E-Commerce Technology on Toonwarm Bookstore

by

Ms. Sasikant Hoemanee

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
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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

The advantages of marketing on the internet are expanding around the world. The Internet represents a tremendous opportunity. For customers, it gives a much wider choice of products, services and prices from different suppliers and the means to select and purchase items more readily. For organizations marketing these products and services it gives the opportunity to expand into new markets, offer new services and compete on a more equal footing with larger businesses. For those working within these organizations it gives the opportunity to develop new skills and to use the internet to improve the competitiveness of a company

Recently, the widespread adoption of intranets, extranets and the acceptances of The internet as a business platform have created a foundation for business electronic commerce that offers the potential for organizations to streamline complex processes, lower costs and improve productivity

Toonworm website uses the technique of e-commerce and creates new dynamics that is able to directly respond with customers as real time and has provided catalogue services by grouping products from the publishers. The purpose of this project is for expanding its market and increase total sales by using technology of programming and the benefits of the internet including electronic commerce strategy.

ACKNOWLEGEMENTS

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I. INTRODUCTION

1.1 Background of the Project

Since Internet was introduced to the world, the communication among people is convenience at low cost. There are many new technologies and tools which are developed for increasing and distribution new of information on the internet.

The internet and the web vastly increase information density – the total amount and quality of information available to all market participants, consumers, and merchants alike. E-commerce technologies reduce information collection, storage, processing, and communication costs. At the same time, these technologies increase greatly the currency, accuracy and timeliness of information – making information more useful and important than ever. Electronic commerce encompasses several methods of connecting buyers and sellers, including advertising, product demonstrations, catalogs, and directories. Moreover, Web commerce is only one of a battery of on-line services that consumers may ultimately be interested in.

Electronic commerce provide buyers with a wider range of choices than traditional commerce, and available to evaluate 24 hours a day, every day. The benefits of electronic commerce also extend to the general welfare of society. Electronic payments of tax refunds, public retirement, and welfare support cost less to issue and arrive securely and quickly when transmitted via the Internet. Furthermore, electronic payments can be easier to audit and monitor than payments made by check, which can help protect against fraud and theft losses. To the extent that electronic commerce enables people to work from home, we all benefit from the reduction in commuter-caused traffic and pollution.

After seeing these huge benefits of E-Commerce, So Toonworm website has been built by trying to support and help customers are able to easily find more products, prices, details of goods and searching of a specific product anywhere in the world.

1.2 Objectives

Objective of this project is to do business on the internet by using ASP programming for developing every step of buying and selling processes as a real commercial world.

Toonworm website could decrease cost such as rent, wage and operation cost and increase total of sales by developing content that addresses the nuances of product categories, customer base and distribution channels for which customer need detailed information to make a buying decision.

This development will help customers for easier shopping, searching by multi-factor (e.g. Keyword, ISBN, publisher, author, categories, and price) and delivery results that match the search request. More facilitate to merchants, they are able to easily and quickly add their products on their WebPages and tracking history of customers, quantity of books were sold by backend programs and maintainable database and able to control and verify stock as well.

Moreover, it also would increase higher communication between customers to Customer or customers to merchants by a web board programming.

1.2 Scope of the project

(a) Product

Toonworm website provides cartoon books online of every publisher in Thailand, including cartoon CDs.

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(b) Database

Toonworm website use Microsoft Access database to store all of information about customers and products because Toonworm website just has been built and still has not had more information for keeping and we need more time to develop the other parts of website first. So Microsoft Access database is the best way for us at this time.

(c) Customer

Toonworm divided group of customer to be 2 groups as following:

(1) Local market : They are Thai cartoon's readers who live in Thailand.

(2) External market : They are Thai cartoon's readers who live in aboard.

(d) Storefront

(1) Provide real-time online information about product availability and order status.

(2) Invest in search technology that allows consumers to search by multiple factors (e.g. ISBN, keyword, publisher, author, and price) and delivers results that match the search request.

(3) Shopping cart contains the books you have selected. You can now enter the quantities you require, add or delete the books that are shown in your cart as much as your requirements.

(4) Provide webboard which would increase higher communication between customers to customer or customers to merchants.

(5) Register to be member via mailing list program for receive information, news, promotions from website.

(e) Backend

(1) Merchant is able to track history purchasing of customers.

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(2) Merchant is able to add, delete and update information on web site via database by backend program.

(3) Ability to send information to customers who are register their email via mailing list program.

1.4 Deliverables

(1) Development of E-Commerce website on Toonworm.

(2) Benefits and cost analysis of the website.

(3) Report of this project.

(4) A conclusion and recommendation for the project.

II. LITTERATURE REVIEW

2.1 What is E-Commerce?

Electronic commerce is the pre-eminent buzzword of the online business revolution. It captures the excitement and focus of this fast emerging market. But it is more than a slogan or glib party line. At its core it embodies a concept for doing business online.

Electronic commerce is the paperless exchange of business information using electronic data interchange (EDI), e-mail, electronic bulletin boards, fax transmissions, and electronic funds transfer. It refers to Internet shopping, online stock and bond transactions, the down-loading and selling of "soft merchandise" (software, documents, graphics, music, etc.), and business-to business transactions.

The concept of e-commerce is all about using the Internet to do business better and faster. It is about giving customers controlled accesses to your computer systems and letting people serve themselves. It is about committing your company to a serious online effort and integrating your Web site with the heart of your business. If you do that, you will see results!

The Internet's role in business can be compared to that of the telephone. It is a way for people to communicate with each other. It is also a way for a consumer to communicate with a company's computer systems without human intervention. In fact, the internet is a communication medium like the many others we use in business every day.

Think of the ways you communicate with people in business. The best way is face to face. Body language, tone of voice, and facial expressions all help you understand

what the other person is trying to say. When you cannot meet face to face, you may use any of a number of different means to communicate: a telephone, a fax machine, Federal Express, the U.S.Postal Service, or maybe even a messenger service. These are all ways to delver or receive information, authorization, even shipments of goods and merchandise.

The internet is a reasonable alternative to all of those means of communication. Any place and any way that your business communicates with its customers, you should think about how you could have done it online. That is the power of e-commerce.

Can not meet face to face? Send an e-mail with an attached photograph. When it comes time to pay for merchandise, use a secured server to pay by credit card, or even digital cash! The opportunities and situations in which online business is possible are limitless.

2.2 What is ASP?

ASP otherwise known as Active Server Pages, is a language that allows the front in page to communicate with things such as an Access Database. Pages created using this language are easier to update and in the case of rather large sites it's almost the only way to keep everything organized. ASP works along with SQL to communicate with databases by passing protocols which communicate to the next page which information to pull from the database and which information is to be left behind.

While using ASP we can also include a custom backend application designed specifically for your sites needs. With this custom backend you will have a secure area that you can go in to make minor changes to your site, be it fixing a price, adding an item, deleting an item, or changing a product's image, you will be able to do whatever you want with your custom backend.

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2.3 Internet Marketing

One of the main jobs of marketing is to be the voice of the customer; that is, to let the rest of the companies know the needs and wishes of its customers. With the internet, the voice of the customer becomes a shout. Whether through visits to a Web site, e-mail to customer support, instant messages to friends, posting on a company intranet, or discussions on a community bulleting board, the days of one way information flow from marketer to customer are over. Millions of new internet users want to communicate.

Marketers have been leaders in this new online world. First efforts were experimental, consisting of simple publishing sites with little more than customers learned the power of real-time information, such as order-tracking, online account information, and catalogs with exact inventory details. Usage soared. Now Web traffic is an asset, a valuable marketing opportunity. Even traditional marketing methods, from television commercials to ads on the side of buses, have Web and e-mail addresses

Sophisticated online marketers go further. They think both globally and individually. A Web site is a global platform, but one size definitely does not fit all. Never before has global. Never before has globalization been so obvious, with customers around the world able to see what is available to users is different countries. At the same time, personalization is a battleground in markets as widely separated as computer retailing, banking, news publishing, and online music.

Internet start-ups need to understand what benefits they bring to customers, and where they are weak. Traditional companies must decide how best to live and compete in a world where location is less important and the consumer is used to 24hours service. Customers want to do business online on their schedule.

The internet can be applied by companies as an integral part of the modern marketing concept since :

(1) It can be used to support the full range of organizational functions and processes that deliver products and services to customers and othe key stakeholders.

(2) It is a powerful communications medium that can act as a 'corporate glue' that integrates the different functional parts of the organization.

(3) It facilitates information management, which is now increasingly recognized as a critical marketing support tool to strategy formulation and implementation.

(4) The future role of the internet should form part of the vision of company since its future impact will be significant to most businesses.

Without adequate information, organizations are at a disadvantage with respect to competitors and the external environment. Up-to date, timely and accessible information about the industry, markets, new technology, competitors and customers is a critical factor in an organization's ability to plan and compete in an increasingly competitive marketplace.

2.4 Online marketing Benefits

Online marketing offers many benefits, including:

(1) Extensive customer reach. The Internet is global, reaching millions of people of every age, nationality and profession.

(2) Attractive user demographic: Most Internet users are highly educated with above average incomes.

(3)   Interaction forms, e-mail and surveys let users interact with other web sites, helping companies build customer databases, user profiles, and custom offers.

(4)   Flexibility: Unlike printed materials, it is easy to change information online.

(5)   Product updates do not result in out-of-date catalogues, and marketers can test messages, prices, and more online.

(6)   Automation: Automating sales, marketing, or support processes saves money and time.

(7)   Marketing online delivers results for many businesses.

2.5   The major type of E-Commerce

There are five major types of E-Commerce

(1)   B2C involves business selling to consumers and is the type of e-commerce that most consumers are likely to encounter.

(2)   B2B e-commerce involves businesses selling to other businesses and is the largest form of e-commerce.

(3)   C2C is a means for consumers to sell to each other. In C2C e-commerce, the consumer prepares the product for market, places the product for auction or sale, and relies on the market maker to provide catalog, search engine, and transaction clearing capabilities so that products can be easily displayed, discovered, and paid for.

(4)   P2P technology enables internet users to share files and computer resources directly without having to go through a central Web server. Music and file sharing services, such as Gnutella, are a prime example of this type of e-

commerce, because consumers can transfer files directly to other consumers without a central server involved.

(5) M-commerce involves the use of wireless digital devices to enable transactions on the Web.

2.6 Comparing Electronic Commerce with Traditional Commerce.

The exponential growth of the Internet can be largely attributed to its business users. Though there have been many dot.com failures recently, Internet and intranet-related applications are the fastest growing segment of business today. Businesses using electronic commerce are experiencing dramatic changes in the way they conduct business. Face-to-face interaction, printed and written documents, telephone communication, and postal mail are all examples of media used in traditional commerce. Most of us are familiar with a traditional commerce scenario. Imagine that a customer wants to buy a hat. In the traditional commerce model, the customer goes to a store and requests the item. The request, which many be in the form of an informal verbal appeal, will contain specific information, such as hat size color, material, cost parameters, delivery instructions, and credit card information. The customer may want to wear the hat out of the store or may want to send it to a favorite aunt as a gift. The sales associate ascertains all this information and then moves the customer's request through the traditional commerce model. The hat is found, the customer's credit is approved, inventory is checked, the delivery of the hat made. Assuming that the customer wants delivery of the hat then and there, she walks out of the store wearing the hat.

Now consider how the hat might have been purchased using the electronic commerce model. The customer visits the Web site of Hats U Us. The selection of the

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appropriate hat is made matching the needs discussed above-color, size, and cost-with

the data found in an online catalog. The customer uses an electronic form to send a

digital request for the hat to store for approval. The purchasing department verifies the

customer's credit, puts the necessary information into the store's order database, and

sends and electronic order to the supplier, via electronic data interchange or anther

electronic form if the hat is not in the store's inventory. When the supplier receives the

order, it electronically inserted into a database of pending orders. The inventory is

checked, the company's credit is checked, and the item is pulled from inventory and

marked for delivery. A shipping order may be submitted electronically to shipping

agent. Once the hat is shipped, the customer's credit card is debited by the accounts

payable department at the credit card company and instructs the bank, via e-mail, to

transfer the appropriate funds.

Compare the two versions of commerce. Many of the steps are the same, but the

way in which the information is obtained and transferred throughout the process is

different. Many of the media used in the traditional commerce model-for example, the

magazines, flyers, and printed catalogs used by traditional commerce to promulgate

product information-have been supplanted by the Web pages of the electronic

commerce process. Requests for items in traditional commerce were made on printed

forms or in letters; in electronic commerce the process uses e-mail. The printed catalogs

that buyers once used to check prices and select products in traditional commerce are

now replaced with online catalogs. Online databases are used in the electronic

commerce model to prioritize orders, check inventory at the warehouse, schedule

delivery, generate invoices, and even schedule payments. Print forms and postal mail in

traditional commerce were used for checking inventory, scheduling delivery, generating

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an invoice, confirming a receipt, scheduling a payment from a buyer, and receiving payment from a customer. In electronic commerce there steps are now accomplished by e-mail and electronic data interchange.

Businesses are relying more and more on technology. In order to gain and maintain competitive advantage, speed is essential in today's business environment-from speed to market, and speed to product development, to speed in management decision making. Electronic commerce and its technologies are helping businesses reach this goal. Voice mail, cellular phones, collaborative software, video conferencing, and e-mail all contribute to reducing the time as well as distance factors of conducting business today.

Companies concerned with speed have utilized electronic commerce and created Web database constructions to reach the marketplace as a whole –customers, suppliers, vendors, and employees. The more speed is incorporated into the marketplace; the more important speed is to the success of a business. Think about the convenience of using a single medium for all steps in the commerce process. That's the promise of electronic commerce.

2.7 Benefits of E-Commerce

The Benefits to Organization

(1) E-Commerce technology permits commercial transactions to cross cultural and national boundaries far more conveniently and cost effectively than is true in traditional commerce. As result, the potential market size for e-commerce merchants is roughly equal to the size of the world's online population.

(2) Electronic commerce decreases the cost of creating, processing, distributing, storing, and retrieving paper-based information.

(3) Expands a company's marketplace to national and international markets.

(4) Allow a vendor to reach a large number of customers, anywhere around the globe, at a very low cost.

(5) Enable companies to procure material and services from other companies, rapidly and at less cost.

(6) Shortens or even eliminates marketing distribution channels; marketing products cheaper and vendors' profits are higher.

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

(8) Allows lower inventories by facilitating "pull"-type supply chain management, which starts from customer orders and uses just-in-time production and delivery processing.

(9) Reduces the time between the outlay of capital and the receipt of products and services.

(10) Lowers telecommunications costs because the internet is much chapter than value-added networks (VANs).

(11) Helps small businesses compete against large companies.

(12) Enables very specialized markets. (e.g. www.dogtoys.com).

The Benefits to Consumers

(1) Frequently provides less expensive products and services by allowing consumers to shop in many places and conduct online quick comparisons.

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(2) Gives consumers more choices- they can select from many vendors and many more products than they could locate otherwise.

(3) Enables customers to shop or make other transactions 24 hours a day, year round, from almost any location.

(4) Delivers relevant and detailed information in seconds, rather than in days or weeks.

(5) Enables consumers to get customized products, from PCs to cars, at competitive or bargain prices.

(6) Makes possible virtual auctions, in which consumers can find unique products and collectors' items that might otherwise require them to travel long distances to a particular auction place at a specific time.

(7) Allow consumers to interact with other consumers in electronic communities and to exchange ideas as well as compare experiences.

The Benefits to Society

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

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

(3) Enables people in less developed countries and rural areas to enjoy products and services that otherwise are not available to them.

(4) Facilitates delivery of public services, such as government entitlements, reducing the cost of distribution and fraud, and increasing the quality of the social services, police work, health care and education.

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2.8 Limitation of E-Commerce

Technical Limitations

(1) Costs of a technological solution.

(2) Some protocols are not standardized around the world.

(3) Insufficient telecommunications bandwidth.

(4) Software tools are not fixed but constantly evolving (ie. Netscape 3,4,4.7,4.75 etc.).

(5) Integrating digital and non-digital sales and production information.

(6) Access limitations of dial-up, cable, ISDN, wireless.

(7) Some vendors require certain software to show features on their pages, which is not common in the standard browser used by the majority.

(8) Difficulty in integrating e-Commerce infrastructure with current organizational IT systems.

Non-technical Limitations

(1) Customer fear of personal information being used wrongly. This will become the Privacy issues.

(2) Customer expectations unmet.

(3) Rules and regulations (ie. Jan 2004 Bill C6 - new privacy law).

(4) Security and privacy, vulnerability to fraud and other crimes.

(5) Lack of trust and user resistance, fear of payment information being unsecured.

(6) Tactile limitations.

(7) Schneider, 3rd ed. added "many businesses face cultural and legal obstacles".

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(8) Legal issues outstanding such as jurisdiction.

    (a) Legal environment has many new and conflicting laws.

    (b) Cultural obstacles.

    (c) Linguistic challenges.

(9) Limitations of support services.

    (a) Financial cost.

    (b) Sourcing technical support in foreign languages.

(10) Lack of critical mass in certain market areas for sellers and buyers.

(11) Accessibility outside of urban/suburban and areas effects universality.

(12) Higher employee training required to be click and mortar.

(13) People's resistance to change.

(14) People are not used to faceless / paperless / non-physical transactions One of the big differences between technical and non-technical limitations is that Technical limitations can be solved (most of the time) by spending enough money whereas non-technical limitations are things that are more difficult to change since they involve things that cannot be changed easily - like people's attitude, lack or trust, resistance to change, faceless transactions, etc.

2.9 Major forms of online marketing communications.

Marketing communications include promotional sales communications that encourage immediate purchases and branding communications that focus on extolling the differentiable benefits of consuming a product or service. There are a number of different forms of marketing communications, including.

(1) Banner and rich media ads are promotional messages that users can respond to by clicking on the banner and following the link to a product description

or offering. Variations include different size banners, buttons, skyscrapers, pop-ups, and pop-unders. Rich media ads use Flash, DHTML, Java, and streaming audio and/or video and typically seek to involve users more deeply than static banner ads.

(2) Interstitial ads are a way of placing full page messages between the current and destination pages of a user. They are usually inserted within a single site, and are displayed as the user moves from one age to the next; they can also be made to appear as users move among sites.

(3) Superstitials are rich media ads developed by Unicast that pre-load into a browser's cache and do not play until fully loaded and the user clicks to another page.

(4) Paid search engine including and placement is a relatively recent phenomenon. Firms now pay search engines for including in the search engine index (for-merely free and based on "objective" criteria), receiving a guarantee that their firm will appear in the results of relevant searches.

(5) Sponsorships are paid efforts to tie an advertiser's name to particular information, an event, or a venue in a way that reinforces its brand in a positive, yet not overtly commercial manner. Advertorials are a common form of online sponsor-shop.

(6) Affiliate relationships permit a firm to put their logo or banner ad on another firm's Web sit e from which users of that site can click through to the affiliate's site.

(7) Direct e-mail marketing sends e-mail directly to interested users, and has proven to be one of the most effective forms of marketing communications.

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The key to one time or another, have expressed an interest in receiving messages from the advertiser.

(8) Online catalogs are the online equivalent of paper-based catalogs. Their basic function is to display an e-commerce merchant's wares.

(9) Public relations involves pursuing media courage and exposure to target audiences without buying advertising space. Publicity, special events, and newsletter are examples of ways to encourage the media to report on a site, thereby attracting more traffic.

(10) Offline marketing combined with online marketing communication are typically the most effective. Although many e-commerce ventures want to rely heavily on online communications, marketing communications campaigns most successful at driving traffic to a web site have incorporated both online and offline tactics.

III. MARKETING ANALYSIS

3.1 Market Target

Our target market is emphasized on cartoon's reader in local and external market including other online customers. Target markets, however, need not be small: The readers who live in Thailand and Thai people who live in aboard are quite large. After having our web site, we hope to expand volume of market size and market segment for increasing continuously sales in every year.

3.2 Market Strategy

A well-planned sales and marketing strategy will help our business achieve it's growth potential and increase market share, especially when competing in a weak marketplace. No matter how tremendous a firm's qualities, its marketing strategy and execution are often just as important. The best business concept, or idea, will fail if it is not properly marketed to potential customers. Introducing a Web site is a way that Toonworm is able to intend to enter a new market and attract new customers by given discount and provide the best delivery date for customer including Use customer portals to provide immediate access to common account related information. This increases their level of satisfaction with our products and services while reducing service cost.

3.3 SWOT Analysis

A scan of the internal and external environment is an important part of the strategic planning process. Environmental factors internal to the firm usually can be classified as strengths (S) or weaknesses (W), and those external to the firm can be

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classified as opportunities (O) or threats (T). Such an analysis of the strategic environment is referred to as a SWOT analysis.

The SWOT analysis provides information that is helpful in matching the firm's resources and capabilities to the competitive environment in which to operate. As such, it is instrumental in strategy formulation and selection.

Strengths

(1)   All readers are welcome, ones to buy cartoon books on Toonworm website will get 10 percent off the retail price and other reading benefits.

(2)   Internet users are able to look through more than 1,000 book entries and select them by the name of the author, the cartoon's title, ISBN, price, publisher, new arrivals, the best sellers of the week, or promotional news.

(3)   Provide the easy methods of shopping and a ordering book: is very similar to the shopping way of the real shopping at the land cartoon shop.

(4)   Toonworm cyber bookshop has delivery service to customers every day.

(5)   There are many methods of finding books by browsing a subject, finding from any list on the menu bar.

(6)   There are online services such as FAQs, webboard, frequent questions can reach many customers at the same time. Its can help reduce customer frustration, cut number of abandoned shopping carts and increase sales.

(7)   Enables customers to do transactions 24 hours a day round from almost any locations.

(8)   Reduces costs from marketing campaigns, advertising, brochures.

(9)   There are statistics which measure and introduce ways for developing website.

Weaknesses

(1) Competition is high in marketing both offline and online.

(2) Toonworm Cyber bookshop does not have chat service, is an increasingly popular way for companies to assist online shoppers during a purchase.

(3) There are no returns book services.

(4) English language still is a problem for most readers in Thailand.

Opportunities

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

(2) Directly search for target groups by mailing list.

(3) Offer direct sales through E-Channel.

(4) Increase the new channels.

(5) Provide an additional channel for an existing business.

(6) Increasing demand from website, home shopping.

(7) A growing number of users online, both men and women, due to its online capabilities to serve people around the clock everyday.

Threats

(1) The internet freely provides the crack tools, which make it easy to hack into system.

(2) The number of competitors are increasing both online and offline.

(3) There is a lack of people who are equipped with advanced computer skills. Those people who are highly educated want to work only in the capital city.

(4) Insufficient telecommunication facilities and infrastructure in Thailand. People still don't believe on online business transactions or lack of trust from customers.

3.3 Market Plan (4P)

Having determined what the customer needs or wants, what can the marketer do to satisfy this requirement? We can initially consider 4Ps as below:

(a) Product (Service)

The Toonworm Cyber bookshop provides several cartoon books online by category publishers, of the centralizing kind, that is, the publisher's catalogue information is absorbed in to Toonworm's catalogue. Customers are able to search and match the books as much as they need. Every book which is bought from Toonworm will be packed in strong clear plastic bags. The delivery date is within 3 days from the date of order. Customers can get information about products, prices and availability; order parts, read short description of books, do online order tracking (with VCL express for export), find electronic books news in text, pictures. Enables staff, in real time, to check inventory and product specifications.

(b) Price

Probably the single most important decision in marketing is that of price. Toonworm provides the cheaper price by discounting from the cover of a book's price by 10%. Customer will receive promotion news via mailing list for next purchasing, if they register to be our members.

(c) Place

'Place' is the 'catch-all' of the 4 Ps. In addition to the major element of distribution, it covers what seems to be very diverse elements, including channel decisions, logistics, channel management, retailing, customer support and purchasing. Customers are able to access Toonworm Cyber bookshop for buying and searching the book.

(d)   Promotion

Promotion is a technique which can be targeted to achieve specific objectives, such as increasing repeat purchase. There are promotions which are provided by Toonworm such as:

(I)   Advertising.

Online advertising which Toonworm using web are:

(1)   Register search engine service.

(2)   Using banner exchanges.

(3)   Promotion through webboard.

(4)   Promotion via mailing list.

(II)   Sales Promotion

Toonworm has given discount 10% off from the cover price and other sales promotion will be provided by occasion.

IV. THE PROPOSED SYSTEM

4.1 Hardware Requirement

Table 4.1. Hardware Specification.

Hardware	Specification
CPU	Intel Pentium IV 1.4 GHz
Hard Disk	40Gb
Memory/RAM	512 M, DDRRAM
CD R/RW / DVD	Combo Set
Floppy Disk	1.44 MB
Keyboard	104 keys Thai/English
Mouse	Standard mouse PS/2

4.2 Software Requirement

Table 4.2. Software Specification.

Software	Specification
Operating System	Window XP Professional
Application Software	Microsoft Office XP, Adobe Photoshop 5.5, Macromedia Dreamweaver MX, Macromedia Flash MX, Acdsee 6, Editplus2.1
Browser	Microsoft Internet Explorer 6

4.3 Web Design

Toonworm try to focus on the design of web site so that we present the very best impression to everyone who visits our site, not just the first time, but every time It is the single most imperative factor in the success of our web sit.

Toonworm emphasized on color which are differed on borders in tables, background color, unvisited hyperlinks, visited hyperlink to make the first impressions with visitors and customize group of navigation are in the same part obviously.

4.4 Site Map
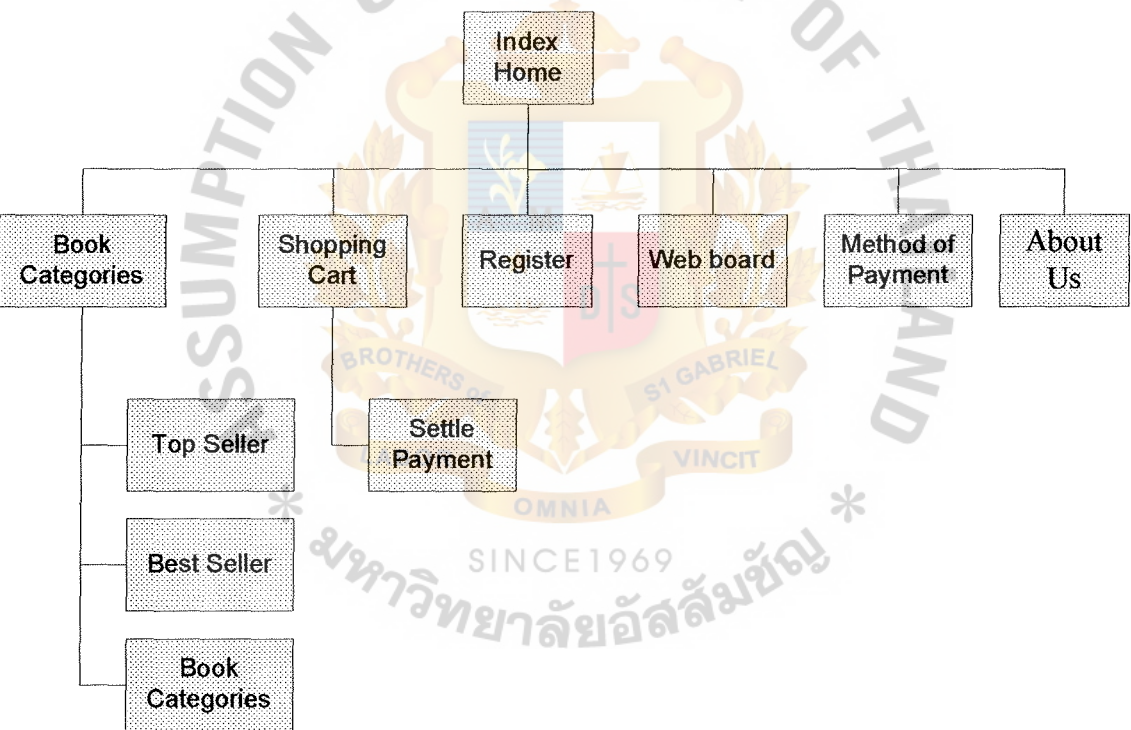
Figure 4.1.   Site map of Toonworm.

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V. IMPLEMENTATION AND RESULTS

5.1 Implementation

Implementation includes the processes used to institutionalize a technology as a stable part of the organization. Implementation follows adoption, where the decision to use the technology is made; implementation is the process of bringing that technology into use.

Toonworm uses the technology of ASP programming and E-Commerce technology including internet marketing strategy for implementation of this web to meet customer's requirement as much as possible.

The implementation of this website consist of 3 parts

    (1)   Design

    (2)   Coding

    (3)   Testing

5.2 Results

5.2.1 Home page
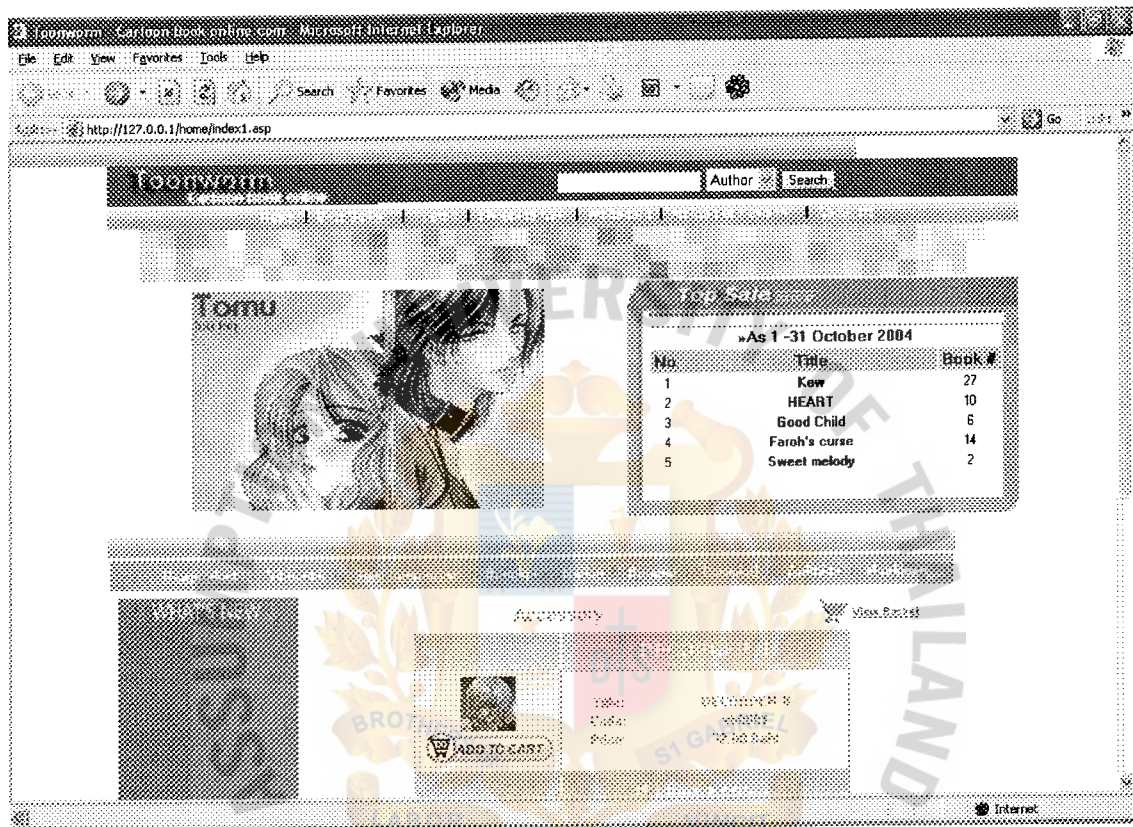
Figure 5.1. Home Page of Toonworm.com.

5.2.2 Book Information

Book Information consist of information of each cartoon book such as quantity,

barcode, publisher, page(s), edition and price.
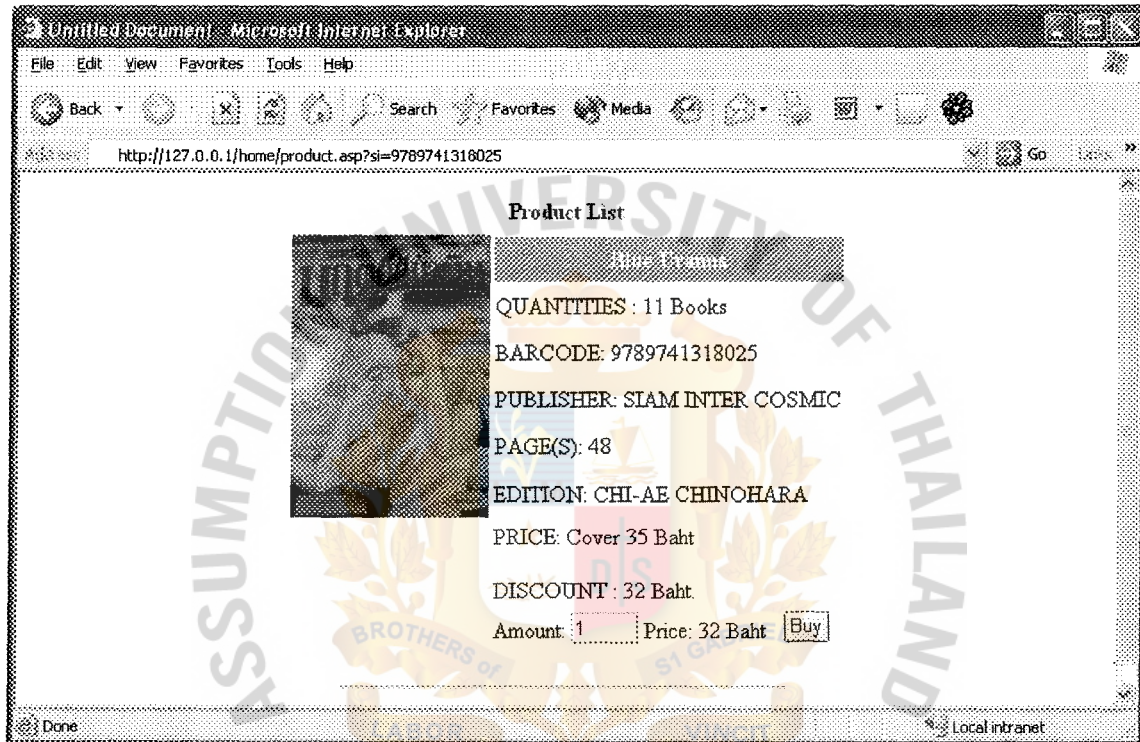
Figure 5.2. Book Information.

5.2.3 Shopping Cart

Consist of title, price, quantity and total of price. Customer is able to delete by trick delete at item which you need to delete or add more product by clicking "continue shopping button" or "settle payment button" for settling payment.
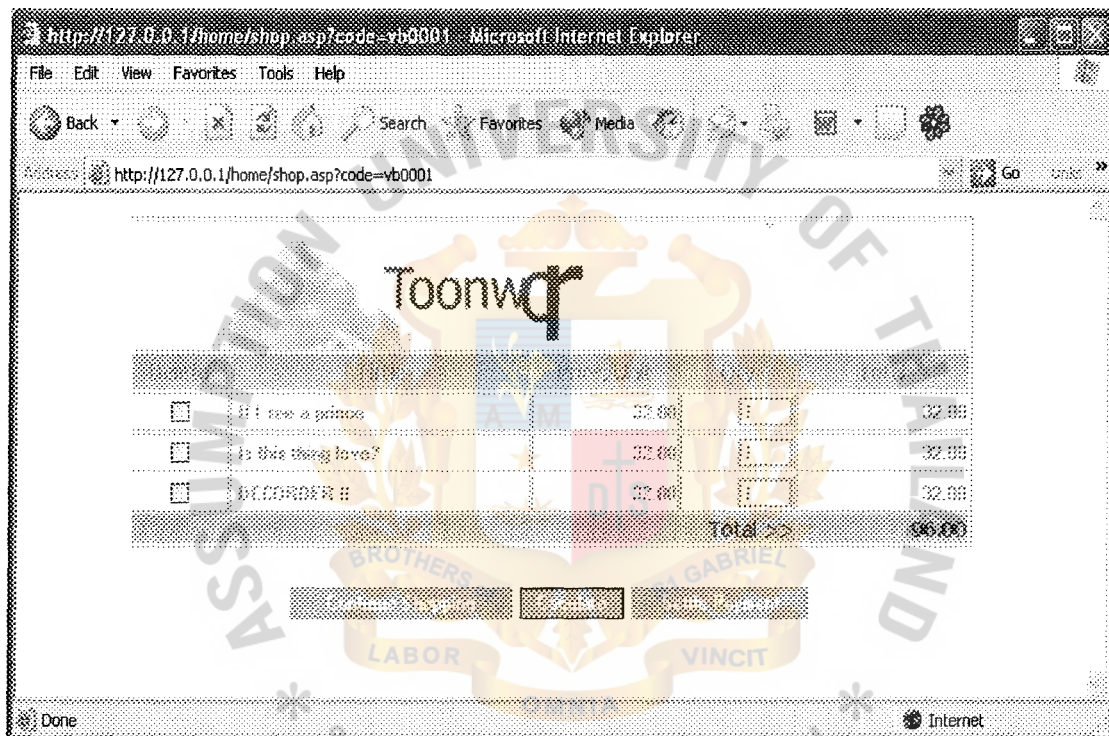
Figure 5.3. Shopping Cart.

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5.2.4 Payment

This website requires your login before you will make a payment transaction.
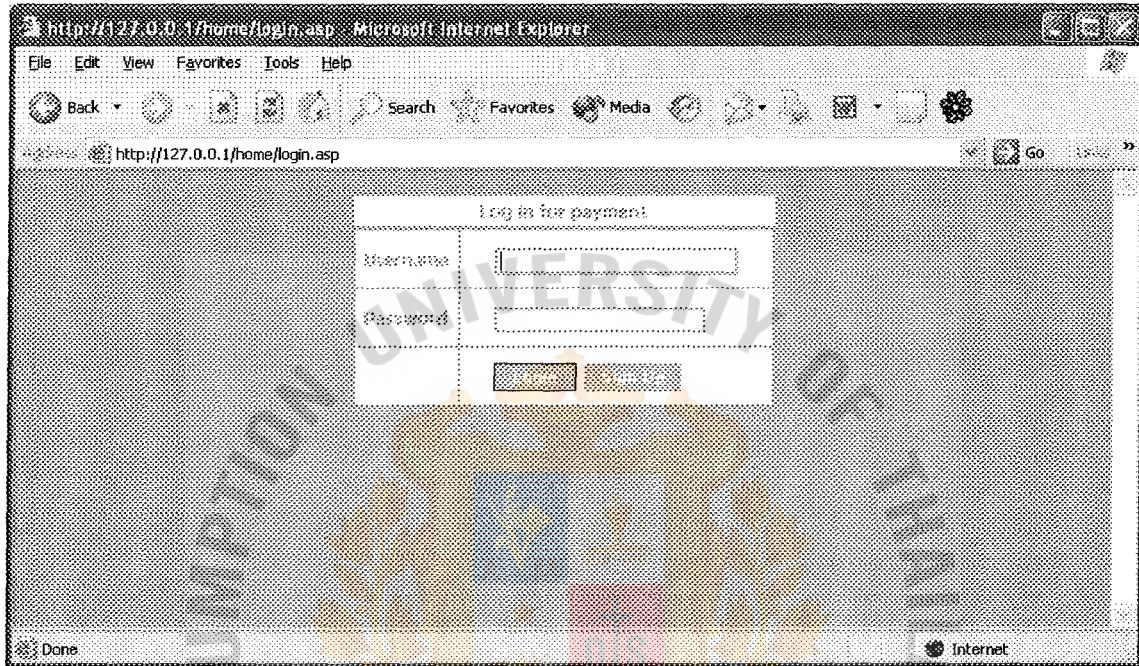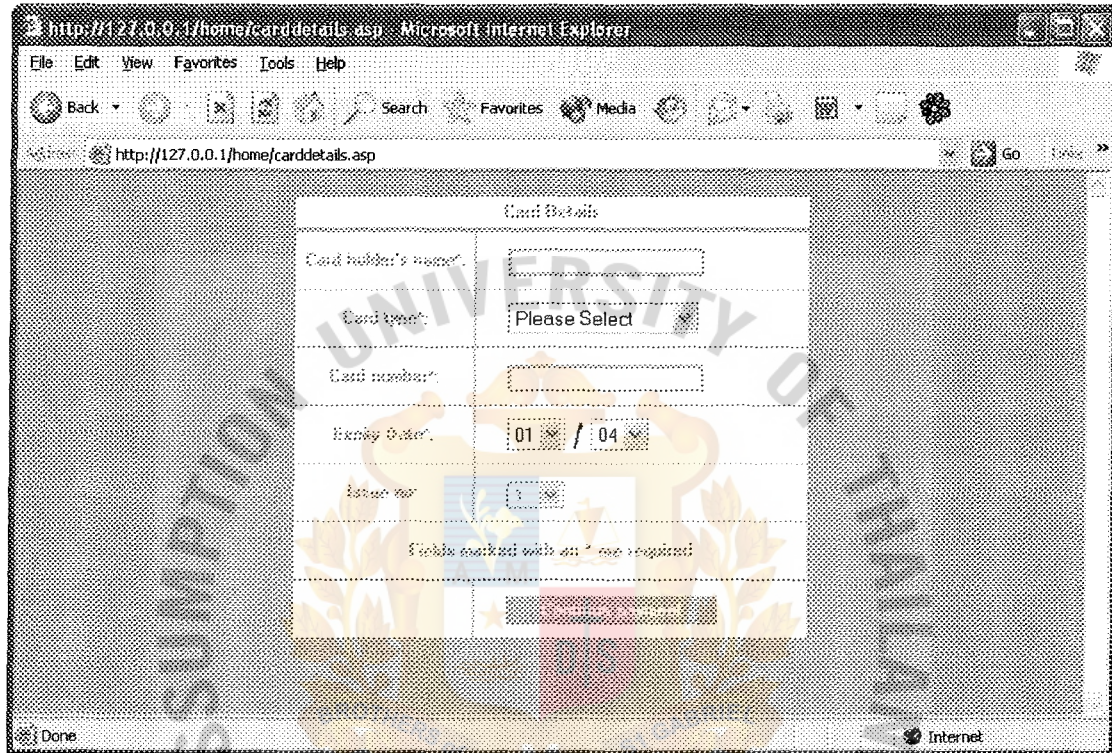
Figure 5.4.   Log in for payment.

After you are successfully logged in, you will meet another page of credit card

requirement to input.

Figure 5.5.   Credit card details.

5.2.5 Backend program

Login page: Before doing any process of backend program, Username & password will need to be required.
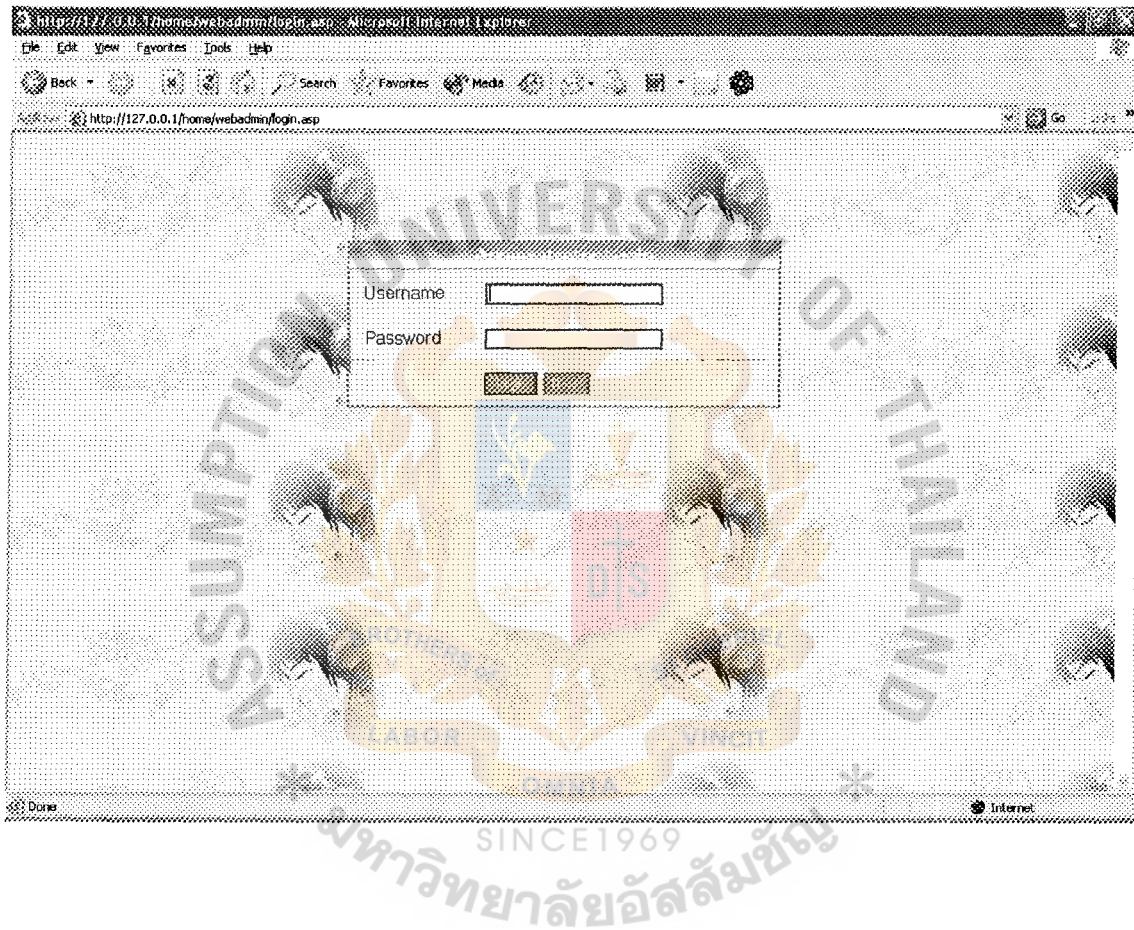

Figure 5.6.   Login page for Administrator.

After login, user will meet web admin page. There are consist of category of each publishers and can link to see transaction of customer in each day or change password of admin.
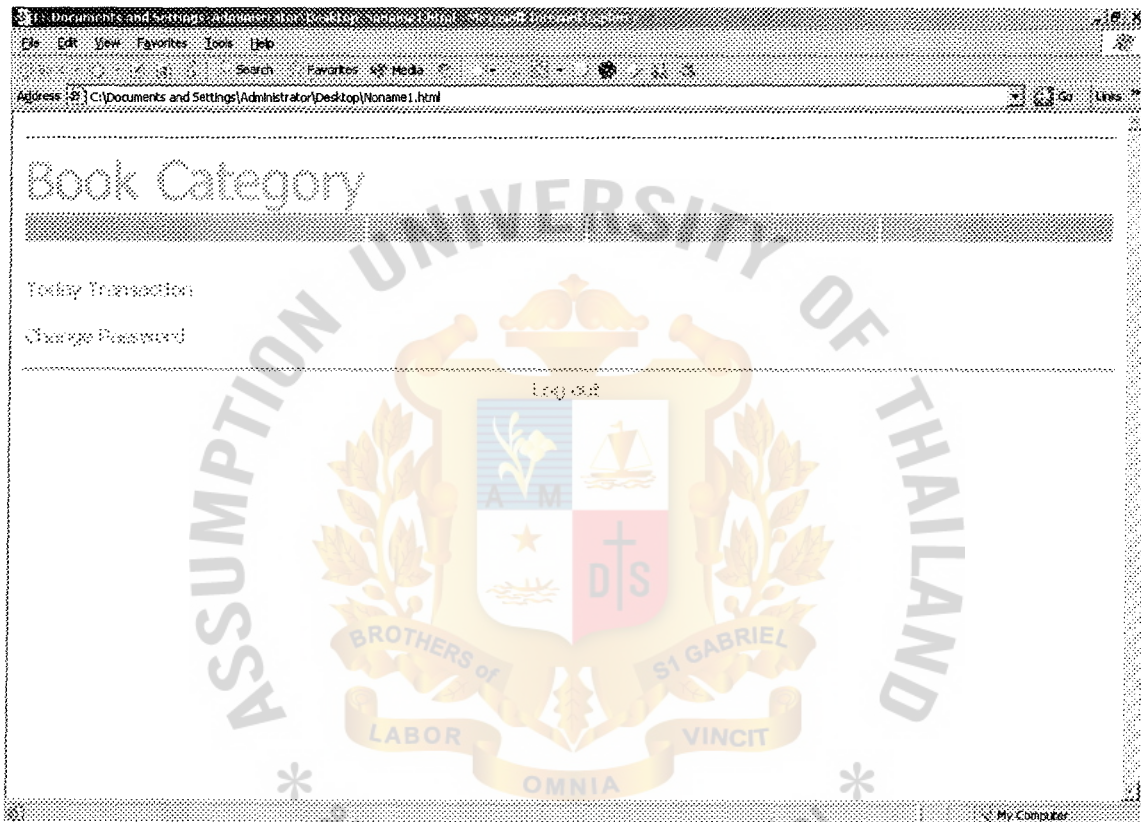

Figure5.7.   Web Administrator page.

This page, you can add code of cartoon book, title, description, price and quantities of stock and picture as well. After finished input information of book, click submit button the information will be updated through database and it shows on webpage automatically.

Figure 5.8.　Add Product with Backend program.

This page is result of information is added. They will show all details which you input. This page is also able to delete items which you don't want to show it.

Figure 5.9.   Add Product with Backend program (show details).

5.3 Security

Security is the principal issue in promoting e-commerce for both buyers and sellers, so in an e-commerce context, encryption is mainly used to scramble the details of an e-commerce transaction as it is passed between the sender and receiver. At the server of bookworm use firewall to protect it from agents reaching resources on the network via public open networks. And also use Norton antivirus to protect and scan virus from any file which are on system as well.
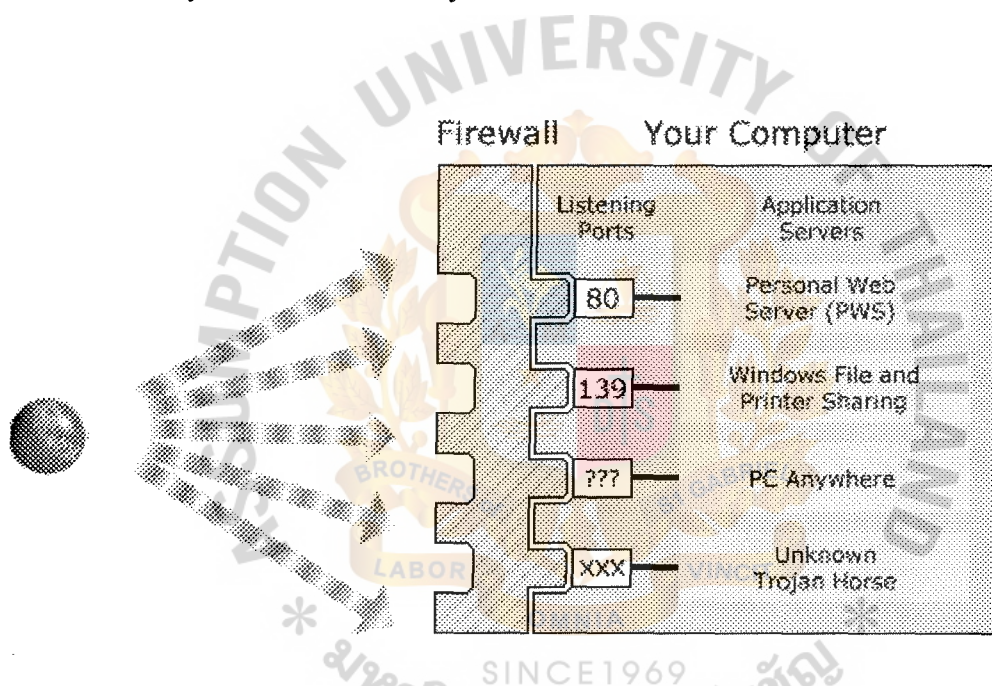

Figure 5.10.   Firewall.

5.4 Database design

Databases effectively provide the 'brains' behind the web site, enabling customer profiling and personalization and predictive analysis through techniques. Without a database, Toonworm web server is 'dumb' and can only serve standard requested information.
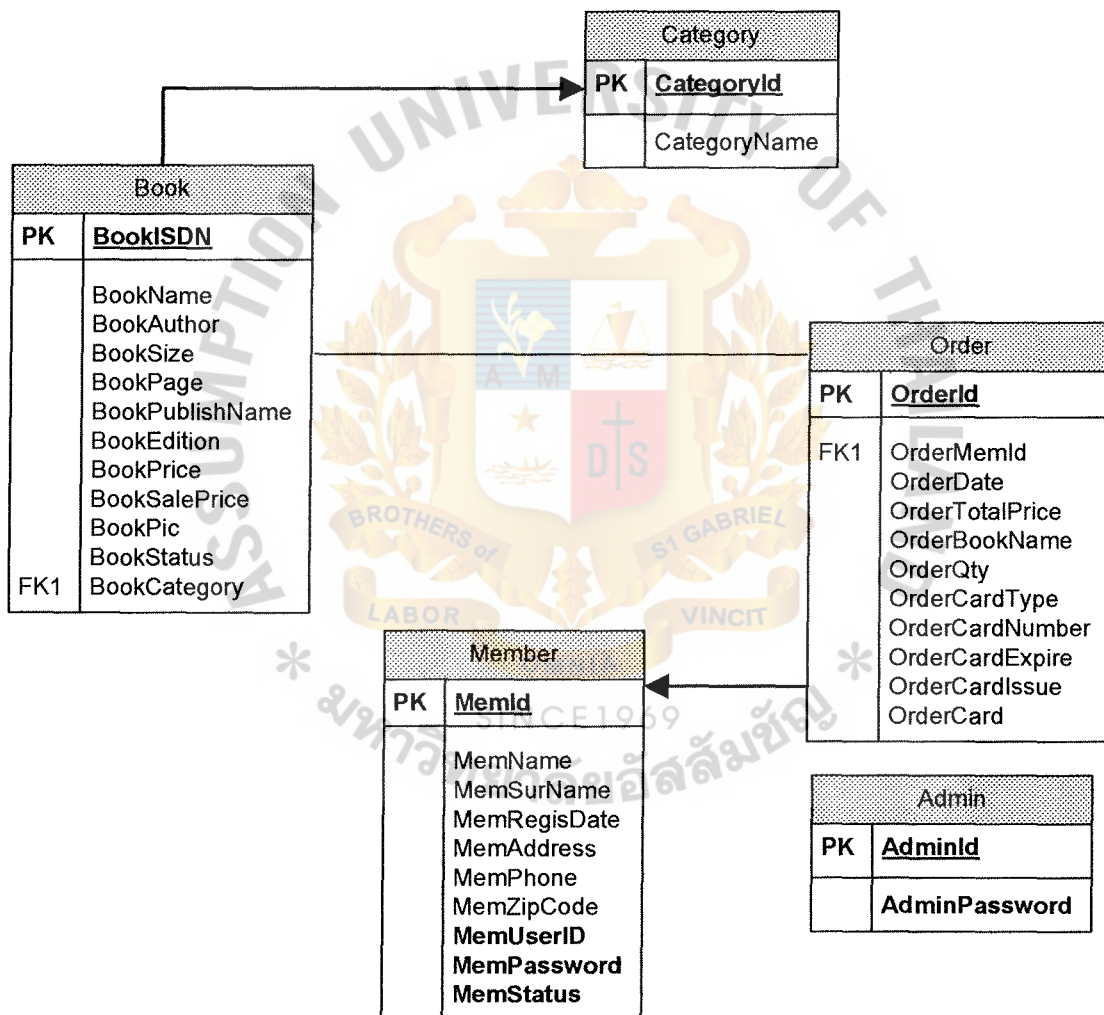
Figure 5.11.   Database Design.

In Figure 5.11. shows the database tables in this system consists of 5 tables as follows:

(a) Table Book – All the product information will be stored in this table in the system such as BookName, BookAuther, BookSize, BookPage, BookPublishName and etc.

(b) Table Member – This table stores the customer information, customer id and customer password who registered to the system.

(c) Table Category – This table stores category of books.

(d) Table Admin – This table will stores admin id and admin password which is able to access the backend system.

(e) Table Order – This table will be kept transaction which customer make a purchase in the system of each purchasing consists of OrderMemberId, OrderDate, OrderTotalPrice, OrderBookName and etc

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5.5 Network Architecture
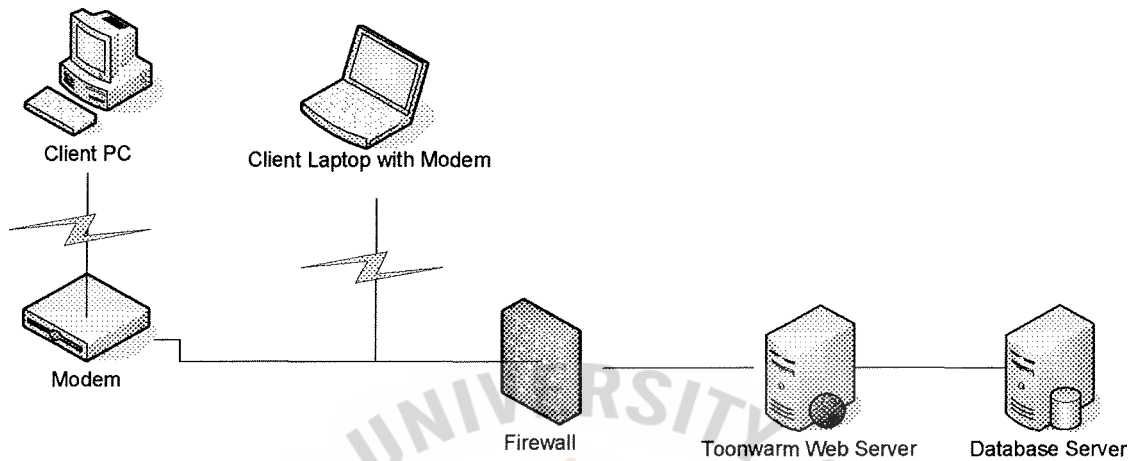
Figure 5.12. Network Architecture

In Figure 5.12. shows the Toonwarm network architecture. Customers can use their computers or laptops connect to the internet with the modem. And open the web browser such as IE to access Toonwarm webstie. When customers request information from Toonwarm, customers will send the request information pass through the firewall to Toonwarm Web Server. Toonwarm Web Server will process the customers request and send the information back to the customers.

VI. FINANCE ANALYSIS

Strategic analysis helps us comprehend the competitive situation of the firm. Financial analysis helps us understand how in fact the firm is performing.

6.1 Cost and Benefit Analysis

This part will compare the profit of organization before having the web site and after having the site. This part will also show the increasing profit after having the site also.

Table 6.1.   Total Cost and Revenue before having the site.

	Year			
	1	2	3	4
Revenue of Toonworm before having site				
Sales	151,200	302,400	340,200	378,000
Operation Cost				
Rent	120,000	120,000	120,000	120,000
Salary	84,000	84,000	84,000	84,000
Electricity and Water	12,000	12,000	12,000	12,000
Decorate expense	200,000	-	-	-
Maintenance Shop	-	3,000	3,000	3,000
Total Cost	**416,000**	**219,000**	**219,000**	**219,000**
Revenue (Loss)	**(264,800)**	**83,400**	**121,200**	**159,000**

Table 6.2.   Four Years Accumulated Cost of Manual System.

Year	Total Manual Cost	Accumulated Cost
1	416,000	416,000
2	219,000	635,000
3	219,000	854,000
4	219,000	1,073,000
Total	**1,073,000**	

Table 6.3.   Total Cost and Revenue after having site.

	Year			
	1	2	3	4
Propose system revenue				
Sales	126,000	378,000	504,000	630,000
Propose system cost				
Hardware Cost	43,000	-	-	-
Software Cost	10,000	10,000	10,000	10,000
Web hosting fee	14,400	14,400	14,400	14,400
Domain registration	8,280	8,280	8,280	8,280
Internet fee	7,080	7,080	7,080	7,080
Total	**82,760**	**39,760**	**39,760**	**39,760**
Operation Cost				
Salary	48,000	48,000	48,000	48,000
Packaging	7,200	21,600	28,800	36,000
Utilities expense	10,000	10,000	10,000	10,000

Table 6.4.　Total Cost and Revenue after having site (Continued).

	Year			
	1	2	3	4
Maintenace expense	-	12,000	12,000	12,000
Equipment expense	-	5,000	10,000	20,000
Total Cost	65,200	96,600	108,800	126,000
Total Cost	**147,960**	**136,360**	**148,560**	**165,760**
Revenue (Loss)	**(21,960)**	**241,640**	**355,440**	**464,240**

Table 6.5.　Four Years Accumulated Cost of Computerized System.

Year	Total Computerized Cost	Accumulated Cost
1	147,960	147,960
2	136,360	284,320
3	148,560	432,880
4	165,760	598,640
Total	**598,640**	

Table 6.6.　The Comparison between Manual and Computerize System Cost.

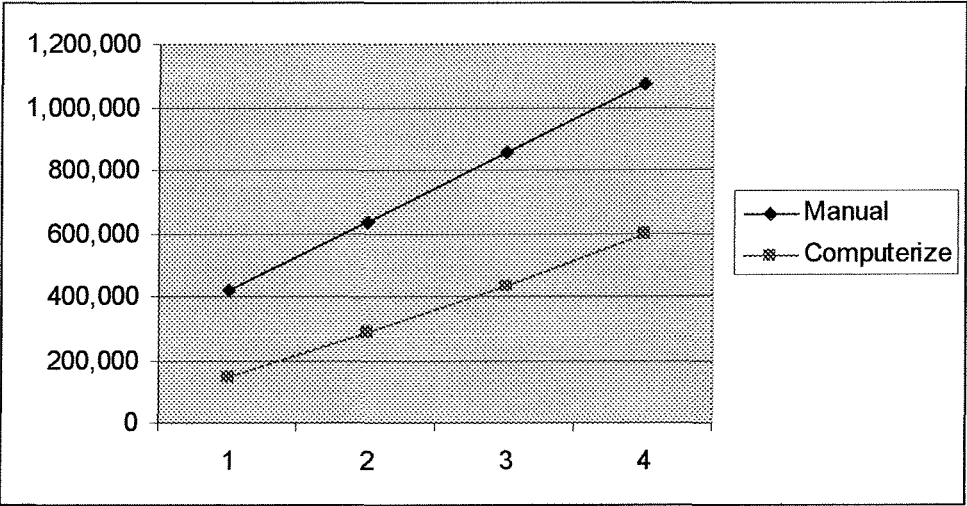| Year	Accumulated Manual Cost	Accumulated Computerize Cost
1	416,000	147,960
2	635,000	284,320
3	854,000	432,880
4	1,073,000	598,640

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Figure 6.1. Graph of Manual and Computerize Cost System.

The table and graph above show the different costs between manual system and the computerize system. The computerize system is cheaper than the manual system. Toonwarm can reduce the cost of salary, decoration and etc.

Table 6.7. The Comparison between Manual and Computerize Revenue.

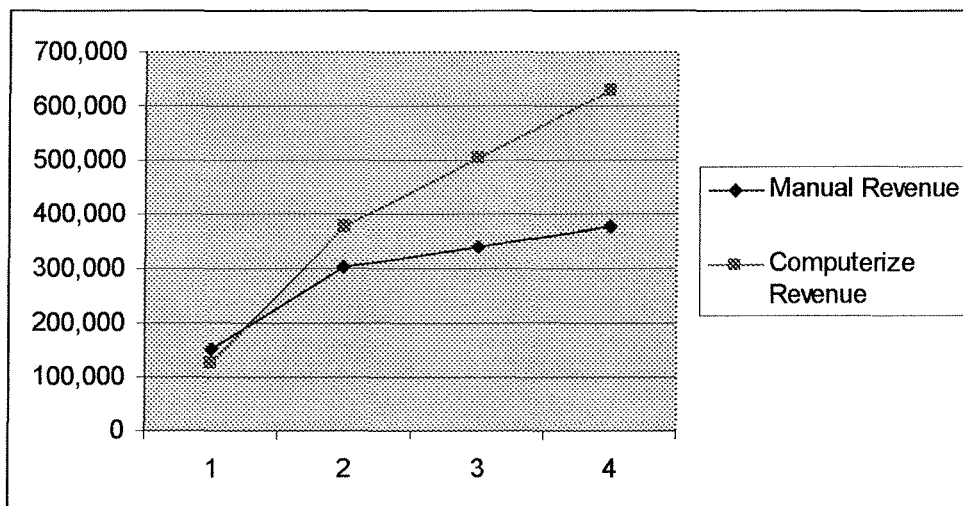| Year	1	2	3	4
Manual revenue	151,200	302,400	340,200	378,000
Computerize revenue	126,000	378,000	504,000	630,000

Figure 6.2.   Graph of Manual and Computerized Revenue.

The table and graph above show the comparison revenue between manual system and computerize system. The computerize system can generate more revenue because Toonwarm website can expand the market target of the customers. So the quantity of books is sold on website to increase sales twofold.

6.2   Payback Period

Table 6.8.   Payback Period.

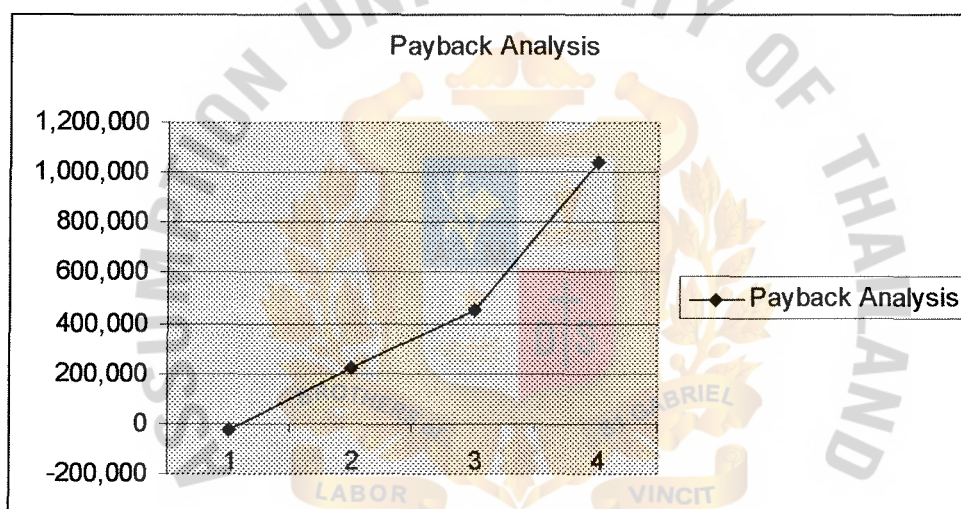| Year	1	2	3	4
Accumulated Computerize Cost	147,960	284,320	432,880	598,640
Accumulated Computerize Reveune	126,000	504,000	882,000	1,638,000
Accumulated Payback Revenue	(21,960)	219,680	449,120	1,039,360

Figure 6.3.   Graph of Payback Period.

The graph above shows the payback period after use Toonwarm website. In the first year, Toonwarm has to invest in hardware, software, development cost and etc. So it does not has a lot of profit in the first year. The payback period will come at the first quarter of the second year.

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VII. CONCLUSIONS AND RECOMMENDATION

7.1 Conclusions

In today's world, internet has an effect on most of the work places. It is used to develop existing markets through enabling and additional communications and/or sales channel with potential customers. It can be used to develop new international markets with a reduced need for new sales offices and agents. Companies can provide new services and possible products using internet.

Together, the Internet and the Web make Toonworm possible by allowing computer users to access products and service information and to complete purchases online. These advantages are factors for helping expanding opportunity of sales to increase.

Toonworm website can increase market channel and volume of sales because E-Commerce technology and internet let customers are able to do purchasing transaction and payment by themselves all 24 hours 7 days. ASP programming can use more time make website to interact with customers so maybe the one reason to hold customers to user more time on Toonworm website. After having website, Toonworm is able to reduce more operation costs such as rent, wage and advertising. So this is the main purpose of do this website : make more profit and reducing costs.

In the future, Toonworm can expand more product ranges, so it is very easy for e-commerce website.

7.2 Recommendation

Although the internet can help to increase more opportunity of sales, this website still has drawbacks in the part of language. Toonworm website emphasizes to sell

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cartoon books in Thai language and Thai language will be mixed in this website. The problem is some windows programs in some country can not support Thai so they are not able to read it and will not pay attention to buy our products finally. In the next future if we have more time to develop. We will make 2 versions of language for support any window program in the world.

Investing advertising is more important to attract the other users to come to visit this website. Toonworm still has loss experience of making online advertising together with having short period time for making this project. After everything on the website is stable, we certainly will be able to make more banners for advertising on this website and neighbor websites as well.
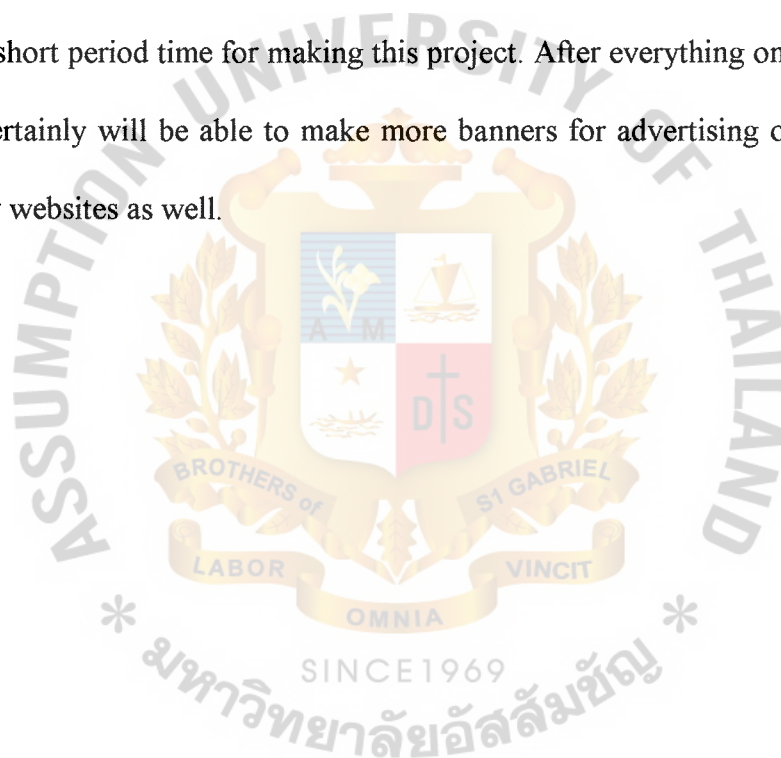
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