



Construction Services and Supplies Web Site

by

Mr. Komchak Ronpirin

A Final Report of the Three-Credit Course
IC 6997 E-Commerce Practicum

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

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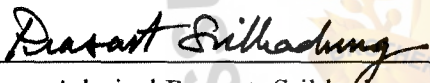
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The Graduate School of Assumption University has approved this final report of the three-credit course, IC 6997 E-commerce Practicum, submitted in partial fulfillment of the requirement for the degree of Master of Science in Internet and E-commerce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

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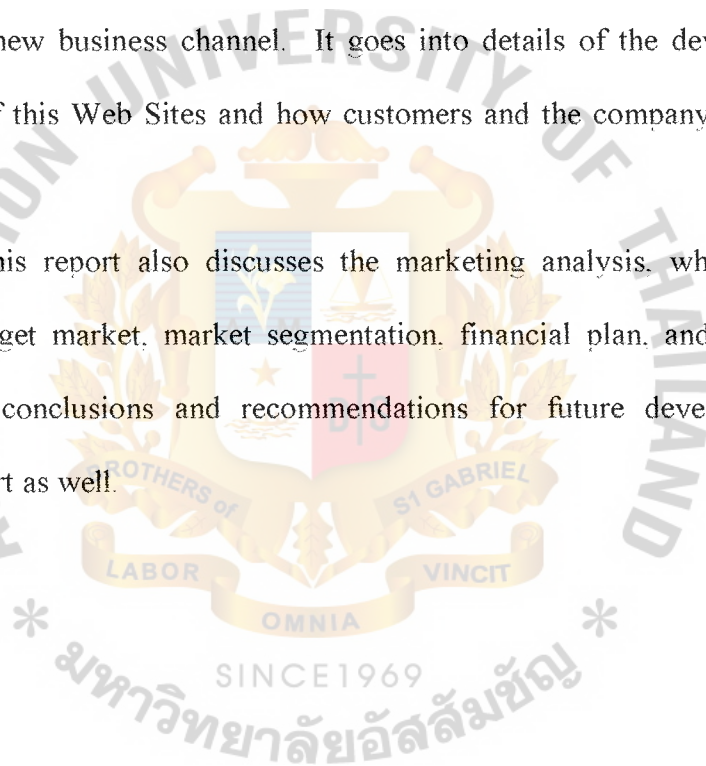
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ABSTRACT

This report is a complement to the final project in order to fulfill the requirements for the degree of Master of Science in Internet and E-Commerce Technology at Assumption University. This project is about developing and operating the construction services and supplies Web Sites.

The report focuses on the introduction of the project, the history of the Internet and E-Commerce, and why and how this traditional construction company has to use the Web Site as a new business channel. It goes into details of the developing and operating process of this Web Sites and how customers and the company will benefit from the Web Sites.

In addition, this report also discusses the marketing analysis, which contains SWOT analysis, target market, market segmentation, financial plan, and break even analysis. Finally, conclusions and recommendations for future development are included in this report as well.



ACKNOWLEDGEMENTS

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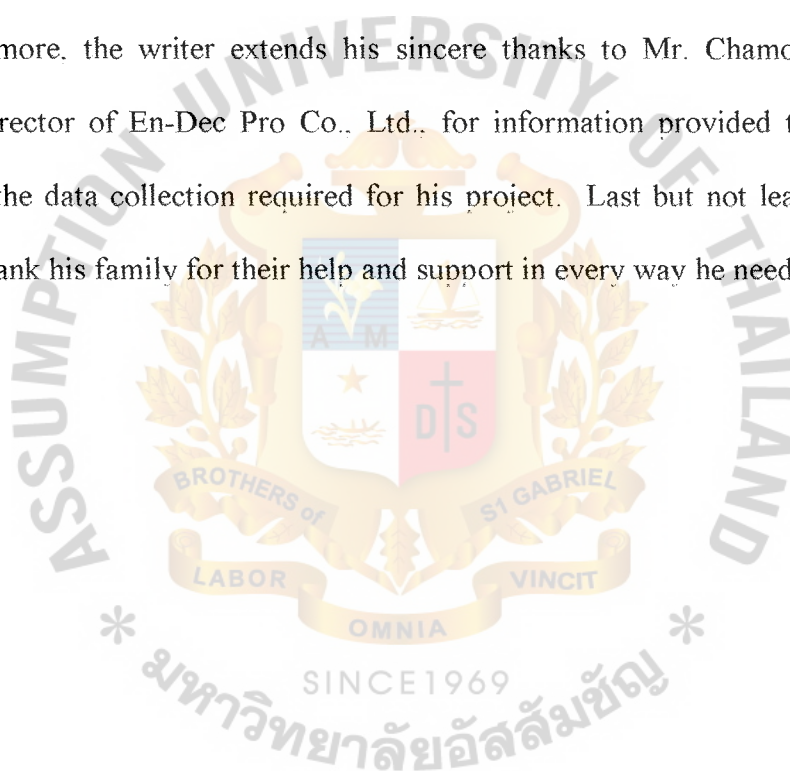


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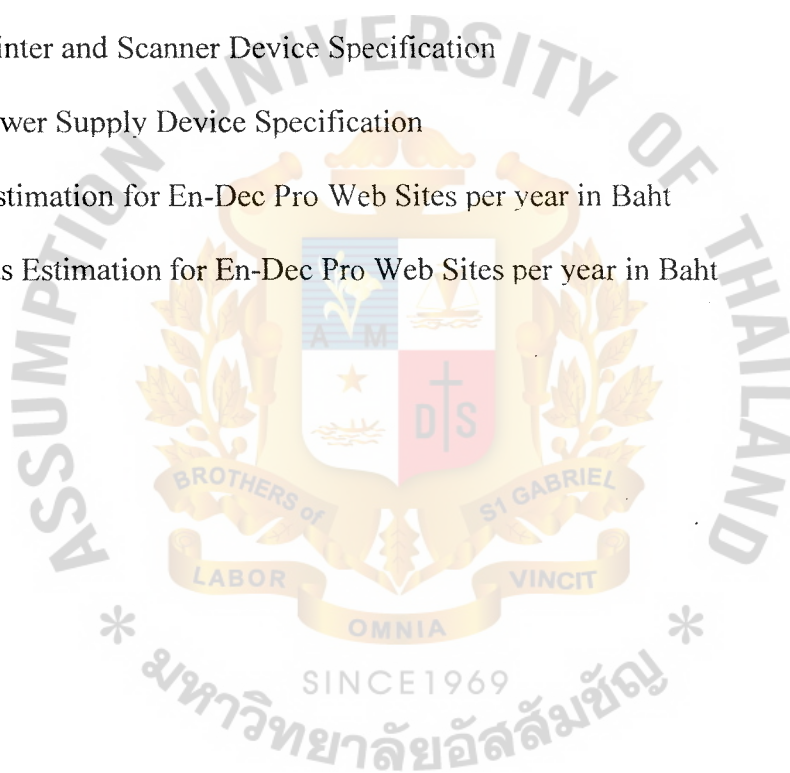
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I. INTRODUCTION

1.1 Background of the Project

The Business world has changed dramatically in the last ten years because of the Internet. It enhances businesses' ability to connect with customers and other business partners. The most important thing the Internet has offered is an online market. A company can sell, buy, and exchange their products, services, and information on via computer network. More and more organizations benefit from the emergence of electronic commerce because it is the easiest and least expensive way to do business. Any business which wants to keep up with their competitors must participate in online business, and En-Dec Pro is no exception.

The Internet has an enormous impact on how people do business today. It provides new ways of advertising products to wider audience and helps companies to publicize their products. It also allows people to learn more about businesses in other countries as well as other cultures and lifestyles. Most companies must learn to change and to implement changes in order to take advantages of the Internet because it offers companies new ways to expand the markets, to deliver services more efficiently and to attract and retain customers.

With the popularity of the Internet, everyone can easily access the information on the Internet from anywhere in the world. And that has made the whole world become one giant market place, which every business wants to be part of. The Internet offers many advantages to companies that want to increase their sales and services. It helps companies reach the worldwide audience and do business with an affluent market. It reduces cost and time to approach the clients and helps companies interact with clients quicker and more efficiently since companies can be open 24 hours with no time zone

barrier. The Internet attracts so many companies because they can use it as a tool for communication, marketing, advertising, sales, and customer services. It is not only faster and more efficient than using traditional methods, but it is also a lot less expensive.

En-Dec Pro has been in the construction business for almost a decade, and there will be no better time than this for the company to take its business even further. Because of the fast growth of the Internet and Electronic Commerce worldwide, especially in Thailand, En-Dec Pro decides to go online by the name of EnDecPro.com. Most construction companies in Thailand still do their business traditional way with their physical store only. We try to gain our competitive edge by building professional Web Sites to provide our business information to clients and potential clients. With our entrance to the cyber world, we do not limit our business to only in Thailand, but the world is our target now.

1.2 Objectives of the Project

The objectives of this project are to develop and create a Website for a construction company with the goals:

- (1) To increase a channel of business.
- (2) To introduce and promote the company's services and supplies to the international market.
- (3) To enhance business from traditional physical company to online company by taking advantages of the Internet to increase the opportunity of our construction business.
- (4) To create communication channels between the company and customers in level of B2C.

- (5) To enable customers to visit our company via our Web Site from anywhere at any time they want.
- (6) To provide information about construction services and supplies for people with interest.
- (7) To support customers in terms of information and help.
- (8) To apply the concepts of Internet and E-Commerce Technology in a real practice.

1.3 Scope of the Project

The final report of this project will cover SWOT analysis, target market, market segmentation, financial plan, and break even analysis. It will go into details of company's background, literature review, proposed system, and project implementation. The scope of this project also includes En-Dec Pro's Web Sites' prototype, which will be developed into an active Web Sites in the future. This Web Sites will provide new distribution channel to the physical company. The Web Sites' prototype will contain:

- (1) Services information: it provides customers with description of each service. Customers can browse and read the information about interested services.
- (2) Supplies information: it provides customers with description of each supply. Customers can browse and read the information about interested supplies.
- (3) Company information: it provides customers with information of the company's history, previous projects, past experience, and organization chart.
- (4) Contact information: it provides customers with street address, e-mail address, telephone and fax numbers, and map to the company.

- (5) Help support: it provides customers with customer service which can respond to any inquiries within 24 hours.

1.4 Deliverables

- (1) The final report covers the information concerning the project.
- (2) The proposed E-Commerce Web Site consists of topics mentioned above.



II. LITERATURE REVIEW

While it is true in theory the Internet gives small and medium-sized enterprises (SMEs) new opportunities to compete, because it reduces transactions costs and barriers of entry, their e-commerce business models must be adapted to their competitive strengths and not just replicate the approaches of bigger players. If a small enterprise tries to compete with a large multinational simply by making a large investment in powerful equipment for its website, the chances are that its productive and/or distribution capacity will never allow it to recover the costs. For SMEs and enterprises in developing countries like Thailand, e-commerce may create new opportunities to participate in international trade. But although putting up website opens a window to global markets. The Internet allows SMEs to implement new, cheaper strategies to build brand names and images in markets to which they had little access in the past.

The Internet is considered a valuable means of communication offering the enticing possibility of interaction (one-to-one communication, e-mail), for many people the web has turned into a primary information resource (one-to-many communication, broadcasting). Most of the information on the Web is either company or product-specific information to increase awareness. As with traditional marketing media, such information on the Internet, which are not their core business, are investing in new possibilities into adequate and sustainable profit.

Currently the cost of content provision on the Web is hardly covered by the contribution of Internet sales. The driving force for a Web presence is more the belief that the Web will lead to competitive advantage, or will turn into a competitive necessity in the future.

2.1 What Is the Internet?

The Internet, sometimes called simply “the Net,” is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers). It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANET. The original aim was to create a network that would allow users of a research computer at one university to be able to talk to research computers at other universities. A side benefit of ARPANet’s design was that, because messages could be routed or rerouted in more than one direction, the network could continue to function even if parts of it were destroyed in the event of a military attack or other disaster.

Today, the Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide. Physically, the Internet uses a portion of the total resources of the currently existing public telecommunication networks. Technically, what distinguishes the Internet is its use of a set of protocols called TCP/IP (Transmission Control Protocol/Internet Protocol). Two recent adaptations of Internet technology, the intranet and the extranet, also make use of the TCP/IP protocol.

For many Internet users, electronic mail (e-mail) has practically replaced the Postal Service for short written transactions. Electronic mail is the most widely used application on the Net. You can also carry on live “conversations” with other computer users, using chatting program. More recently, Internet telephony hardware and software allows real-time voice conversations.

2.2 Internet Growth

In the early 1960s, the Internet was primarily the domain of military, research, and educational institutions. It grew out of ARPANET, a research network created by

the Department of Defense (DoD) Advanced Research Projects Agency (ARPA). In the mid 1980s, DoD moved its military operations machines to a separate network and ARPANET was transformed to NSFNET, a new network founded by the National Science Foundation. NSFNET consists of more than a dozen regional networks linked by high-speed (1.5 megabits per second) connections. The regional networks connected various other networks in universities, corporations, and research institutes. In 1995, NSFNET was shut down and management of the backbone was turned over to companies such as MCI, Sprintlink, and Advanced Network and Service (ANS). The Internet became a commercial network with main Network Access Points being located at Chicago, New York, Bay Area, and Washington, D.C. being served by Ameritech and Bellcore, Sprint, Pacific Bell and MFS Datanet respectively.

The World Wide Web has evolved as a main component of Internet it is a powerful medium to deliver on-demand, just-in-time information. The Web has undergone tremendous growth in the past five years. While there were approximately 100 Web sites in 1992, today there are more than 200,000; there were fewer than 30,000 Internet linked computer networks two years ago, today there are more than 90,000; there were 300 Internet host computer in 1980, today there are more than 10 million; the amount of information on the Internet doubles every year, the Web grows by 300,000 pages every seven days.

Businesses and entrepreneurs who have taken the first step toward Internet based transaction systems can be considered to be Web commerce pioneers. The biggest obstacles remain privacy, security, and authentication issues. Companies that develop web browsers have recognized this and in the short span of less than two years have made successful attempts to address these issues. Once digital payments come to be accepted on par with regular over-the-counter consumer credit card sales, the web will

expedite financial transactions that are completed electronically. This will reduce outstanding balances and ultimately help bring together separate work processes and business functions, which will enable manufacturers and suppliers, quickly delivery competitively priced goods tailored to customers need in today's fast changing marker.

2.2.1 Internet Users Globally

The research shows the growth of Internet users for the main regions of the world. Asia Pacific will become the largest region with 242M Internet users in 2005 up from 61M in 1999. Western Europe with 224 Internet users will also top the 208M Internet users forecasted for the U.S. The Middle East/Africa region will have the lowest number of Internet users at 34M in 2005, but showing strong growth from only 3M Internet users in 1999.

2.2.2 Internet Users in Asia

Currently, the majority if Internet users in Asia are in Japan, where more than 14 million Netizens reside. Japanese also happens to be the second most common language spoken by Web users. However, the landscape is shifting. Japanese Internet growth will start to slow down just as other countries in the region are picking-up speed. In China, there are expected to be over 21 million Net users within five years. By mid-2000, China will surpass Australia as the second latgest Net nation in the region. India, despite crossing the one billion- population threshold this year, has less than one million Net users.

Asian Internet users currently account for 19% of the web population. By 2005, Asia will account for nearly one-quarter (24%) of all Net users. Within the Asian region, Japan (54%), Australia (15%) and China (6%) currently account for three-quarters of the Net population.

2.2.3 Internet Users in Thailand

From the result of the survey of Internet users on the Net, image of the typical Internet users in Thailand emerged: a young, highly educated male of 20 years old or older and lives in Bangkok. Typical respondents use the Internet relatively frequently and many of them access in from home. Their main purpose is sending and receiving e-mail, downloading files and Web surfing. Few have any experience of online shopping. But the people who actually use online shopping has revealed that they utilize the Internet in many different ways from purchase of computer software, books and CDs to hotel reservation. This suggests that thw online shopping market in Thailand has passed the experimental srage and is about to take off.

In addition to Internet Thailand, the first Internet service provider in Thailand, MKSC and Loxley Information Services have announced lower service fees since 2002, followed suit by other ISPs, thanks to server competition. About five years ago, users had to spend at least 40 baht an hour on top of a 1,000 baht start-up charge to get connected to the worldwide web. By comparison, access to the network now costs an average of between 10 baht to 15 baht an hour. Industry experts have predicted that the number of net users in Thailand currently put at more than 1 million. It will be 20 percent of the population, or 15 million in the next five years, with a wider spread of participants between Bangkok and rural areas. Seeing the growth of Internet users, both the public and private sectors are gearing up to provide access service.

Table 2.1. Internet Users in Thailand from Year 1991-2002.

Year	Users	Source
1991	30	NECTEC
1992	200	NECTEC

Table 2.1. Internet Users in Thailand from Year 1991-2002 (Continued).

Year	Users	Source
1993	8,000	NECTEC
1994	23,000	NECTEC
1995	45,000	NECTEC
1996	70,000	NECTEC
1997	220,000	Internet Thailand/NECTEC
1998	670,000	Internet Thailand/NECTEC
1999	1,500,000	ISP Club/NECTEC
2000	2,300,000	ISP Club/NECTEC
2001	3,500,000	NSO/NECTEC
2002	4,800,000	NECTEC

2.3 Benefits of the Internet

The Internet is becoming the principle platform for electronic commerce and electronic business because this technology provides so many benefits. Those benefits are such as the following:

(a) Connectivity and global reach

The value of the Internet lies in its ability of easily and inexpensively connecting so many people from so many places all over the globe. The Internet's global connectivity and ease of use can provide companies with access to business or individuals who normally would be outside their reach. Companies can link directly to suppliers, business partners, or individual customers at the same low cost, even if they are halfway around the globe. Internet gives the opportunities for the businesses to find new sources for their products and services because of the information flows.

(b) Reduced Communication Cost

Internet technology can reduce communication cost by allowing companies to create virtual private networks as low-cost alternative to private WANs. It also reduces the cost for fax, phone and mail by using Email.

(c) Lower Transaction Cost

Business have found that conducting transaction eletronically can be done at a fraction of the cost of paper-based processes.

(d) Reduced agency costs

The cost of managing employees and coordinating their work by providing low-cost network and inexpensive communication and collaboration tools that can be used on global scale.

(e) Interactivity, Flexibility, and Customization

Web pages have capabilities for interacting with viewers that cannot be found in traditional print media. Companies can use e-mail, chat rooms, and electronic discussion groups to create ongoing dialogues with their customers, using the information they have gathered to tailor communication precisely to fit the needs of each individual.

2.4 Internet User Driving Forces

There are numerous factors that are driving the growth of the Internet. The key driving forces are summarized in the next table. The left column shows important factors that have been active recently and continue to add growth to the Internet. The right column lists the factors that are emerging and are likely to have a strong impact in a few years.

Table 2.2. Internet Users Driving Forces.

1998-2001	2002-2005
<ul style="list-style-type: none"> - E-mail proliferation - Free web browse - Content explosion - Low-cost PCs - Intranets - Web hosting services - Business-to-consumer e-commerce - PC purchase rebates from ISPs - Business-to-business e-commerce - "Free" ISP rates in international markets - Web-driven productivity gains 	<ul style="list-style-type: none"> - Business-to-business e-commerce - Broadband connections - Web cellular connections - M-commerce (E-commerce for mobile services) - Application services provides (ASPs) - Web appliances - Hardware cost bundled in ISP rates - Declining and fixed ISP rates outside U.S.A. - E-commerce driven productivity gains - Web interactive TV service

Source: <http://www.eforester.com>

"Free" ISP rates are not really free. They are used in countries where all telephone call fees are based on usages rates. The ISP offering "free" Internet access receives a share of the per minute telephone charge from the telephone company.

Broadband Internet access such as cable modems and Digital Subscriber Lines (DSL) are growing rapidly and will have positive impact on the user experience. Fixed wireless is a third broadband technology cellular technology (3G) may be the biggest broadband technology of them all. With data transfer rates of 384 Kbps for moving vehicles and up to 2 Kbps for stationary receivers, 3G cellular may be a potent broadband technology.

Information appliances will have a major impact on Internet usages. Web cellular phones will extend the time and place of Internet access. They will also extend the number of Internet users-especially in developing countries where fixed phones lines are limited. Web appliances and web entertainment appliances will also extend the time and place of Internet access.

2.5 Electronic Commerce

Electronic commerce or E-commerce is a term that describes the emerging way to conduct business and market processes using Internet technologies. Although relatively young, this new way of commerce has a great deal of promise and is changing the way people conduct business in several industries. Most commonly, E-commerce is online shopping as conducted through the use of powerful web browsers. The customer now has the opportunity to compare several prices of commodities and find the lowest one. Therefore competition becomes much fiercer and customers pay lower prices, as E-commerce becomes its own styled market.

Electronic commerce is the paperless exchange of business information. In order for electronic commerce to work, certain standards have to be in place so that there is a common format in which companies can exchange data. This is achieved by using Electronic Data Interchange (EDI), which provides a format based on a public standard. Some of the advantages offered by EDI include increased speed of business transactions, reduction of manual data entry errors, lower costs for printing, mailing and labor.

2.5.1 Electronic Business

Electronic business or e-business, derived from such terms as “e-mail” and “e-commerce”, is the conduct of business on the Internet, not only buying and selling but also servicing customers and collaborating with business partners. One of the first to use the term was IBM; it launched a thematic campaign built around the term. Today, major corporations are rethinking their business in terms of the Internet and its new culture and capabilities. Companies are using the Web to buy parts and supplies from other companies, to collaborate on sales promotions, and to do joint research. Exploiting the convenience, availability, and worldwide reach of the Internet, many companies,

such as Amazon.com, the booksellers, has already discovered how to use the Internet successfully.

With the security built into today's browsers and with digital certificates now available for individuals and companies from Verisign, a certificate issuer, much of the early concern about the security of business transactions on the Web has abated and e-business by whatever name is accelerating.

2.5.2 Trends in E-commerce

Electronic Commerce is transforming industry and commerce. It shifts business focus from retail and physical stores to the virtual business. Every month, an estimated one million new Internet users join the growing online community worldwide. Moreover, half a million new buyers enter the pool of some 10 million Internet buyers-people who actually purchase something on the Internet each month.

2.5.3 Benefits of E-commerce

- (a) Electronic commerce enables customers to shop or do other transactions 24 hours a day, all year round, from almost any location.
- (b) Electronic commerce provides customers with more choices; they can select from many vendors and from more products.
- (c) Electronic commerce frequently provides customers with less expensive products and service by allowing them to shop in many places and conduct quick comparisons.
- (d) Allow quick delivery, especially with digitized product.
- (e) Electronic commerce allows customers to interact with other customers and exchange ideas as well as compare experiences.
- (f) Electronic commerce facilitates competition, which results in substantial discounts.

2.5.4 The future of E-commerce

It is difficult to predict the future of e-commerce. As yet, there are no standards by which to measure an organization's successful implementation of e-commerce. Although on-line purchases have steadily risen, and continue to do so, it may be at the expense of more traditional methods of buying (mail catalogs, retail store, phone orders, etc.) Also, as technology changes ever day, it is uncertain whether or not many companies will have the resources to keep up. Yet another issue is that of visibility. Large companies with name recognition and deep financial resources will not have a problem attracting consumers to their web sites. It is the smaller organizations that have to try to compete for the customers' attention on a playing field that is far from level. However, there is a general consensus that overall e-commerce will increase exponentially in the future. For year 2002, total online shopping and B2B transaction are estimated to be in the range of \$500 billion to \$3 trillion. The number of Internet users is predicted to reach 750 million by 2008.

Although the future looks bright for these primarily consumer-oriented segments, the biggest market, seems to be business-to-business commerce. According to e-Marketer newsletter, and web site, business-to-business transactions will jump from \$5.6 billion in 1997 to \$268 billion by 2002. business to consumer retail growth is projected to be \$26 billion by 2002, up from \$1.8 billion in 1997. areas that promise some of the highest growth include entertainment, travel, financial services (as on-line security becomes less of an issue), and groceries.

2.6 E-commerce in Thailand

E-commerce web site in Thailand are categorized into five levels of service:

- (a) Full e-commerce sites, representing 8.73% of all web sites, offer a complete range of integrated online services such as online payment systems, product

shipping and delivery, security and after-sales service to customer.

- (b) Almost full e-commerce sites represent 15.87% of all erb sites.
- (c) Web sites with e-commerce transactions represent 35.71%
- (d) Online payment sites, hosted mostly by hotels or software businesses, which do not deliver physical products to customers, represent 18.25%
- (e) Web sites without a payment system represent 21.43%

The most popular transaction payment method is charging on a credit card, followed by transferring funds from bank accounts and direct payment such as postal money orders. Of all the credit and charge cards used in Thailand, Visa enjoys the largest share, followed by MasterCard and American Express. In terms of product shipping, the e-commerce traders prefer using the Communication Authority of Thailand, then the service of foreign express delivery companies ranking DHL, UPS, and Federal Express respectively.

The E-commerce Resource Center (ECRC) of the National Electronic and Computer Technology Center (NECTEC) suggested that the government provide the necessary infrastructure and manpower to promote the adoption of e-commerce and proposed development strategies in four areas including banking, laws, infrastructure: telecommunications and certification authority, and human resources and R&D. The ECRE has also set another eleven work plans to support the strategies in order to pave way for the e-commerce market expansion in Thailand.

2.7 Four Possibilities to Profit from Providing a Website

Internet activities, and content provision on the Web as a special kind of Internet activities, can contribute to a company's performance in four ways.

- (1) Increased number of units sold
- (2) Larger margin per unit sold

- (3) Content sold as stand-alone product
- (4) Advertising income generated from Web pages

Increased Number of Units Sold

Internet-based marketing and public relations aim at increasing awareness about a company and its product and service range. As with traditional marketing, this is costless for consumers; profit is made when the marketing costs are made up for by additional sales. Currently the largest potential in Internet-based marketing is seen in attracting new customers worldwide and in established distant, long-term customer relationships.

In most instances it is difficult to discover how many additional units are sold because of a Web presence. Further, some of these may be substitutes for 'traditional' sales (internal channel cannibalization). As long as overall worldwide or regional sales do not increase, but almost every book store and computer dealer is present on the Web (with rather different offers), it is not obvious how they all could increase their total turnover. There will be a few "winners", and there will always be some "losers".

There is no doubt, however, that Internet-based turnover is predicted to grow tremendously over the next few years. But with more efficient business processes and price transparency leading to decreasing margins there is not too much reason to foresee an increase in total (traditional and Internet-based) turnover.

Larger Margin per Unit Sold

Larger margin per unit sold can be achieved (1) by lower costs (efficiency) or (2) by charging higher price per unit. Lower costs may be achieved by using the web for various processes such as internal communications, receiving orders and payments, or providing customer service (process/business re-engineering). Customers could, for instance, download information from the company's Web Sites and special requests

could be answered via e-mail automatically. From a more in-depth perspective, most efficiency gains will result from decreased working capital achieved by introducing electronic commerce e.g. Internet-based activities.

Higher prices charged per unit need to be based on value-added for customers. This means that a particular book, computer or type of coffee that is advertised and sold via the Internet is more expensive than if it were sold via traditional marketing media and sales channels. This notion is the reverse of the more popular idea of selling cheaper via the Internet due to economies of scales, improved sold at higher prices because of a Web presence that the author is aware of its TV advertising minutes, the actual product sold by TV stations to companies that place their commercials.

Content Sold as Stand-alone Product

While classic marketing content is not produced to be sold, companies are increasingly placing other forms of content on the Web mainly to encourage customers to visit their sites and ultimately buy their products. They could profit from extending their 'traditional' product line to information-based products, e.g. providing access to a special database or interactive games.

The most prominent examples are carefully of such a database, its maintenance costs go far beyond 'putting a paper-based catalogue on the Web and just updating it quarterly'. More drastic examples can be found when visiting the content offered by TV stations and newspaper on the Web. News features as well as sports results go beyond what has traditionally been offered and need almost continuous updating.

These information resources are free for consumers, who, in turn, are by no means bound, maybe not even encouraged, to watch the respective TV program or to read the newspaper "on paper". Experience even shows that both the Web pages

offered by TV stations and by newspapers are often accessed by those consumers who temporarily or generally do not watch or read the traditional medium.

Different approaches to selling such content offers are possible; the three most popular are: (1) charging per month, (2) charging per actual time visiting the site, and (3) charging per page accessed. Whether such information-based products primarily reach the end-consumer directly from the company that 'has the content' or from intermediaries, who repackage the content and maintain the actual sales channel on the Web, remains to be seen. The important thing is whoever invests in building and maintaining the contents needs to be able to charge for it regardless if end-consumers or intermediaries (business-to-business) pay. If intermediaries collect information themselves, manufacturers and designers lose a business opportunity; but as long as it does not involve any expense not covered by additional income, this goes along with the overwhelming trend of specialization and outsourcing with specialized partners increasingly co-operating in a network or virtual organization.

Advertising Income Generated from Web Pages

As time for commercials is the main "product sold" by TV stations, the market for advertising space on the Web is also booming. Only those companies whose contents attract a certain number of site visitors can sell additional space to others who then place their ads. While this opportunity for profit is gaining importance, it is mainly suitable for those large companies whose sites are well-known and visited, e.g. TV stations, newspapers, magazines, etc. It does not appear to be a feasible source of income for the millions of SMEs that also offer content on the Web.

III. BACKGROUND OF THE COMPANY

3.1 Who Is En-Dec Pro?

After over twenty years of working with several Japanese construction companies, Mr. Chamorn Ronpirin had made a big decision by quitting his old job and starting his own company. With his determination and help from his friends, En-Dec Pro Co., Ltd., Engineering and Decoration Professional Company Limited, was born in 1996.

Many kinds of projects have been performed by the company over the years from small projects such as a house decoration to bigger scale projects such as a turn key construction for a factory. A project cannot be done without a good teamwork. Experienced engineers and architects are one factor that customers come to En-Dec Pro. The other main factor is communication between the company and customers. The faster the company can interact with its customers, the better chance to satisfy customers. However, no matter how well the company tries to interact with its customers, the demand of faster response is still high. This problem can be solved by going online, which will be discussed later in this report.

En-Dec Pro has provided construction services from the start of the company and has just opened construction supplies section in the beginning of this year. The company offers services in various fields of work such as architectural, structural, electrical, mechanical, telecommunication, and interior/exterior decoration. The lines of business that En-Dec Pro can accomplish for its customers in each service are:

- (a) Investigation and planning.
- (b) Designing, drafting and adding.
- (c) Specification and bidding document preparation.

- (d) Cost estimate and budget preparation.
- (e) Evaluation of project cost.
- (f) Job quality and schedule control.
- (g) Construction and supervisory services.
- (h) Dispatch of technical experts.
- (i) Technical training.
- (j) Maintenance program planning and services.
- (k) Turn-key construction.

En-Dec Pro has begun to provide construction supplies in the beginning of this year because the company has found a business partner to co-invest and help with construction and distribution of supplies. Prestressed concrete pile and prestressed concrete slab are construction supplies the company offers right now, and there will be the expansion in the future if the business does well.

Because En-Dec Pro is not yet a major construction company in Thailand, the company has to find ways to promote their name to a wider audience. There is no better way than going online. In order to succeed in business world today, the company must keep pace with the other businesses and try its best to be ahead of competitors. En-Dec Pro finds the Internet as an opportunity to provide new distribution channel to a physical company. As mentioned earlier, Thailand may not be the company's only target group anymore, but the world is where En-Dec Pro looks forward to.

3.2 Current Problems and Areas for Improvement

Traditionally, there are only two main ways for a company to be hired by customers. First, the project's owner will ask several construction companies to enter price competition, and they will pick the company with the lowest cost. Second, the company will get customers from words of mouths such as a friend of a friend. Both

are not very reliable because the market is too narrow, and the company needs to be fed with projects all the time. The company does not have Web Sites to promote their services yet, so the potential customers do not know any information about the company and do not wish to risk with the company they do not trust.

Also, the contact between the company and customers can only be made during daytime and via telephone, which limits customers' accessibility and convenience. With only a physical company, the communication causes some problems because it is not as fast as customers want it to be. En-Dec Pro does not have the e-mail system yet because the company does not own Web Sites and does not connect to the Internet. The process of work is slow. The company has to spend a longer period of time and waste cost in closing sales in meeting and negotiation.

In addition, there are areas that can be improved by creating Web Sites. The problems with inconsistency, repetitive, and not available paper works can be avoided. Customers will no longer have to waste their time in meeting with our architects or our engineers every time to archive a project and refer for information at every step. Clients' lost of energy in tracking their projects, which sometimes negotiation is not successful. Last but not least, the Internet will help the company to grow faster because more people will know about En-Dec Pro.

3.3 Mission and Goals

En-Dec Pro's mission is to become a well-known construction company both locally and internationally. We will help customers to be able to work with us as much convenience as possible. The company aims to become a one stop service for any construction services. Whenever people think about building a house, decorating part of their houses, or doing big projects such as telecommunication networks, they will think about En-Dec Pro.

For the goals in the near future, EnDecPro.com Web Sites will be expanded even more into every detail of the company for customers' convenience. It might be hard for Thai customers to be willing to pay online, especially in a large amount of money. However, credit card payment will be available for those who want to make a purchase online. Our main goals right now would be bringing in more business from foreigners. We are sure that our work experience and portfolios will impress them and make them our regular customers.

In the meantime, there is so much we can do in Thailand, so the company has to think about going abroad. Our market would probably expand to other Asian countries first. We can send our architects and engineers to look over projects abroad because our staffs have a lot of experience with foreign customers and foreign companies before. Therefore, with the Web Sites, En-Dec Pro should be able to attract more new customers and retain our old customers, which will increase company's profit and create brand awareness for the company.

Below is a list of En-Dec Pro's goals for entering E-market:

- (1) Focus on the new channels to increase sales in our supplies.
- (2) Bring in new customers
- (3) Retain old customers.
- (4) Provide information, which will avoid customers' time wasting in order to come to the office every time they have a question.
- (5) Offer the most reasonable price for customers.
- (6) Offer the highest quality services and supplies with customers' satisfaction guarantee.
- (7) Provide the best customer support to help customers in every way they need concerning construction services and supplies.

- (8) Communicate with customers as often as they wish.
- (9) Expand supplies in Supplies section.
- (10) Retain customers to generate repeat purchases and make referrals.



IV. THE PROPOSED SYSTEM

4.1 Construction Services Online

Nowadays, computer's users spend a lot of their time accessing the information on the Internet. They also look for products and services that they want or search for information about those products and services that they are interested in.

Before customers choose a company to do their projects, they have to spend quite a lot of time in making a decision. In the old days, Yellow Pages might be customers' only solution. However, with the emergence of the Internet, they can access into any information on any Web Sites at any in order to look for the right company for their construction projects.

The Internet is a profitable place to conduct business, and Web Sites are a new channel of promoting construction services and supplies online. Web Sites help customers with more choice for the best company to do their construction projects. To ensure of the quality of services that they will receive, customers will be able to view the company's profile, previous works, and any information before they contact the company for their services. In the mean time, customers can inspect the company's portfolio from the Web Sites. They can tell the company their requirement about their projects by filling the information on the company's Web Sites or sending an e-mail. In addition, customers can ask any questions or comments regarding the projects, such as how much the projects will be, whether the projects will be finished on budget and on time, how long the design and the construction will take, and any problems that might occur during the construction process.

Customers' satisfaction is always the goal for any services including construction services. The company must communicate with customers all the time in order to know

exactly that they are always on the same understanding about the projects. Customers can discuss their budget and timetable with the company, which will help the company's architects and engineers know what to do with no time wasting.

4.2 Services Online Process

The main task of engineers and architects is to construct projects, which satisfy the needs of customers. And the first thing customers have to do is to know what they want, such as, how big the project will be, how much money they are willing to spend, and other matters concerning the big picture of the project. Then the company can quote the price from the standard fee table. All these processes may seem a little complicated, but they all can be done via the Web Sites with no trouble.

Customers can first check out the company's background, portfolio, experiences, contact information, and etc. before choosing this company for the project. They can view the price from the company's standard fee table. Also, they can look at all services the company offers. After deciding to use construction services from the company, customers can fill in their requirement, their appointment, and any information regarding the project in Help page on the company's Web Sites. Otherwise, they can simply write an e-mail to contact the company. Either way, the response will be sent back within 24 hours.

After the agreement between customers and the company is met, working process will start immediately. The scope of work will be stated clearly right away avoiding the misunderstanding for both parties. Advanced payment will be paid at this stage (around 10% of the whole amount). Customers have total control over the project, but within reasons, of course. The finished works will be guaranteed to satisfy customers' needs and wants. From the past experience, customers have always been pleased with the

results because the communication between customers and the company is very critical to us.

During the constructing process and after the projects are finished, customers can always reach us via our Web Sites, and the answers will be replied within 24 hours as well. Customers, especially international customers, who may not be able to come to the office, would be pleased because all processes can be done online including presentation, discussion, work approval, etc.

4.3 Construction Supplies Online

Numbers of people who shop online tend to grow more and more in the last few years. All kinds of products and services are available for Internet users to shop. Construction supplies might be considered new for E-market because this business has a very specific market. Construction supplies involve large amount of money, so online payment seems to be impossible.

Customers would do their research for products and price both online and offline. What the company offer here can be called an online catalogue. Customers can browse through supplies that we have in store, how these products will be delivered, and how much they cost.

At the moment, numbers of supplies available on the Web Sites may seem small because the company has just expanded this section not long ago. Putting the list of construction supplies gives the company a competitive edge over others. The company will be able to gain new customers who are regular Internet users while other traditional companies do not have access in this new channel.

4.4 Supplies Online Process

Customers who want to purchase construction supplies would normally do their research for the best available first before making their decision. When they come

across our supplies on the Web Sites, they will find quality products with reasonable price and fast delivery.

In the beginning, this supplies department might struggle because the company is still new in the construction supplies market. However, within a couple years, people will start to recognize the company's name and see how comfortable it is to order for construction supplies from us.

Customers can come to the Web Site and browse through the catalogue. If they decide to make a purchase, they can call us or e-mail us to call back for delivery. We will ask new customers for their identification and address to deliver. For the first time customers, when 50% of the amount is wired to the company's back account, the delivery will be made immediately. The rest can be paid afterwards depending on the condition.

The customers' profiles will be kept in our database, so that the next time customers will be able to buy our construction supplies easier. They can just simply send an e-mail or call the company, and the delivery is on its way. Payment can be agreeable for old customers according to their credits.

Within seven days, if customers are not satisfied with our construction supplies, they can return or get a refund without additional costs because the company's motto is to keep our customers satisfied. We are a new and small construction company, so we have to compete with other big companies with our better customer services.

4.5 Hardware and Software Requirement

Table 4.1. The Hardware Specification for PC.

Hardware	Specification
CPU	Intel Pentium 4 1.8 GHz
Hardware	Specification
Hard Disk	ST380021A 80 GB
Mainboard	ASUS P4S333/C
RAM	Kingston 512 MBRDD
CD-RW	NEC NR-7700A
DVD	Pioneer DVD-ROM DVD-103
Floppy Disk	1.44 MB
Keyboard	Standard 101/102-Key Thai/English
Mouse	Microsoft USB IntelliMouse Optical
Display Card	Tornado GeForce4 MX440
Monitor	NEC FE 950+ 20" Trinitron
Modem	Generic SoftK56
Network Adapter	Linksys NC100 Fast Ethernet Adapter

Table 4.2. The Hardware Specification for Notebook.

Hardware	Specification
Acer	Pentium 4 2.1 GHz RAM 256 MB HD 40 GB CD-RW32X 15" TFT

Table 4.3. The Software Specification.

Software	Specification
Operation Software	Window XP Professional
Application Software	Microsoft Office XP, Adobe Photoshop 7, Macromedia Dreamweaver MX
Application Software	Microsoft Internet Explorer 6

Table 4.4. The Printer and Scanner Device Specification.

Hardware	Specification
Printer/Scanner	HP PSC1210

Table 4.5. The Power Supply Device Specification.

Hardware	Specification
UPS	Leonics Green III 500 VA

V. MARKETING ANALYSIS

5.1 SWOT Analysis

Before starting any business, analyzing our own values is a must. It is no different in this case. The SWOT analysis helps us know ourselves and what we should do with our business. It allows us to transform our strengths to unique capabilities that provide better service to customers. Weakness will show us what we should avoid and try to accomplish. We can also see our potential business channels by analyzing the opportunities. Finally, the potential threats in the environment can be minimized when we know them ahead of time. The following SWOT analysis captures the key strengths and weaknesses relating to the market analysis summary and describes the opportunities and threats facing En-Dec Pro's business.

Strengths

- (a) Our engineers and architects have experience over 30 years in construction business.
- (b) Our work is always based on customers' satisfaction.
- (c) Our engineers and architects have worked in many big projects with various companies both local and international in the past.
- (d) Web Sites will create brand awareness to customers who come and visit.
- (e) EnDecPro.com will promote our services and supplies to wider audience.
- (f) With our Web Sites, the company is able to provide more information with less energy.
- (g) Our engineers and architects can discuss with customers closer and faster when they need consult about their projects.

- (h) Web Sites eliminate problems of time consuming and cost for processing services.
- (i) Services and supplies information on the Web Sites can be updated frequently.
- (j) All information can be accessed at all time via the Web Sites.
- (k) Our experts will answer any question from customers as fast and accurately as possible.
- (l) We always provide good quality services and supplies.
- (m) We offer a suitable price.
- (n) Web Site is user friendly. The interface of Web Sites is designed to support customers' demand. It is simple to use and easy to find the required information.
- (o) Our Web Site is a new channel to help customers make their decision easily and fast.
- (p) Not many competitors are there in construction business in Thailand on the Internet.
- (q) The cyber office is more comfortable and more convenient for customers to come than physical office when they have a question.
- (r) Web Site is used as a new advertising tool to promote our company to be recognized by others.
- (s) The cost of advertisement on the Internet is lower than traditional advertisements.
- (t) Keeping good records of customers helps the company with relationship selling and retaining program.
- (u) Excellent and able staff with great customer service.

- (v) Strong relationship with business partners, so the delivery will be fast.

Weaknesses

- (a) There is low brand awareness of the company at the moment.
- (b) Customers still do not know about the company, so they cannot get services from us.
- (c) Lack of security system, reliability, and standard on the Internet.
- (d) Many offline competitors provide same services and supplies.
- (e) There are fewer numbers of Internet users in Thailand than other countries such as US and Japan because of the limitation of technology levels in Thailand.
- (f) People are still used to go to the physical construction company for services and supplies.
- (g) The company is unrecognized by potential customers due to our new entry status on the E-commerce market.
- (h) Few advertisers are interested in this target market.

Opportunities

- (a) The company will get the opportunities to provide services and supplies to new customers by entering the E-market.
- (b) Growth in demand of construction services.
- (c) The Internet increases opportunities for us to serve customers. When customers need help, we are in a better position to give it to them.
- (d) Web Site will be a place where our staff and other experts can share their ideas and experience.
- (e) Expand the business and increase the services by the rise of social patterns, population, lifestyle, and boom in the economy.

- (f) Internet users in Thailand tend to grow faster because of the change in technology and markets, and people tend to interest more in online business.
- (g) Web Site offers us another area of strength in comparison to the traditional company.
- (h) We have more opportunities to contact with customers than physical company because our Web Site is open 24 hours a day, 7 days a week all year long.
- (i) Economy is getting better, and our business opportunity is higher with more demands.

Threats

- (a) Demand of construction market is still in a process of picking up from the economy crash in 1997.
- (b) Possibility of slower growth rates in construction projects.
- (c) New technologies on the Internet come very rapidly, which can make our Web Sites and services out of date. So we have to keep updating our information frequently.
- (d) New competitors of construction services and supplies enter the E-market all the time.
- (e) It is very hard to change customers' behavior. People are still used to getting services and supplies from company's physical office.
- (f) Thailand does not have adequate advance telecommunication infrastructure.
- (g) People still do not trust payment system on the Internet.

5.2 Target Market

En-Dec Pro's target market is not restricted to only Thai customers but also includes international customers, who are interested in construction services and supplies from us, as well. Our target group includes:

- (a) People who want to decorate a house, an apartment, a building, a store, etc.
- (b) People who want to build a house.
- (c) People who want to build a factory.
- (d) People who are in telecommunication business and want to expand their projects.
- (e) People who are interested in construction services and supplies.
- (f) People who want to buy construction supplies.
- (g) People who want to search for information about construction services and supplies.
- (h) Foreign people who want to use construction services and supplies in Thailand.
- (i) Foreign people who want to learn more about construction in Thailand.
- (i) Foreign people who want to use our staff for construction projects internationally.
- (k) People who look for one stop service for any construction solution.

5.3 Market Segmentation

To compete in business today successfully, the company needs to provide more with the best offer to attract more new customers. Marketers must attract certain segmented markets that exhibit unique needs and wants. Market segmentation is therefore necessary for today's competitive business markets environment. The overall

objective of market segmentation is to improve the company's competitive position, to serve the needs of customers better, and to enhance the company's image.

The profile of targeted customers consists of the following geographic, demographic, psychographic, and behavioral factors:

- (a) Geographic: the company mainly targets the customers who live in Thailand, which includes of Thais and foreigners. Also, people who live abroad and interest in our services and supplies are all welcomed.
- (b) Demographic: our targeted customers' age are between 25-60 years old because these people are working men and women who are able to afford construction services and supplies. Their income should be at a moderate level. The gender can be both male and female. The family life cycle can be both single and married.
- (c) Psychographic: people with interest in construction services and supplies are the company's targets. People who work and involve in construction business are in this segmentation as well.
- (d) Behaviors: home decorators, construction builders, and anyone who look for information about construction services and supplies are all in the company's target group.

5.4 Financial Plan

The company will invest some money to create professional Web Sites with information about company's services and supplies. It will not cost much comparing to other payments of the company, but the benefits will pay off very well in short amount of time. The advertisement on the Internet will be used in the beginning, so that web users can recognize our company. The investment in web promotion will not be as high

as other media promotion. In addition, we hope for words of mouths from one person to another for our promotional method.

5.4 Break Even Analysis

Before En-Dec Pro creates Web Sites, the company has to discuss the cost and benefits which we have to confront in the long run. Break even analysis is used to evaluate cost and benefit for this Web Sites. It can help to find the optimum way by calculating all the anticipated costs associated with the Web Sites.

Cost Estimation

Cost estimation occurs from evaluating the resources that will be needed to develop and operate the Web Sites. These resources include the necessary expenses for personnel, computer hardware, application software, and others. This cost is measured in Baht value.

The expenses that can occur during the developing process and operating the Web Sites are:

- (a) Computer Hardware
- (b) Software Development Tools
- (c) License for Software Application
- (d) Web Site Design
- (e) Domain Name Registration
- (f) Internet Access Cost
- (g) Web Hosting Fee
- (h) E-mail Hosting Fee
- (i) Utilities

Table 5.1. Cost Estimation for En-Dec Pro Web Sites per year in Baht.

Description	1 st Year	2 nd Year	3 rd Year
PC Hardware	120,000	0	0
Notebook Computer	60,000	0	0
Printer/Scanner	10,000	0	0
UPS	7,350	0	0
Software Application	15,000	0	0
Domain Name Registration	1,500	1,500	1,500
Web and E-mail Hosting	1,500	1,500	1,500
Internet Access	5,900	5,900	5,900
Utilities	48,000	48,000	48,000
Total Cost for Each Year	269,250	56,900	56,900
Total Cost		326,150	383,050

Revenues Estimation

Benefits can be measured by increase of revenue. There is no set fee arrangement for a particular type of project. Benefits are established in a number of ways depending on the type and size of projects plus the extent and nature of services required from our engineers and architects. Common method of compensation is a percentage of construction costs. In addition, the company will also get the profits from selling supplies, which are prestressed concrete piles and prestressed concrete slabs.

The revenues that the company can gain from expanding our business to the Internet via the Web Site is:

- (a) Architectural Service

- (b) Structural Service
- (c) Electrical Service
- (d) Mechanical Service
- (e) Telecommunication Service
- (f) Interior/Exterior Decoration Service
- (g) Selling Supplies

Table 5.2. Benefits Estimation for En-Dec Pro Web Sites per year in Baht.

Description	1 st Year	2 nd Year	3 rd Year
Architectural Service	20,000	60,000	80,000
Structural Service	0	50,000	50,000
Electrical Service	40,000	110,000	150,000
Mechanical Service	0	40,000	60,000
Telecommunication Service	0	0	0
Interior/Exterior Decoration Service	20,000	70,000	100,000
Selling Supplies	0	0	0
Total Benefits	80,000	330,000	440,000

Table 5.2 above shows the increased benefits that En-Dec Pro will earn by entering the E-market.

Break Even Point

Break even point is when the initial investment is paid off. The total cost for developing and operating Web Sites in two year is 326,150 Baht (269,250 Baht for the first year and 56,900 Baht for the second year) while the total increased benefits from the Web Sites is 80,000 Baht in the first year and 330,000 Baht in the second year. The

reason the benefits from telecommunication service and selling supplies do not increase in the first two year because there are big amount of money involved in these services and supplies, and new customers also still do not trust an unknown company on the Internet. However, as time goes by, the company will establish its name, and more customers will come and use our services and supplies. After analyzing cost estimation and benefits estimation, the company will be able to meet its break even point after two years of operating Web Sites, and after that the benefits will grow even more and more.

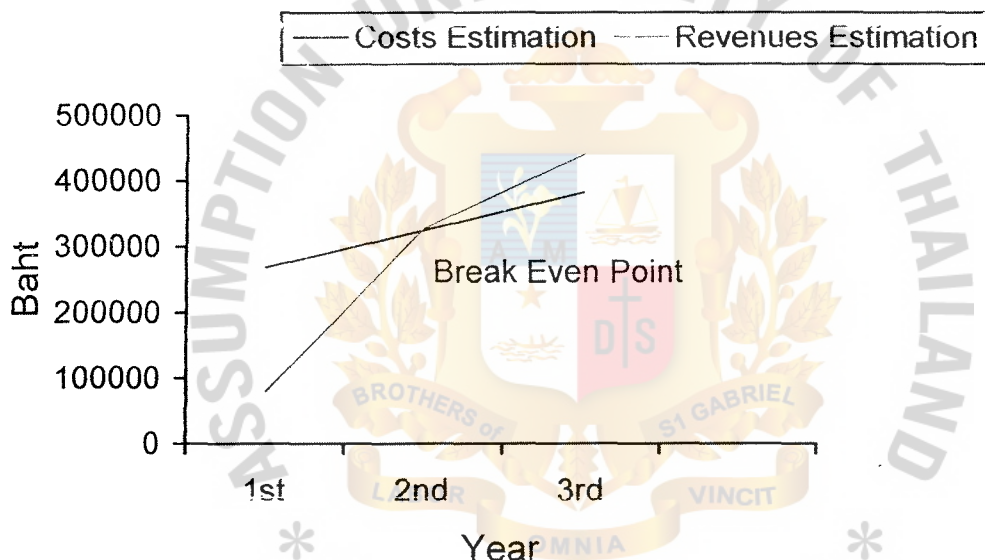


Figure 5.1. Break Even Point for En-Dec Pro.

VI. PROJECT IMPLEMENTATION

6.1 Overview of Project Implementation

After the company understands the concepts of the system, the Website will be planned, designed, and created for this project. The company sets up both hardware and software to develop the Website. The system must be tested before it can be used in reality. This process may take some time to make sure that this system works properly.

This Website is designed and implemented in HTML format. The overall design of this Website will be clean and very comfortable to look at. The color scheme is monochromatic; several shades of blue are chosen with white as a background color. The nature of a construction company should be calm and stable and should not include many different colors. Also, a monochromatic scheme enhances the sense of cohesiveness of the overall layout of a Web Site. This Web Site uses sans-serif typefaces for a navigation bar and links and uses Georgia 12-point type in black color for body text because these fonts tend to be easier to read. The navigations are designed to be user-friendly helping customers to browse through the contents comfortably.

After the Website is completely finished, the company will put them online and wait for responses from the audience. The company then will promote the Website by registering in several search engines directories such as yahoo and google, posting messages in newsgroups and mailing lists, making links from other appropriate Website, paying for small banners and ads on other popular Website, and putting Web address on the company's business cards. The Website will be expanded and developed continuously in order to stay ahead; the site must be updated at all time.

6.2 Site Map

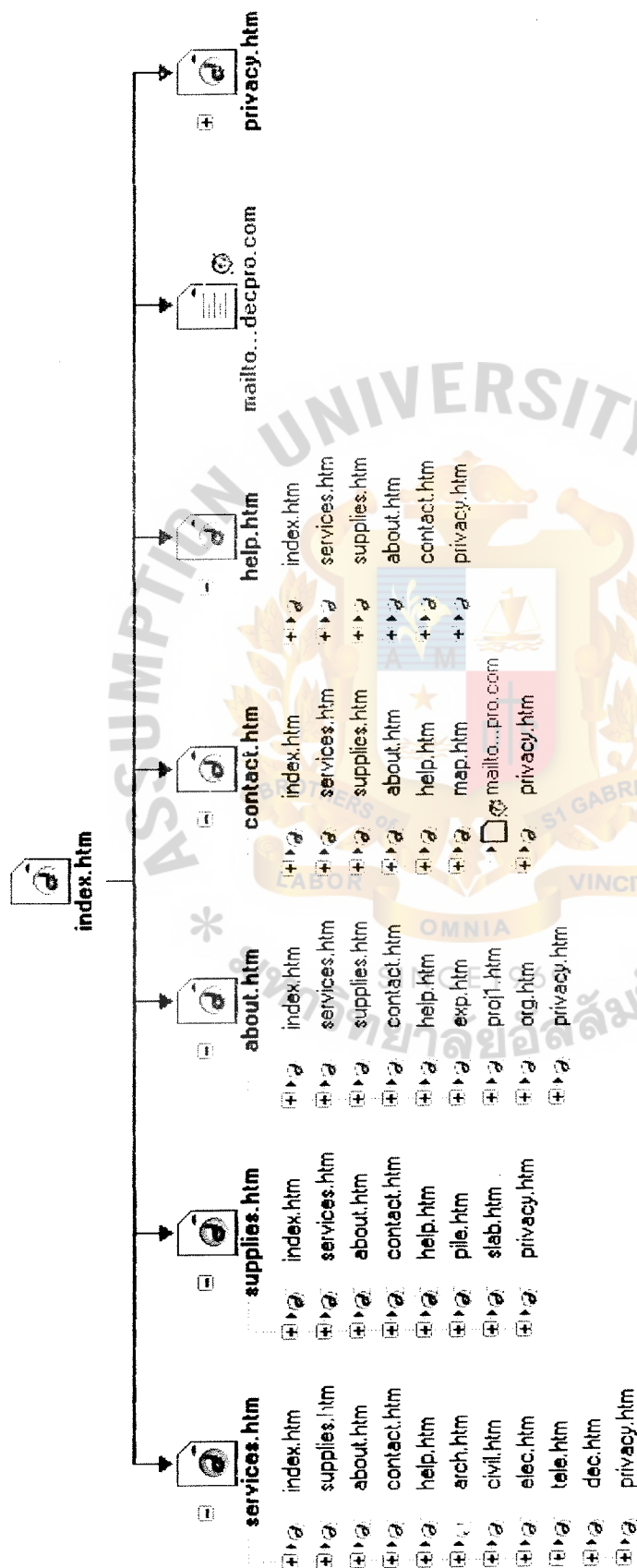


Figure 6.1. En-Dec Pro Site Map.

6.3 Web Operating Functions

Every page of this Website will provide a common navigation bar to enable customers to go from one place to another within the Website at any time they want in one click. This feature helps customers from wasting their time by going back to the main page every time they want to browse to another place. The Website is designed for customers to use as easy as possible. The operating functions of this Website are as follows:

- (a) Home Page (or Index Page) – it provides links to other main pages within this Website on a navigation bar at the top of the page and on the left handed side, which will be the same on every page of this Website. Also, customers can search for anything on this Website using Keyword Search function on top of the left bar of every page in this Website.
- (b) Services Page – this page provides links to other main pages on a navigation bar at the top of the page as well. Links on the left handed side will take users to architectural, structural, electrical, mechanical, telecommunication, and interior/exterior decoration pages, which customers can go back and forth these pages using these same links.
- (c) Supplies Page – same as Services Page and Home Page, users can go back and forth main pages using a navigation bar at the top of the page. Left-handed links will bring customers to the details of Supplies section of this Website.
- (d) About Company Page – similar to Services Page and Supplies Page, customers can use links on the left handed side to view the information about stuffs' experiences, the company's previous projects, and the organization chart.

- (e) Experience Page – it provides users two links to stuffs' reference records, which both pages will be open in new windows.
- (f) Previous Projects Page – customers can look at the company's portfolio here containing five pages in chronological order.
- (g) Contact Us Page – this page includes street address, e-mail address, telephone numbers, fax numbers, and a link to a map to the company's office.
- (h) Help Page – customers can fill in their inquiries, questions, comments, suggestions, etc. Responses will be replied within 24 hours. Similar to Home Page, the left-handed side bar provides links to all main pages of this Website.
- (i) Privacy Policy Page – this appears as a link at the bottom of every page telling customers about how their information will be used in this Website. When users click on this link, a new window will pop up to display this privacy policy.
- (i) Price Page* – a link to this page is on every page under Services Page explaining customers about estimated cost for each particular type of project. A new window will be open when clicking on this link.

VII. CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

The company sees the importance of putting its business online, so the Website is created. Followings are advantages that the company and customers will gain after the completion of Website development:

- (a) The company will now be open 24 hours a day and 7 days a week, which means customers can get information about the company at any time they want.
- (b) Customers can communicate with the company's staff easily at their convenience.
- (c) Business will be expanded to wider audience including people from foreign countries.
- (d) This Website creates brand awareness for the company.
- (e) The company can improve the efficiency of its services by getting responses from customers.
- (f) Website helps reducing cost and time to approach customers.
- (g) It is easy to update any information about the company on Website.
- (h) Website can support customers in terms of information and help online.
- (i) The Internet is a new business channel for the company.
- (j) The company will have closer relationship with customers.

The company finds it reasonable to create a Website because the cost is not too high and will benefit the company in long term. After calculating cost and revenue of the Website, the company finds that the break down point is approximately 2 years, which makes this project very promising to push forward.

In order for a company to survive in today's business, it must find ways to stay ahead of competitors. The Internet is one way to go about it. There is still room for business to expand. Just like every other technology, the Internet has its pros and cons. The company has to choose the right ones. The more the company knows or can predict about the future will be the better for it.

7.2 Recommendations

There are several things that this company could do with its Website and business to help improving its performance. Following are some recommendations that might help the company:

- (a) Keep updating any new information on the Website as often as possible.
- (b) Change the design every year in order to keep the Website interesting.
- (c) Expand variety of supplies and services.
- (d) Be up-to-date with new technologies, especially those concerns the Internet.
- (e) Maintain relationship with old customers and improve customer services to keep them satisfied.

It is always wise for a company to keep updating itself to stay up there with other competitors. Not only that, a company must keep up its good works and try to provide better services for customers. Good products can only attract customers for their first impression, but great services are what keep them coming back.

There is so much we can do about online payments in construction services and supplies Website like this. The more money involved, the more complicated it gets. People will not trust an unknown company to do their 10 million Baht project. In the meantime, they will not want to put their credit card number to buy concrete materials worth millions of Baht for sure. What a company can do is to keep improving their

services via Website, such as offering instant response for any inquiries and providing wider selection in Supplies section.

E-market is still wide open for new comers. If any online businesses stop learning and improving, the new ones will come along and take their places. For any offline business, the right time to go online is now. The Internet helps people from all around the world to connect with each other. Business must take this opportunity to widen their audience. It is not just local anymore; it is the world now.





APPENDIX A

WEB INTERFACE DESIGN

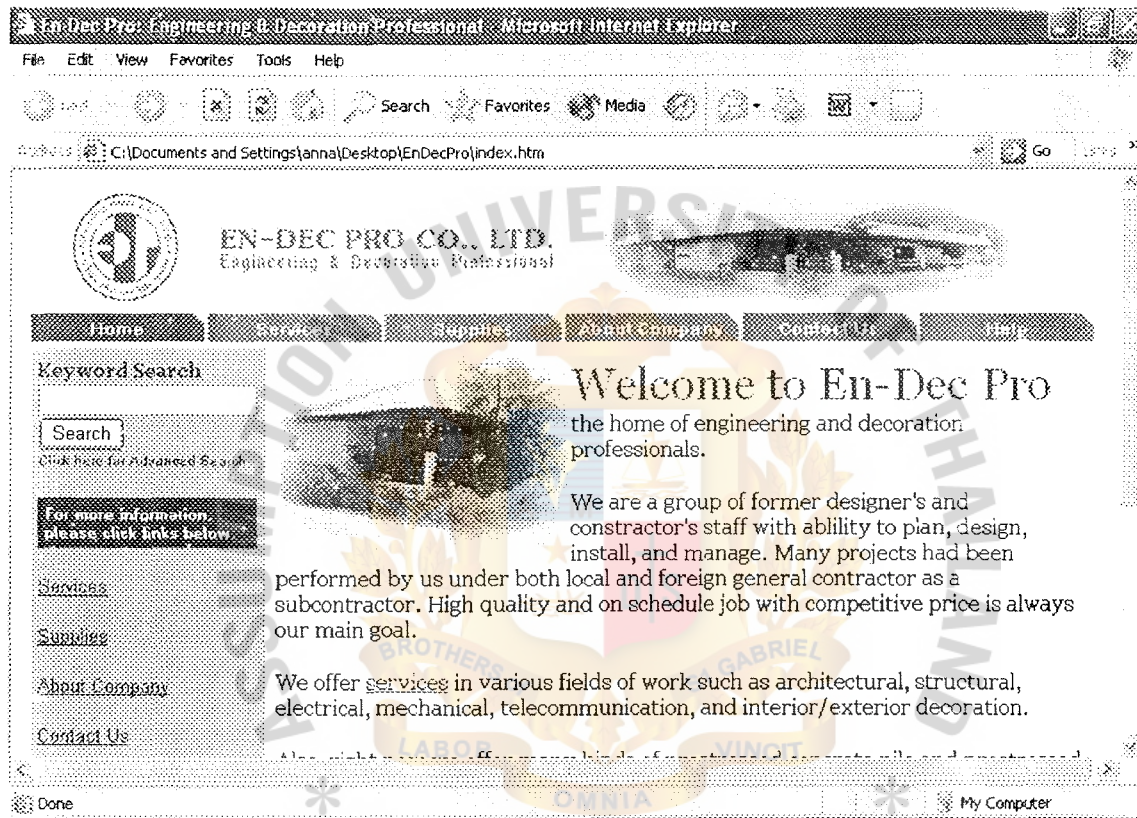


Figure A.1. En-Dec Pro Home Page.

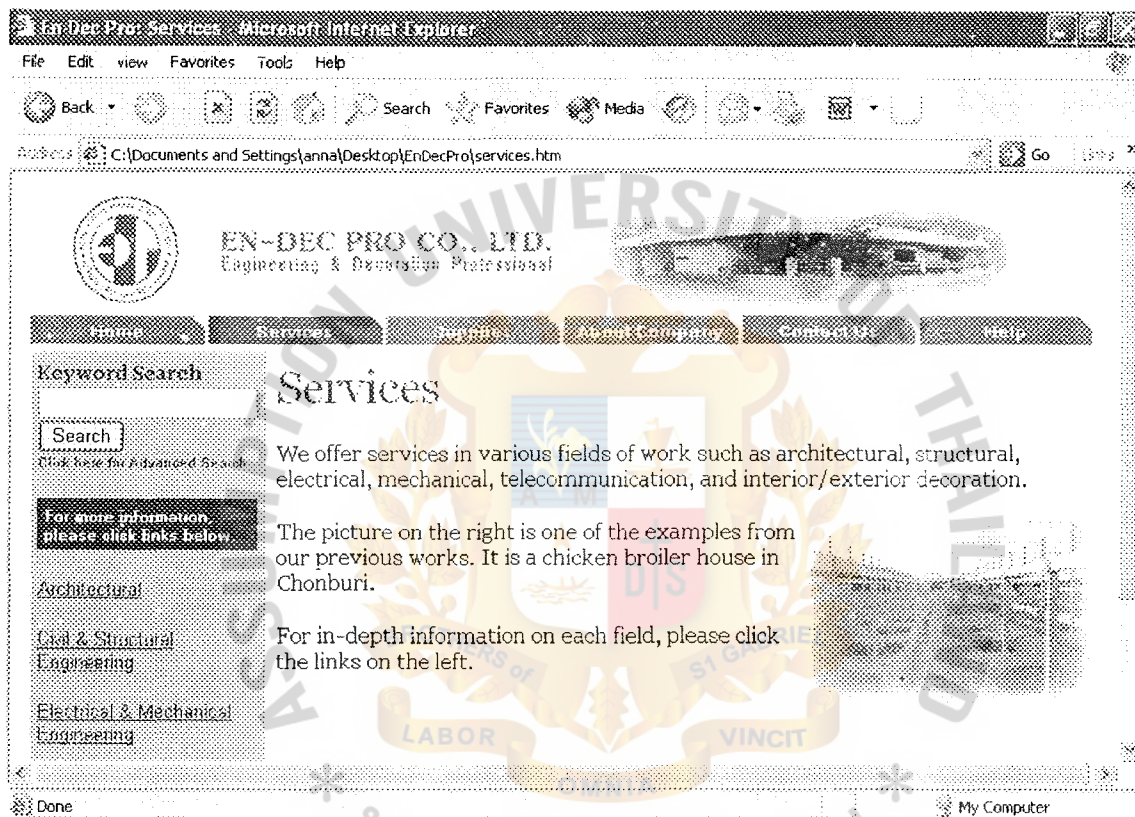


Figure A.2. En-Dec Pro Services Page.

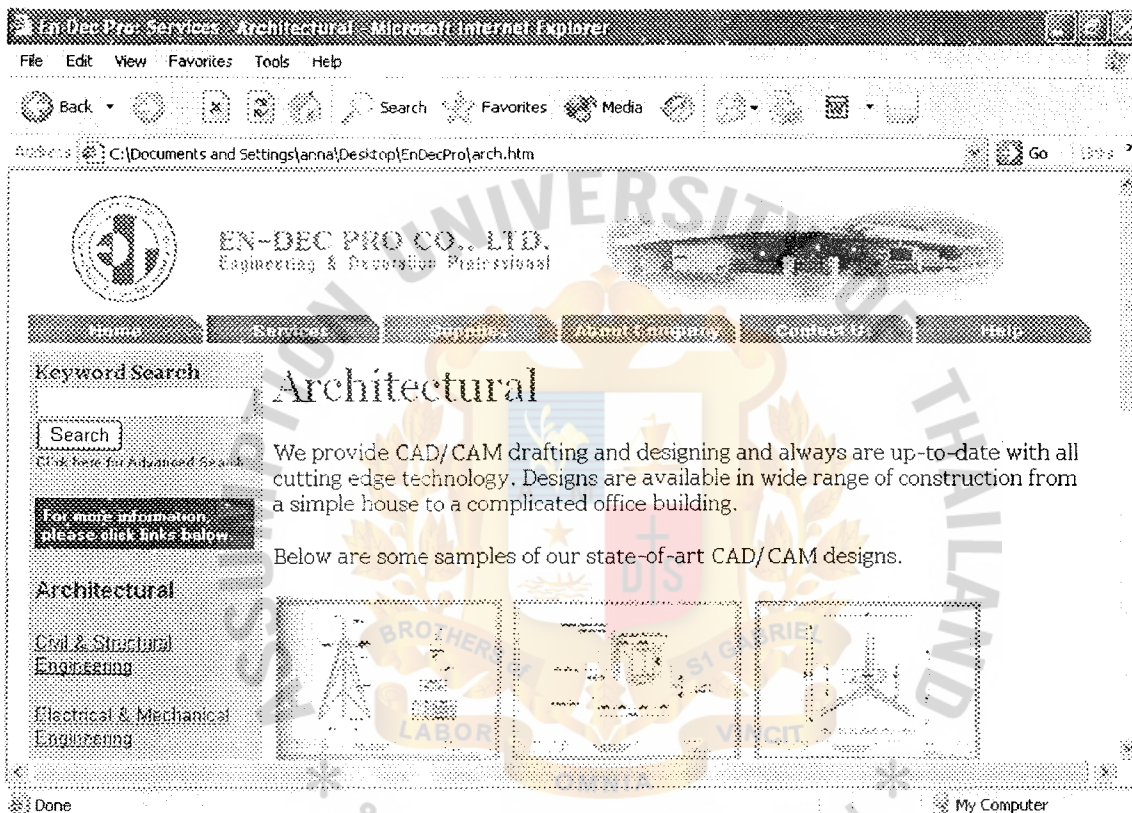


Figure A.3. En-Dec Pro Architectural Page.

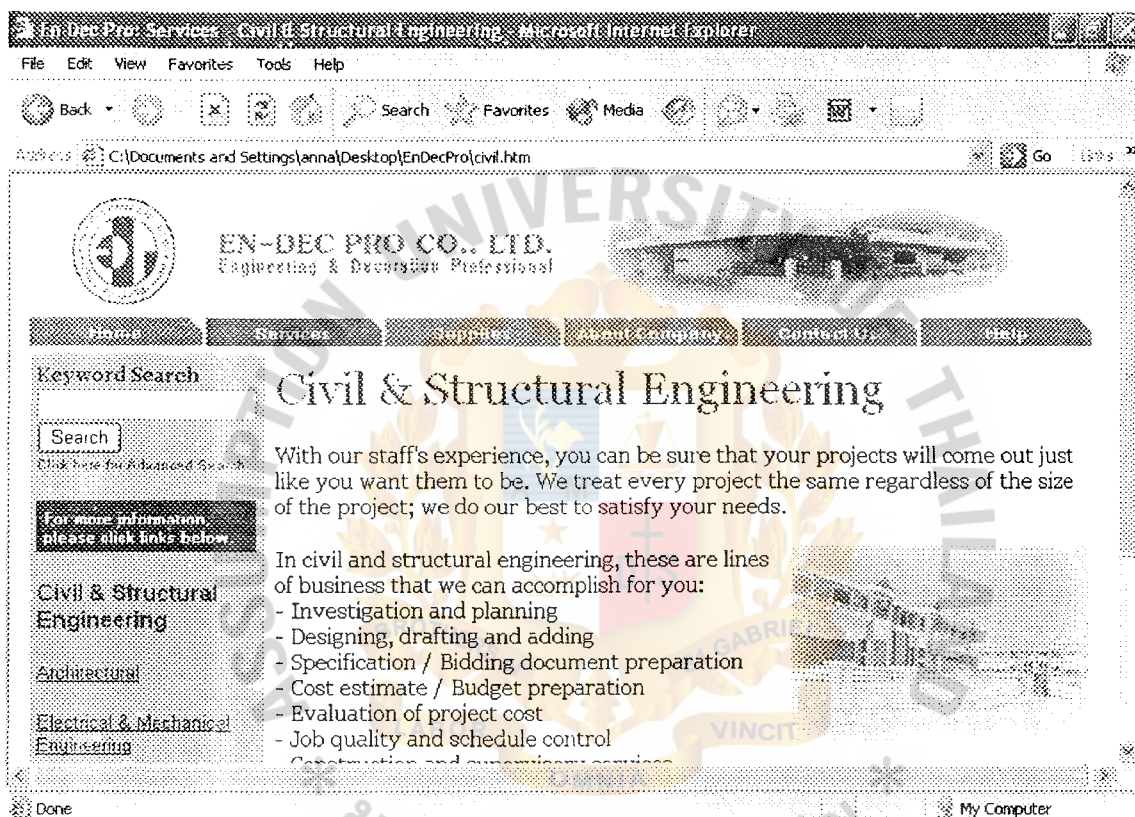


Figure A.4. En-Dec Pro Civil & Structural Engineering Page.

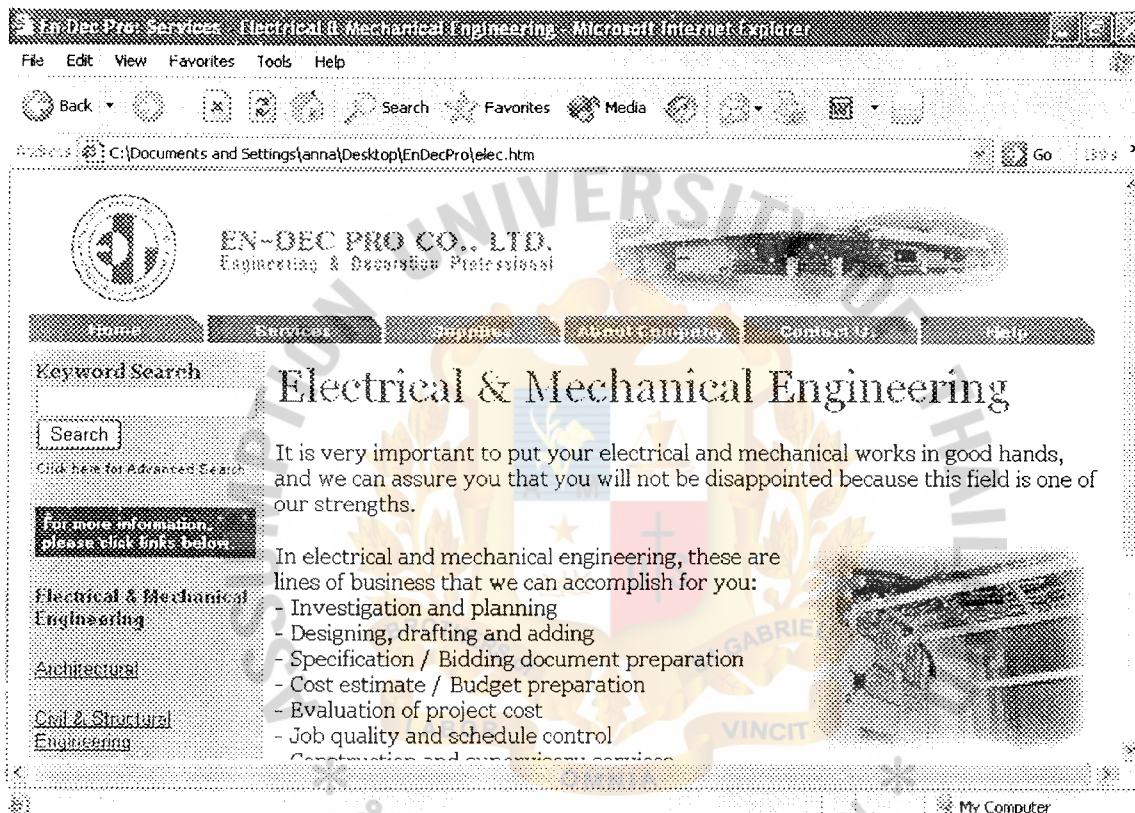


Figure A.5. En-Dec Pro Electrical & Mechanical Engineering Page.



Figure A.6. En-Dec Pro Telecommunication Construction Page.

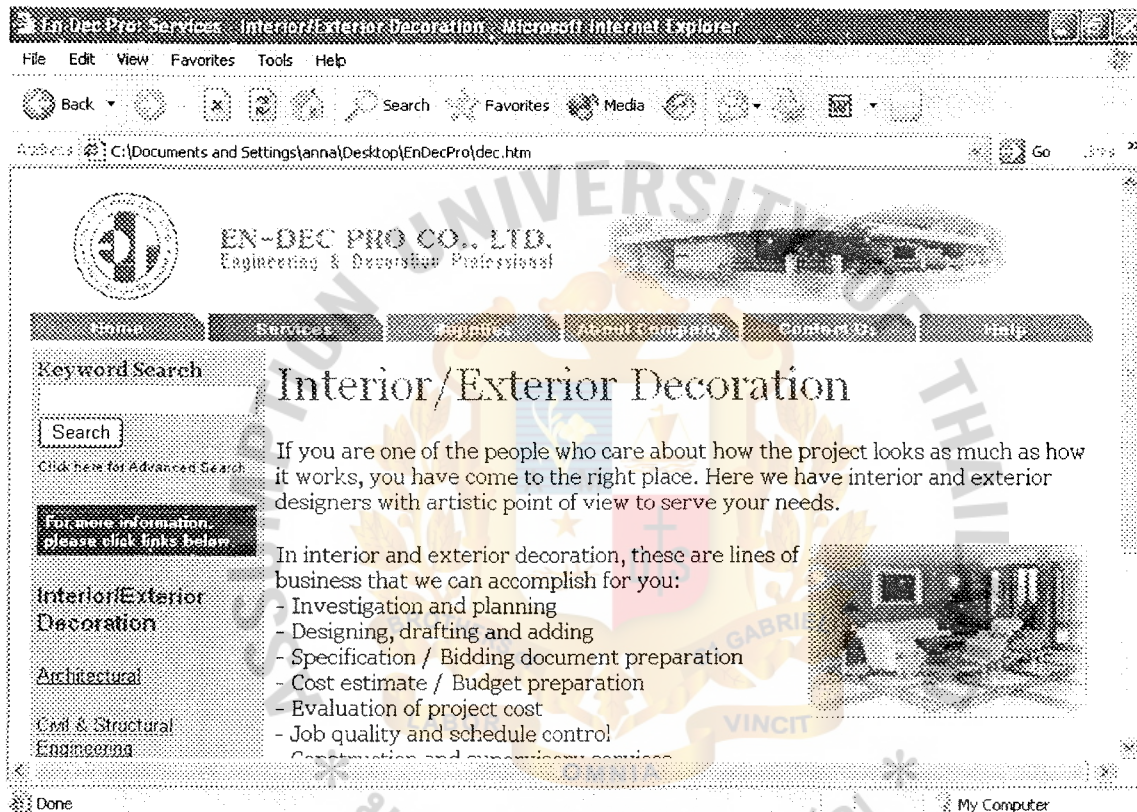


Figure A.7. En-Dec Pro Interior/Exterior Decoration Page.

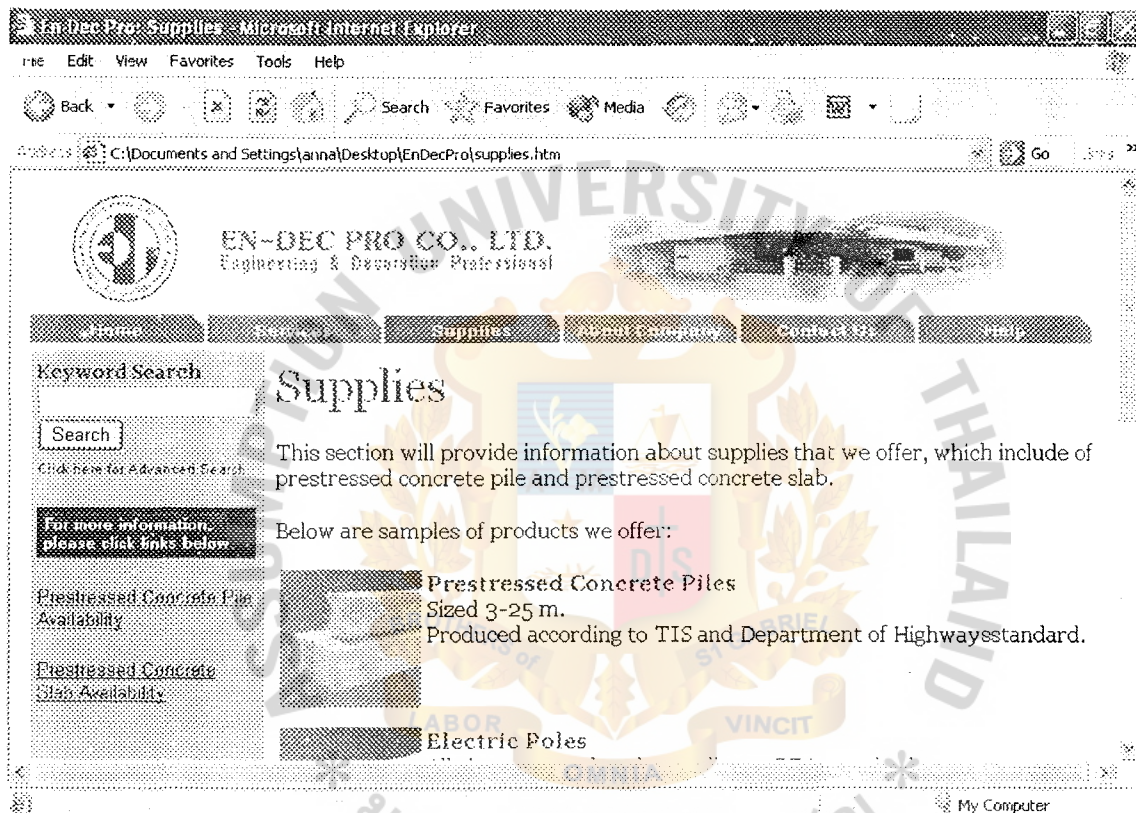


Figure A.8. En-Dec Pro Supplies Page.



Figure A.9. En-Dec Pro About Company Page.

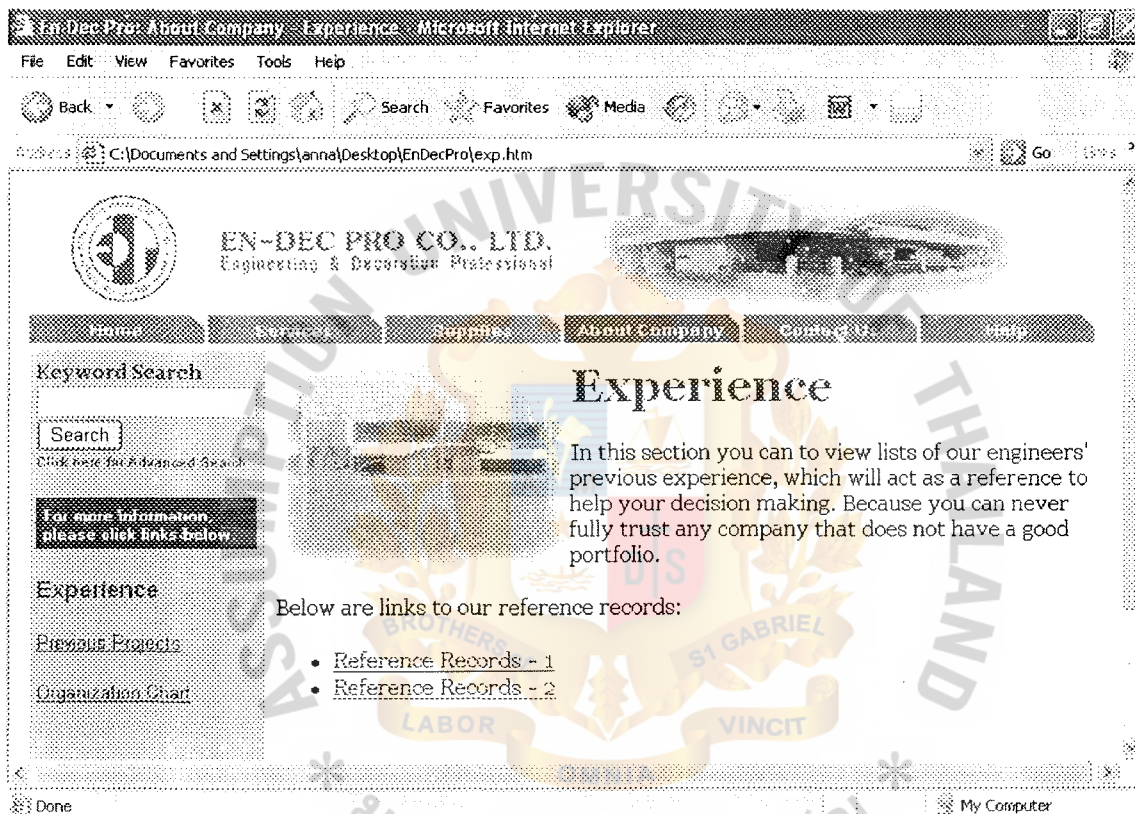


Figure A.10. En-Dec Pro Experience Page.

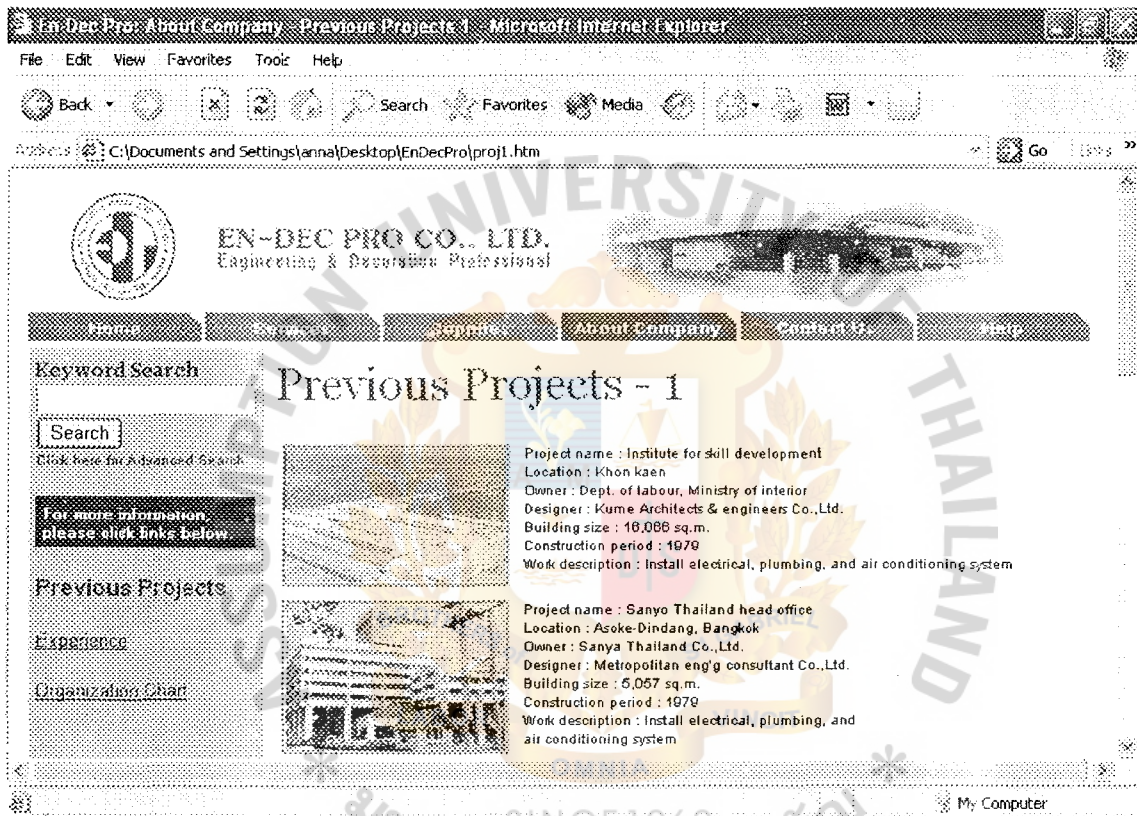


Figure A.11. En-Dec Pro Previous Project Page.

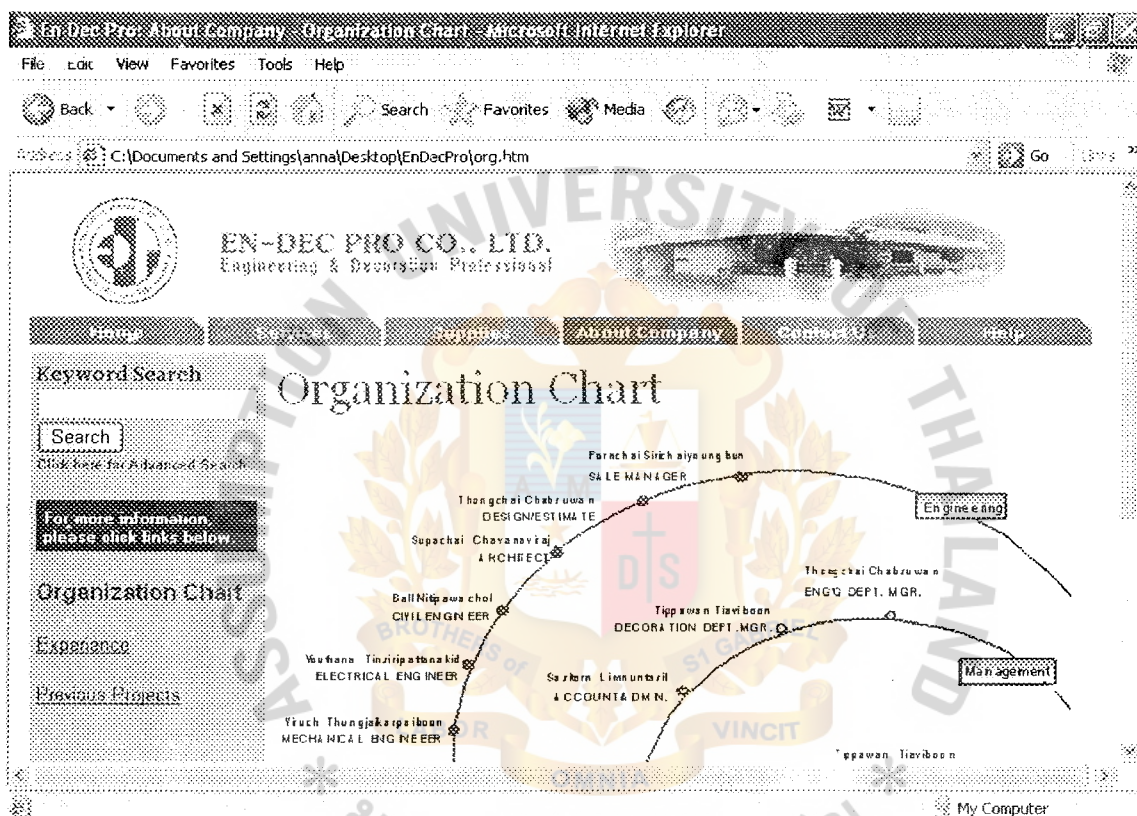


Figure A.12. En-Dec Pro Organization Chart Page.



Figure A.13. En-Dec Pro Contact Us Page.

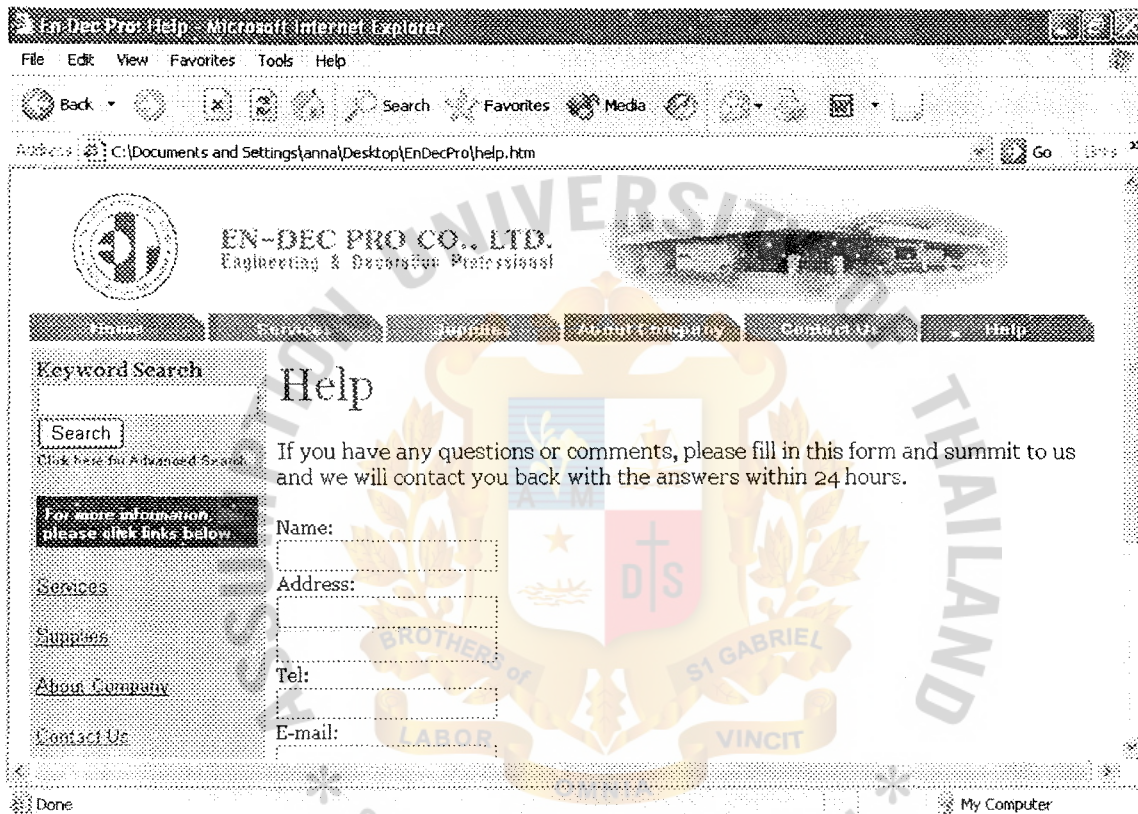


Figure A.14. En-Dec Pro Help Page.

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