50

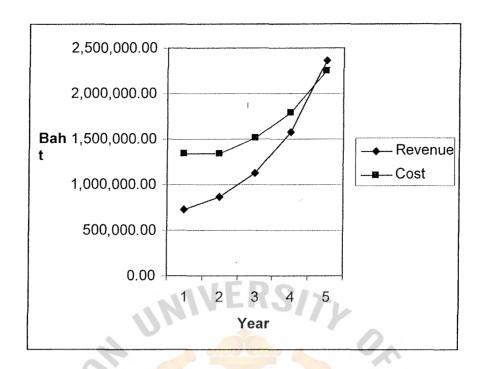


Figure 5.8. System Cost & Benefit Analysis, (Break Even Point).

From Figure 5.8., we can analyze system cost and benefit including break even point. The shop will generate the break even when the business runs until four and a half year.

VI. PROJECT IMPLEMENTATION

6.1 Overview of Project Implementation

Project implementation is the plan for developing the Online Catalog system extending from the convention shop by adopting the 'waterfall' model. The processes of the Project Implementation are:

- (1) Requirements Definitions
- (2) System and website design
- (3) Implementation and unit testing
- (4) Integration and system testing
- (5) Operation and maintenance
- (6) Documentation

The output of the task would be evaluated and reviewed after each task has finished. If the task has some problem, we will be able to go back to the previous stage of that task.

6.2 System Conversion

The website conversion will be implement in Modular Prototype Approach which use the building of modular, operation prototype to change from old system to new in a gradual manner. As each module is modified and accepted, it is put into use.

One advantage is that each module is thoroughly tested before being used.

Another advantage is that customers and users are familiar with each module as it becomes operational.

The fact that prototyping is often not feasible automatically rules out this approach for many conversions. Another disadvantage is that special attention must be paid to interfaces so that the modules being built actually work as a system.

6.3 System Monitoring

Importance of Website Monitoring

As the ecommerce and the Internet continue to make inroads into every aspect of traditional businesses, a Web presence can either drastically strengthen or weaken our business. A successful Web operation can potentially harvest all the benefits of the ecommerce in the entire sales life cycle, from product development, marketing, transaction, fulfillment to customer support. An ill-monitored operation will damage our offline business in addition to the money wasted in our online business.

Website monitoring allows site owners to take actions before their customers experience the difficulty of their Websites.

Types of Site Monitoring

The site monitoring can be basic or complex depending on the goals of our Web presence.

- (1) Availability Monitoring: checks whether Web users can access our Websites.

 According to InternetSeer, each month, the average website is unavailable 2.67 hours.
- (2) Performance Monitoring: measures the speed of page or site access.
- (3) Transaction Monitoring: checks whether users can complete a transaction, for instance placing an order, and how long it takes to conduct the transaction.

Website Monitoring Options - Services vs. Software

Site owners can either subscribe to a site monitoring service and let the service provider does the monitoring for us or install monitoring software to do the job. If we operate a small website and likely have the technical skills, we can spend a few hours to write simple scripts to monitor our site.

- (1) Site Monitoring Services: can be usually setup in a couple of minutes. Services incur continuous cost, but the costs of services are justified by the benefits of better Web operation. The cost of services can range from a few dollars a month to hundreds of dollars a month dependent on the size of the site and complexity of site monitoring.
- (2) Site Monitoring Software: Some simple site monitoring software costs under \$100 and can be installed easily on PC, but there's always a leaning curve to use the software. If we use a Web hosting company to host our Website and have a different broadband connection to the Internet, installing PC-based monitoring software is not a bad option either.



VII WEB PROTOTYPE DESIGN AND DEVELOPMENT

7.1 Web Design Objective

Samsara is a shop that sells Antiques, Cloths, and related products. Since the shop needs to expand its market channel to Internet, the website needs to be designed the same as the physical shop color theme. The catalog online for Samsara has been designed along with internet marketing strategy such as Ads, Search Engine, Mailing List, and etc.

7.2 Site Navigation Bar

The navigation bar has been designed by placing in the left hand side of each Samsara website in hierarchical navigation system which is flexible and powerful.

In Product page, the website also provides navigation bar according to local navigation system at the top of the page.

7.4 Site Content

A major component of designing website is organizing its content. A big challenge in creating Samsara website is to organize its information in such a way that it is useful and meaningful to users. Good content organization creates the foundation for effective navigation and is crucial success of the site. In content organization, Samsara website has been design carefully according to geographic along with database link that give Samsara website the most dynamical.

7.5 Site Architectural Blueprint

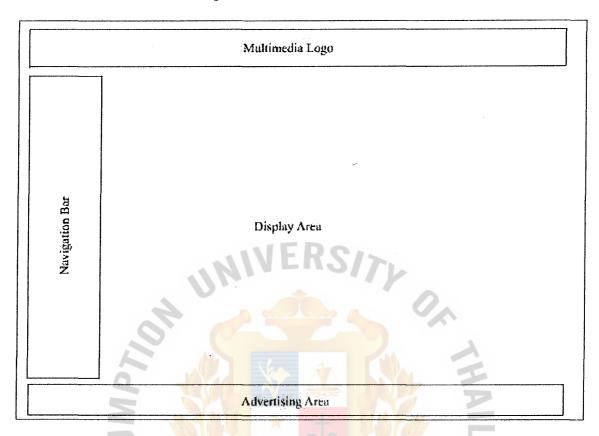


Figure 7.1. Mock Up Design of Webpage.

VIII. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

Samsara.com is the web based antique shop implemented to increase the sales volume and decrease the cost of paper based catalog provide to customer.

The growth Internet usage and Internet environment and technology can help Samsara to become the leader of the business section. Samsara can gain competitive advantage by implementing website that provides online catalog to customer. This can attract new customer and keep the old customer most satisfaction.

By applying analysis such as Marketing Mix, SWOT Analysis, Marketing Analysis, and Cost and Benefit Analysis, Samsara can effectively implement the website and cope with its problem to deal its successful.

In online catalog page, the customer is inform the most useful details of each product available such as product name, product price in Thai baht currency, real product picture, and product description. This can help foreigner who would like to have a trip in Thailand can plan for souvenir shopping time by knowing where they can find the souvenir, which product they would like to buy, and how much money the need to prepare.

In conclusion, Samsara online catalog project should prepare the implementation plan and strategy to deal with the conventional business and new channel environment to boost the successful in this business

8.2 Recommendations

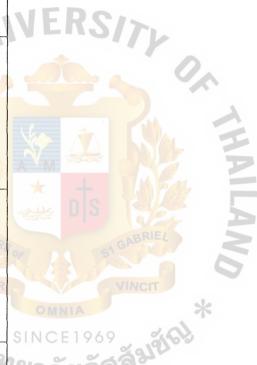
The website can be applied directly with some product detail and content adding into website. However, it is recommended that the website should be implemented into full e-commerce website in order to get the most benefits of going online in the near future. With e-commerce website, the shop can expand more market space internationally without opening new branch with the saving in cost of hiring employees and rental cost.





E-Mail Address Customer Last Name | Telephone No. Customer First Name Customer ID

Table A.1. Customer List Report.



36

Table A.2. Product List Report.

Product ID	Product Name	Product Price	Product Type	Product Picture	Description
		IISS	MDS		
		*	10%		
		8/2/			
	139	OTHERS		N	
	7217	SING		VI	
	ลัย	D MNIA CE1		ER	
	อัส			S	
	a ₃	SABRIE VINCIT		174	
		er!			



Database D1

Table B.1. Customer Table.

auto_increment Extra Default Null Null No Yes Null No Yes % No * varchar(50) varchar(20) varchar(25) varchar(50) tinyint(5) Type text cust_first_name cust_last_name telephone address cust id email Field

Database D2

Table B.2. Administrator Table.

auto_increment Extra Default Null No No No % varchar(20) varchar(15) tinyint(5) Type Admin_password admin_username admin id Field

Database D3

Table B.3. Product Table.

auto_increment Extra Default Nall No Null Yes No % 2 * varchar(250) varchar(15) varchar(30) tinyint(5) double Type text prod_name prod_price prod_type prod_desc prod_pic prod id Field

40

Database D4

Table B.4. Event Table.

Field	Type	Null	Default	Extra
event id	tinyint(5)	No SUMPS.		auto_increment
event_date	timestamp(14)	Yes	Null	
event_pic	varchar(50)	Yes	Null	
event_desc	text	No	MI	
	OMNIA SINCE 1969 ยาลัยอัสส์	D S GABRIE	VERS/7)	







N - = 1

Figure C.2. Products Page.

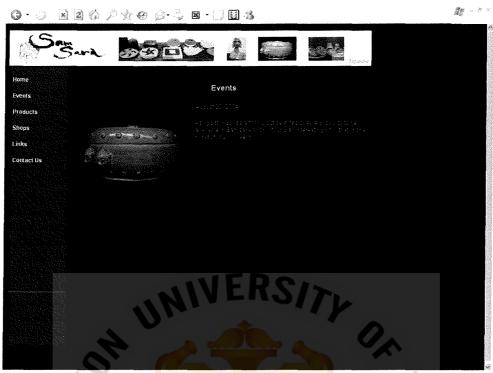


Figure C.3. Events Page.

BIBLIOGRAPHY

- 1. Chaffey, Dave, Mayer, Richard, Johnston, Kevin, Chadwick, Fiona Ellis. Internet Marketing: Strategy, Implementation and Practice. Second edition. Prentice Hall.
- 2. Kendall, Kenneth E., Kendall, Julie E.. System Analysis and Design. Fourth edition. Prentice Hall.
- 3. King, David, Lee, Jae, Warkentin, Merrill., Chung, H. Michael. Electronic Commerce 2002, A Managerial Perspective. International edition. Prentice Hall.
- 4. McCracken, Daniel D, Wolfe, Rosalee J.. User-Center Website Development. A Human-Computer Interaction Approach.Prentice Hall.
- 5. Sommerville, Ian. Software Engineering. Fifth edition. Addison Wesley.



St. Gabriel's Library, Av

