



ONLINE MARKETING APPLICATION FOR A HOSPITAL

by

Ms. Itsarapa Sanitprachakorn

A Final Report of the Six-Credit Course
CE 6998-CE 6999 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Computer and Engineering Management
Assumption University

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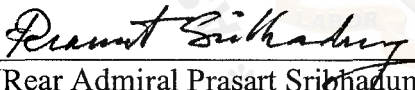
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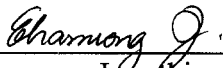
Academic Year March 2003

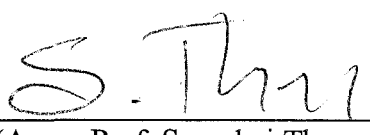
The Graduate School of Assumption University has approved this final report of the six-credit course, CE 6998 – CE 6999 PROJECT, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer and Engineering Management.

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March 2003

ABSTRACT

Online Marketing Plan Application for a Hospital will focus creating an effective and efficient channel of communication by analyzing and designing a user friendly website. This project can be separated into three main parts: current marketing plan and activities of this hospital, proposed system and new harmonized marketing plan and strategies, and Web design and implementation.

The first part, the current marketing plan and activities, consists of background of the hospital and current business model. Also there are some marketing materials presented.

The second part, proposed system and new harmonized marketing plan and strategies, consists of new proposed system with new marketing plan and full utilization of website.

The third part, web design and implementation, consists of the web design detail together with how to publicize this website.

www.mitraparphospital.com will mainly provide services and information on hospital and health care, update information. The objective of this website is to enhance brand and add value to existing services.

ACKNOWLEDGEMENTS

The writer would like to acknowledge people who have made great contribution to this project. Their assistance was more than she could ask for.

Firstly, she would like to thank and give my sincere appreciation to Rear Admiral Prasart Sribhadung, her project advisor, for guiding, advising and providing endless assistance to make this project complete

Secondly, she would like to thank Siam2you Co., Ltd for a great employment opportunity which lead me to become interested and able to acquire invaluable knowledge of web development.

Thirdly, the writer would like to thank, Dr. Panom Sanitprachakom, M.D., D.C.E.H., F.I.C.S of Mitraparp Memorial Hospital for providing invaluable information about his hospital.

Fourth, the writer would like to thank, Mr. Sangserm Panutaiwat, a marketing executive of SCT Co., Ltd for his timely assistance and information.

Finally, the writer would like to express her sincere gratitude to all instructors of the faculty of Computer Engineering Management of Assumption University who have been so kind and supportive through out her study.

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I. INTRODUCTION

1.1 Background of the Project

In the fast moving and constantly changing global business environment, Information technology is unquestionably necessary in the process of technological, industrial, social and human development around the world. Business is now focusing on continuous improvement, business process re-engineering, cost-saving, invention of new marketing techniques, added-value to product and service and delivers promise, services, satisfaction and delight to our customers faster. Once again the advent of internet has enabled us to achieve these focuses never before attainable efficiently and effectively. There is no-end in exploring improvement and benefit of internet. It is a must for companies to at least have a website to provide a new channel to gain advantage over its competitors. E-commerce expands the marketplace from local to international market no matter what time-zone the customers are in. Effectively designed system improve process, decrease cost of storing, distribution and retrieving information while delivering customer delight and satisfaction.

Having some valuable experiences working in the web design and development field and involvement in this industry, I can see the necessity and tremendous benefits of having a website. I would like to propose a web project that could enhance marketing process and activities and at the same time, evolve the traditional marketing activity of a hospital. A lot of business in Thailand has geared toward utilizing more Information Technology, Internet and E-commerce in part of their business or even in conducting the business model. A Hospital is also gaining more insight on utilizing technology in improving process and communicate interactively with patients, another word, customers. However, this trend has not been growing outside of the Metropolitan

area. It is, therefore, very challenging to design a web site for a suburban hospital, where most people in the area do not have access to the internet. But this does not stop the idea of being a leader or providing a higher service level to customers. And also the number of internet users has grown tremendously in Thailand.

Mitraparp Memorial Hospital Saraburi is a leading hospital in the Saraburi Province and also one of the well-celebrated hospital in Thailand. My uncle is one of the founders of this hospital. So this project, hopefully, could benefit from strengthening corporate image for Mitraparp Memorial Hospital under the hospital philosophy,

"Your Friendly Hospital." The online marketing communications will focus on the position of Mitraparp, which is one of the best hospital web sites in Thailand that promotes living healthy issue. And last but not least, this web site is designed to primarily provide more value added service and create a competitive advantage for his hospital.

1.2 Objectives of the Project

To develop a website as an online application for a hospital with the following objectives:

- (1) To analyze the existing marketing plan and strategy, in order to effectively design new system and explore on-line marketing activity and opportunity.
- (2) Boosting the existing hospital name with the website together with the existing marketing means to strength the corporate image.
- (3) Create effective and efficient interactive communication channel for interested persons, new prospect, and new customer (patient).
- (4) To provide useful information, knowledge, news and industry trend for anyone is concerned and/or interested in health and medical topics.

- (5) To reduce paper base system marketing materials and redundancy.

1.3 Scope of Project

- (1) Background of the Hospital, Business Model and Marketing Problem
- (2) Current Marketing Strategies and Activities
- (3) Proposed New System, Strategic and Tactic, develop and design new system, site structure, cost and benefit analysis.
- (4) New marketing plan, FAQ, target market, industry trend and outlook, SWOT analysis
- (5) Web design and implementation, proprietary update application, and a prototype of the web site.

1.4 Deliverables

- (1) A Detailed final report covers the afore-mentioned scope.
- (2) A prototype of "www. mitraparphospital. corn" web site

1.5 Key Consideration to the Success of Website

Putting some thought into your web site can help make sure it works. Below are important criteria that one should seriously consider in building up a web site.

There's more to a website than putting together a few pages of HTML and then publishing it. A successful website takes time to plan and design.

The first myth of the Internet is that it is about technology. The problem with this is that being new we tend to focus on the medium (technology) and not on the message. In terms of the Internet, technology is still part of the problem in that we still suffer from poor performance and slow connections, making some of the tools available inappropriate to the audience.

So before worrying about the technology, consider these five steps that will help us better understand how the Internet can work for the business.

Know and Deeply Understand our customer. More than any other medium, the Internet is a personal experience. Simply put, everyone usually surf Internet alone. So a great website has to create experience that makes sense for user and that convinces user that we are the people they really want to deal with (in other words become our customer).

Above all, we want our website to engage the user. To achieve this, we must start thinking like the user or customers. This is not as difficult at all, but it does need plan and correct implementation. Basically learn from the existing customers, ask them about how they use the Internet. Ask them what they would use our website for, for example they might prefer to "visit you in person" but have a website available to "research a purchase or to offer them support tips and guidance", as this turn out to be a strong point for hospital or any other services.

Look at websites of other companies that most people know and respect, in any industry both local and overseas. Try and find a point of difference that will give customers something extra, something that keeps them coming back to our website. Organize Information. Most users need to be able to find what they want quickly and, when they find it, they need to understand it and then do something with it. Designing a website that reflects the needs of the user, that carefully considers what different people want to do and why it is known as information architecture.

This is the art of organizing information so that it is logical, accessible and meaningful for your visitors. The biggest mistake that any company can make with its web presence is to design for itself. You are not the customer, your customer is!

There is a lot of talk about websites needing to be more than "brochure ware" to add value and that the Internet is an interactive medium. This is true but to effectively and efficiently start out on the Internet, keep it simple and treat the process as an evolution not a big bang experience. As the organization learns by listening to feedback

and by tracking who is using the website and what business it generates, then it is the time that one should expect to review, revise and refine both the structure and the content.

Look to add value wherever possible. Make it easy for potential customers to get hold of the organization, have an electronic contact point identified on every page; if a customer is surfing he or she doesn't necessarily want to have to pick up the phone. When a customer does email us, we should reply immediately. Email is immediate, quick response is the most crucial point of having another channel to contact. Slow in responding gives the impression that we do not care and that we do not understand the medium! Simultaneously consider these points when organization is planning to create website, not afterwards.

If we want user, prospect or customer to keep coming back to our website then the content needs to change regularly. Sources of information, such as newsletters, news, facts, FAQ, discussion forum, expert's opinion or product updates, must be applied to the website. Make sure that information we plan to use on the site is useful, relevant and accurate.

When new product is introduced or old service is discontinued, we must immediately change information on the website. Also consider a process that could help reduce redundancy by automating and so that it will be a simple process for organization and staff.

Design. The website is another shop front, a key part of the impression an organization give potential customers of our business, it is worth putting professional effort in doing this properly.

Presumably we already have a company image that we use for other marketing material and stationery. This should be carried over to our website but be aware that it

could require some adjustment to work effectively in this new medium. Before we start, consider how our traditional image will translate to the Internet and communicate effectively.

Promotion. Below are some examples of the Promotion Strategy:

When carmaker Volvo set up their US web site, they saw young, upwardly mobile early adopters of the Internet as potential Volvo buyers. Volvo used banner advertisements on many of the major websites but quickly discovered that this didn't work. It was not long before Volvo fell back to simply placing their web address on traditional advertising and publicity material and this has proven much more successful in attracting visitors. Banner advertisements are only seen to work for the top one or two sites, the New Zealand Herald considers them a success but they are one of those top traffic site.

Even pioneer US music "e-tailer" CD-Now found that the cost of banner advertisements was greater than the revenue they generated. CD-Now invented the affiliate program but for affiliates themselves this is often a difficult (if not impossible) way to make money.

As Volvo found in the early days of the Internet, often the best form of publicity is the traditional kind. The Internet is too much of a niche environment for traditional broadcast advertising. (www. zdnet com)

Techniques that work can include placement links on related web sites (such as professional or industry organizations), using search engines to ensure that people can find us (but don't rely on these as they are notoriously fickle and often slow to update) and finally and not to be underestimate, word of mouth.

Cost/benefit of website. We might have initially considered our website as an expense (not an investment), part of your marketing budget. Even if we do, it is still important to

be able to understand what business we are expecting the site to generate. This is still true even if the site's purpose is secondary, such as people using the site to research our products and services before they visit you to purchase. The website is all part of your overall "branding".

Our website can be an opportunity to reduce costs in other areas and, in doing so, increase levels of customer service. Many service-based companies have discovered that up to 80% of customer service calls are for basic information that could easily be provided on a website. FAQ's, or frequently asked questions, are a perfect way to do this. In a small business, being able to resolve the simple questions or providing product specifications without having to divert valuable resources from the real issues that do require that human touch is invaluable. It means that when a customer really does need personal service, they can get it and it also means that customers don't need to spend their afternoon listening to hold music just to get answers to simple questions.

To summarize, think before we build. Plan what our website is going to, understand who our audience is and what they want from our website. Understand how to relate information together on our site so that it is relevant and meaningful. Plan how you intend to raise the profile of our website so that people know about it, want to visit it and then have a reason to come back. Identify opportunities for improving our customer service and for freeing up people in our business to do their real jobs and add real value to our customer's experiences. Finally, having done all of this, it is time to go ahead and build it so that it enhances our brand and gives our customers a value-added experience!

II. LITERATURE REVIEW

Center

2.1 Benefit and Limitation of Internet Technology

Few innovations in human history encompass as many potential benefits as Internet does. The global nature of the technology, low cost, opportunity to reach hundreds of millions of people, interactive nature, variety of possibilities, and resourcefulness and rapid growth of the supporting infrastructures result in many potential benefits to organizations, individuals, and society. These benefits are just starting to materialize, however they will increase significantly as Internet expands. It is not surprising that some maintain that the Internet technology revolution is just "as profound as the change that came with the industrial revolution."

2.2 Benefits to Organizations

- (1) Internet Technology expands the marketplace from local, national and international markets. With minimal capital investment, a company can easily and quickly reach out to more prospects, customer, suppliers and even the most suitable business partners globally.
- (2) Internet technology decreases the cost of creating, processing, sourcing, distributing, storing, and retrieving paper-base information.
- (3) Internet technology allows reduced inventories and overhead by facilitation "pull" type supply chain management. In a pull-type system the process starts from customer orders and use just-in-time manufacturing. This could never be done so efficiently without the advent of Internet technology.
- (4) The pull-type processing enables expensive customization of products and services, which provides competitive advantage to its implementers.

II. LITERATURE REVIEW

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- (5) Internet Technology reduces the time between the working capital requirement and the receipt of products and services.
- (6) This Technology support business processes reengineering efforts. **By** changing processes, productivity of salespeople, knowledge workers, and administrators can increase tremendously.
- (7) Internal and External Communication cost can be reduced tremendously.
- (8) Other benefits include improved image, improved customer service, opportunity to find new business partner, simplified process (if reengineer correctly), reduction in time and increase productivity, eliminate the paper utilization, expediting access to information, knowledge management, reduced transportation cost and increased flexibility.

2.3 Benefits to Consumers

- (1) Internet Technology enables customers to shop or do other transactions 24 hours a day, all year round, from almost any location.
- (2) Internet Technology provides customers with more choices; they can select from many vendors and from more products, which they may have never seen before.
- (3) Electronic commerce frequently but not always provides customers with less expensive products and services by allowing them to shop in many places and conduct quick comparisons.
- (4) Customers can receive relevant and detailed information fast instead of waiting days or weeks for the delivery of information. Even some products can be delivered faster, especially digitized product, such as e-magazine.

- (5) Internet Technology allows and enables customers to interact with other customer s in electronic communities and exchange ideas as well as compare experiences.
- (6) Electronic commerce facilitates competition, which result in better entrepreneurial ideas to serve customer. Customers can benefit greatly from reduction in price and better services.

2.4 Technical Limitations of Internet Technology

- (1) There is a lack of system security, reliability, standards, and some communication protocols.
- (2) There is insufficient telecommunication bandwidth, especially for the country that is not fully developed or having an old system that is in place which requires huge investment to convert.
- (3) The software development tools are still evolving and changing very rapidly, which is quite difficulty to keep up.
- (4) It is difficult to integrate the Internet and E-Technology software with some existing applications and databases, especially the older version.
- (5) Vendors may need special Web servers and other infrastructures, in addition to the network servers.
- (6) Some EC Software might not fit with some hardware, or may be incompatible with some operating systems or other components.
- (7) As time passes, these limitations will lessen or be overcome; appropriate planning can minimize their impact. Also it is not necessary to design the system in-house. The global trend now is to outsource of the work and function from the professional, so the professional can assist and overcome these hurdles accordingly.

2.5 Non-technical Limitations

- (1) Cost and justification. The cost of developing correct and working website can be very high, and mistakes due to lack of experience may result in delays, there are many opportunities for outsourcing but where and how to do is not as simple as one might think. Furthermore, to justify the system one must deal with some intangible benefits, which are difficult to quantify.
- (2) Security and privacy. These issues are especially important in the Business to Consumer area, especially security issues that are perceived to be more serious than they really are inappropriate encryption is used. Privacy measures are constantly improved. Yet, the customers perceive these issues as very important, and the Internet industry has a very long and difficult task of convincing customers that online transactions and privacy are, in fact, fully secure.
- (3) Lack of trust and user resistance. Customers do not trust an unknown faceless seller, paper transactions and electronic money. So switching from physical to virtual stores may be difficult. Many companies have adopt both physical store and electronic store to overcome this limitation and hope to gain competitive advantage over the electronic store only type of business.
- (4) Lack of touch, feel, smell and taste online. Some customers like to see and touch the real items such as clothes and like to know exactly what they are actually purchasing. Some buyers have a hard time to visualize what the real product looks like if they have not seen one physically.
- (5) Many legal issues are as yet unresolved, and government regulations and standards are not refined enough for many circumstances.

- (6) Electronic commerce, as a discipline, is still evolving and changing rapidly. Many people are looking for a stable area before they enter into it.
- (7) In most cases there are not yet enough sellers and buyers for profitable Electronic Commerce operations.
- (8) Accessibility to the Internet is still expensive and/or inconvenient for some potential customers. However the growth rate is still very high for some countries.

Despite these limitations, rapid progress in Electronic Commerce is taking place. For example, trading stock online especially in United States. Tracking worldwide shipment if utilize a courier service such as Federal Express. As experience accumulates and technology improves, the ratio of Internet Technology benefits to cost will increase, resulting in many new ideas of implementing and greater rate of adoption.

The potential benefits may not be convincing enough reasons to even start having a website or create activities online, much more compelling are the business drivers that may force companies to engage in Internet Technology.

Internet User Profile of Thailand 2002

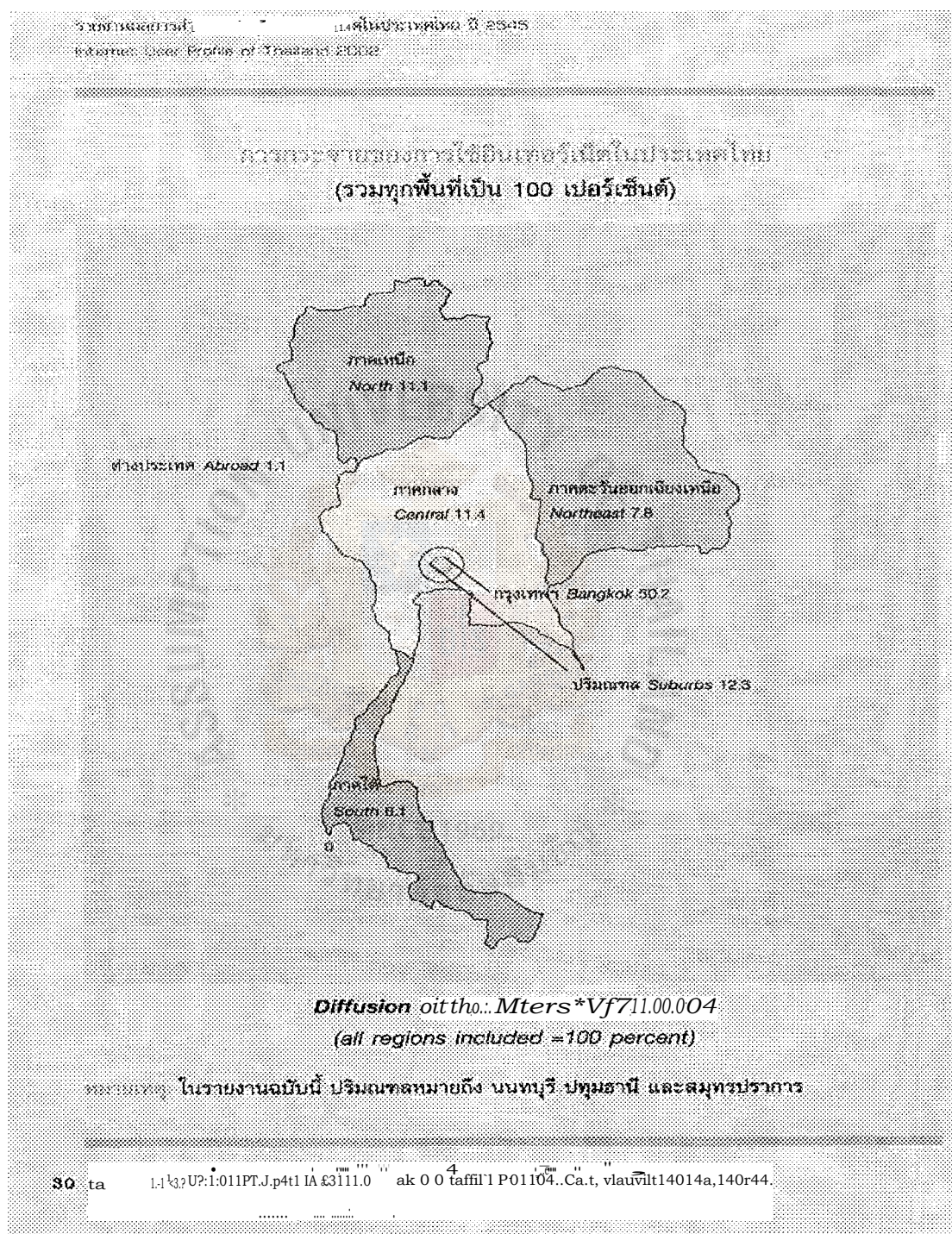


Figure 2.1. Diffusion of the Internet in Thailand.

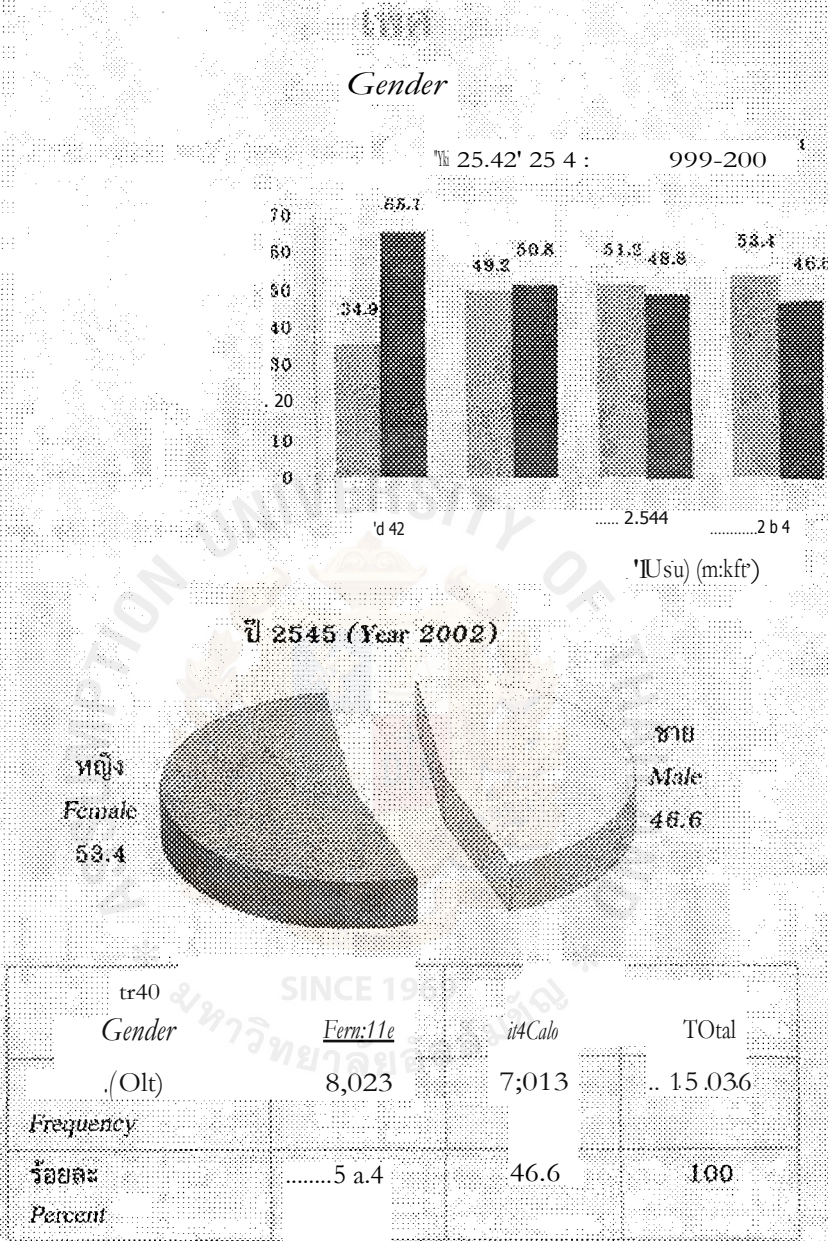


Figure 2.2. Flowchart of Gender.

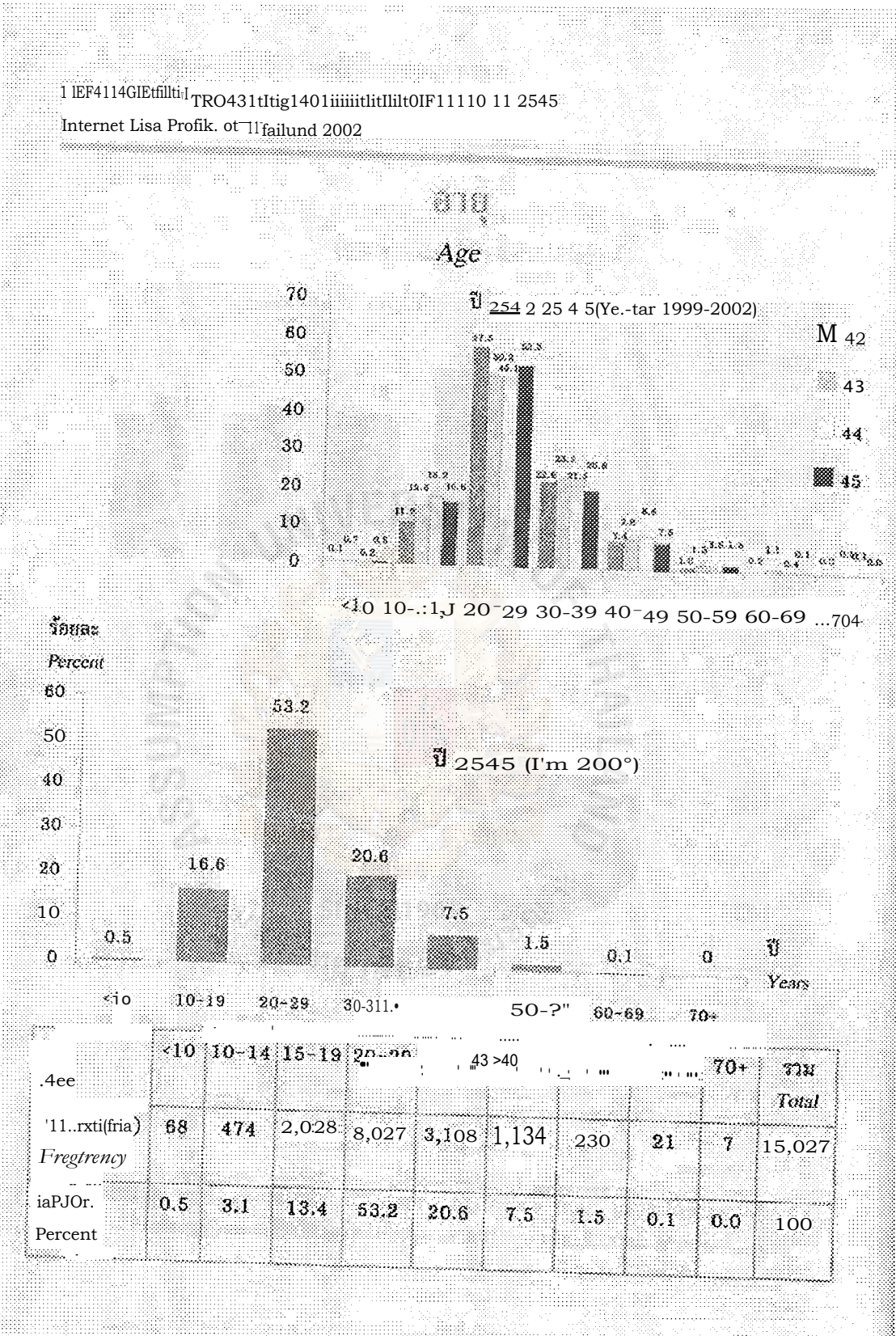


Figure 2.3. Flowchart of Age.

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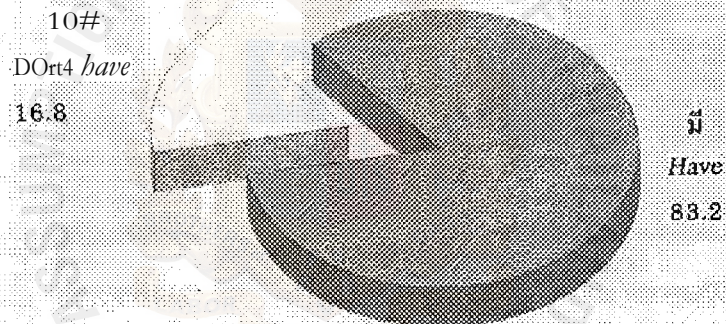
สาขาการศึกษา Major of Education	914111 (AU) Frequency	ร้อยละ Percent
11711109110V4 Laatt. 11trFin111 Mettlewe, lieaitheaac.	573	3.9
iim eanvtoibwooi main amp Liocrai AltS	449	3.1
คณิตศาสตร์ Mathematics	274	1.9
นิติศาสตร์ Law	240	1.7
เกษตรศาสตร์ ttni.1111161.1in tfl U17131 Agriculture	232	1.6
ระยุกต์ Statistics	1 B3	1.3
lni Fine sAii5	180	1.2
สถาปัตยกรรม134 0161.31itta 1175ผังเมือง Architi xturo	117	0.8
111'6111nii 1..*0/7d and lieverlige	64	0.4
ไม่มีสาขาเจาะจง No Major	988	6.8
อื่น ๆ Others	953	6.6
รวม Total	14,530	100

Figure 2.4. Flowchart of Major of Education.

การมีคอมพิวเตอร์ที่บ้าน

Home Computer Ownership

ปี 2545 (Year 2002)



การมีคอมพิวเตอร์ที่บ้าน	มี	ไม่มี	รวม
Home Computer	Have	Don't have	Total
จำนวน (คน)	12,363	2,499	14862
Frequency			
ร้อยละ	83.2	16.8	100
Percent			

Figure 2.5. Flowchart of Major of Home Computer Ownership.

Internet Activities

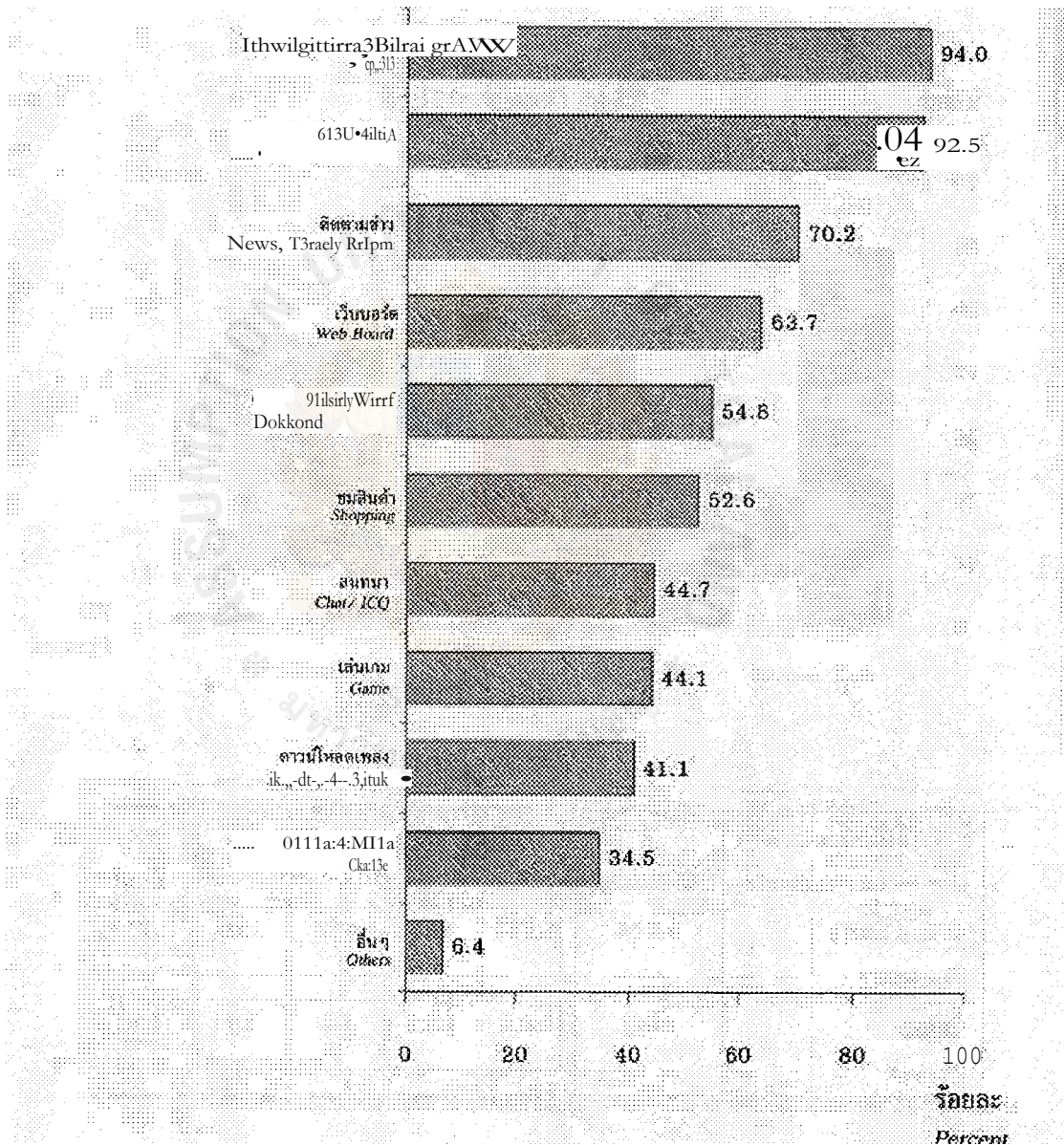


Figure 2.6. Flowchart of Internet Activities.

III. THE EXISTING SYSTEM

3.1 Background of the Hospital

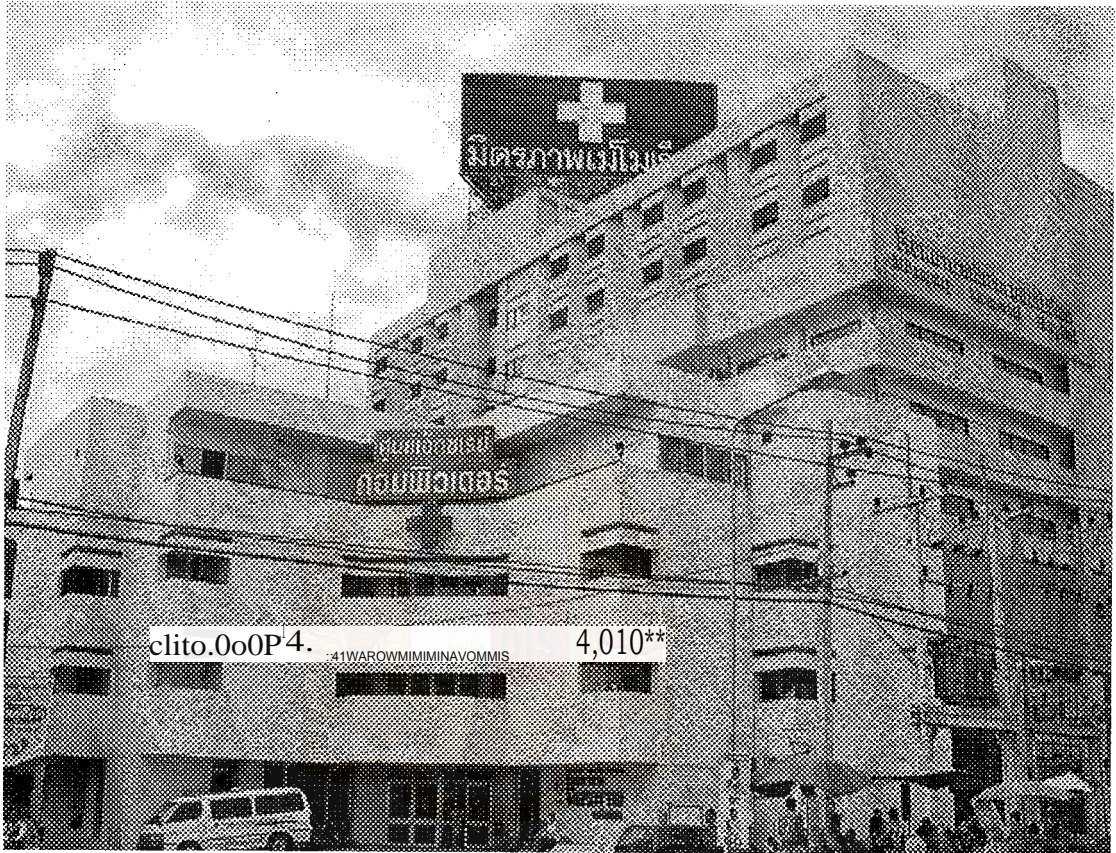


Figure 3.1. Background of the Hospital.

Mitraparp hospital was founded on 23 July 2524 with the cooperation of the group of doctors, businessmen and entrepreneurs. The hospital was registered as Mitraparp Company with a capital investment of approximately 30 million baht. The hospital has started out with one building containing 40 beds. As the operation and business improved, now the hospital has grown on to 4 building with 250 beds. **O.P.D** has been expanded since then. Diagnostic rooms have grown in number and size to accommodate growing population of the area. 24 hours emergency has been improved

tremendously. In addition the new state of the art X-Ray system and facility are operated since Year 2001.

Service Policy

Service based on Medical Ethic

"Your Friendly Hospital"

Special Service

Curative

Beauty surgery

Rehabilitation

Preventive

Promotive

3.2 Marketing Problems

There is no efficient and effective way to utilize one to one marketing activities. Since existing medium is too costly to operate for example, like sending news or quarterly newsletter through mail, publish hospital Public Relation Activities, i.e., donation and etc, since the cost might be too high in the case of a suburban hospital. Or even making phone call to remind and confirm patient of doctor's appointment, vaccination due date or Medial Check up because it is too costly for the hospital. There is also difficulty in trying to communicate or distribute promotional material efficiently to target existing patient.

3.3 Current Marketing Communication Strategy and Activities

At present Mitraparp hospital does not seriously consider marketing activities and communication as a crucial point for the success of the hospital. Reputation of the hospital is the most important fundamental strength to communicate to the public. Spreading word of mouth is very important and the only way to effectively

communicate to those who does not have experience with the hospital. Therefore effective communication are very limited. Below are some of the materials that Mitraparp hospital are distributing:

- (1) Donation and Public Relation Activities
- (2) Brochure (paper type)
- (3) Several leaflets with health tips and basic general knowledge, fun to read especially for the kids, targeted mostly toward parents and children, distributed at various location within the hospital such as counter top, waiting area, and etc.

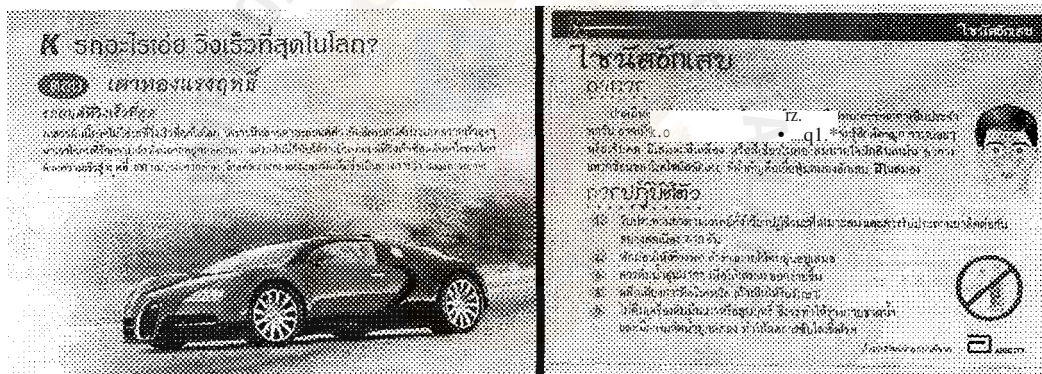


Figure 3.2. Card of Mitraparp Memorial Hospital.

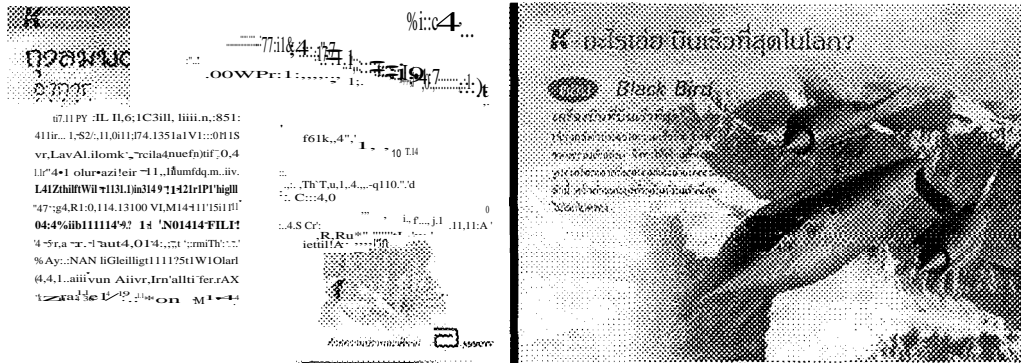


Figure 3.3. Card of Mitraparp Memorial Hospital.

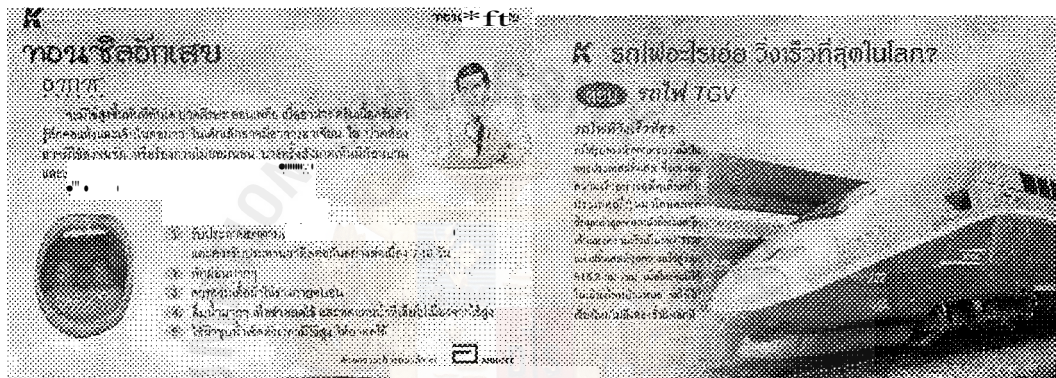


Figure 3.4. Card of Mitraparp Memorial Hospital.

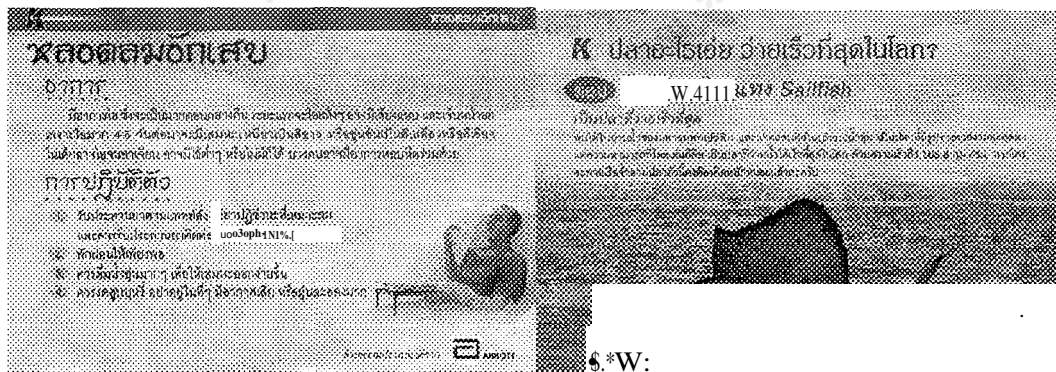


Figure 3.5. Card of Mitraparp Memorial Hospital.

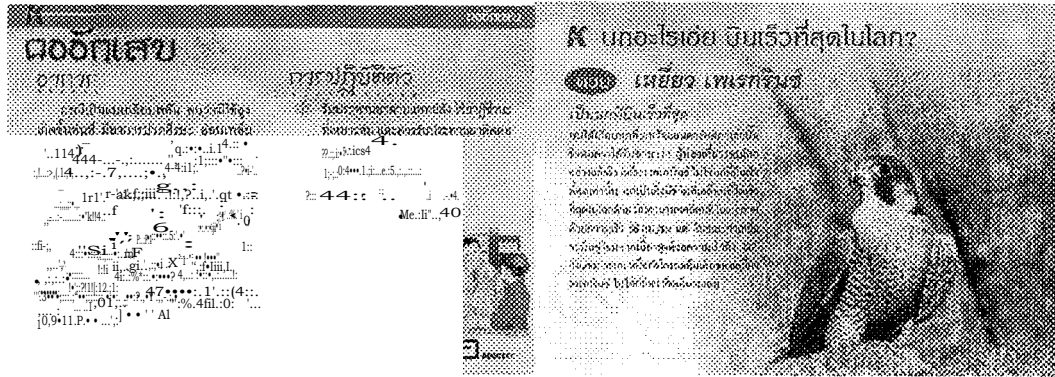


Figure 3.6. Card of Mitraparp Memorial Hospital.

- (4) Various Promotional Package for Health Check and discount on some medicines.
- (5) Seasonal package for rooms and x-ray

Please note that Mitraparp Memorial Hospital distributes the above materials only in the hospital area. There is no way the patient will receive this useful material without visiting the hospital. There is currently no mailing system.

As for outside the hospital, there are some small billboard, sign at posting at Saraburi Area to create awareness or to remind existing patients to always think about Mitraparp hospital. Outside of the Saraburi area, it is less likely that the public would even know the existence of this hospital.

IV. THE PROPOSED SYSTEM

4.1 Strategy and Tactics

The New Web Site "www.mitraparphospital.com" must be:

Online strategies

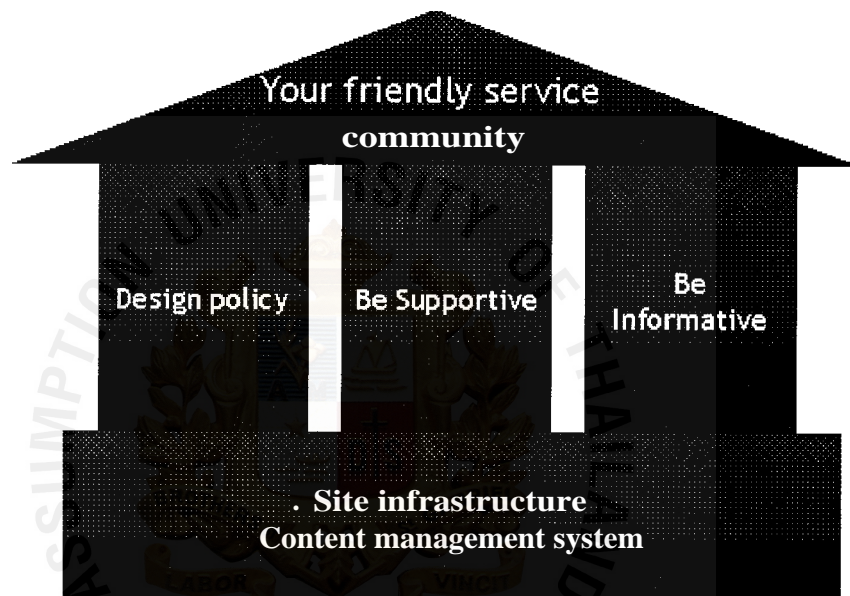


Figure 4.1. Flowchart of Online Strategies.

- (1) Focused on design policy of corporate image which communicates in the concept of "Your Friendly Hospital"

Both offline and online marketing communications must be harmonized. They must follow "Your Friendly Hospital", the philosophy of this hospital. Using blue and green colors to stress brand presence, friendliness and using human or family lead graphics in a modern and western style to create a human touch for better living and better health. The person who visits the site should feel like they are in the hospital

meaning and trying to create a stylish atmosphere but strictly follow the hospital's philosophy.

The Mitraparphospital.com creates the new look and feel the same direction for each branch that fits with Mitraparp logo "Your Friendly Hospital". The target market can perceives Mitraparp Memorial Hospitals as friendly when they think of health care and also perceive Mitraparphospital.com as the best hospital website in Thailand that promotes living healthy issue and provide comfortable services like the Partner for visitors' Life.

(2) Informative

The web site will contain useful and full information about Mitraparp Hospitals, the specialized clinics, and an interesting activity. Not only company and service information, the web site also contains useful information about health tips, food for health, health news, and other information for people who are concerned about their health (Value Health Content). More text contents will be beneficial for them so that they can know and understand more in everything about health care.

(3) Supportive

Mitraparphospital.com must support possible interactive and personalized services for their users target which they can feel closer to the web site. More interactive services can attract user target visiting the web site more frequently and they can find the easy way to get what they want by just clicking their mouse. With no limitation of boundaries for using Internet, the web site can save time to request prior information needed from user target.

They can check a doctor's schedule and then make an online appointment. They also can select personalized service that fit to their own so that they feel free when visiting the web site. Supporting more interactive and personalized services to them can make them feel that the web site is a friendly partner who always stands by them for consulting in health care.

Customer Responsive

Most of all we want to create a hospital community within the website. We can start off with a discussion forum, where users can come in and post a question that could be both answered and shared knowledge by not only the expert and doctor, but also an experienced patient as well. However this community has to be closely monitored to prevent any fraud or false intention to deteriorate hospital reputation. The subject of this forum are strictly limited to health related issue such as how to take care of the children when they have a cold or what should a patient do to maintain good health and etc.

4.2 Web Structure

Mitraparphospital.com will be in Thai language. The site will be consists of 6 main sections:

Mitraparphospital. corn

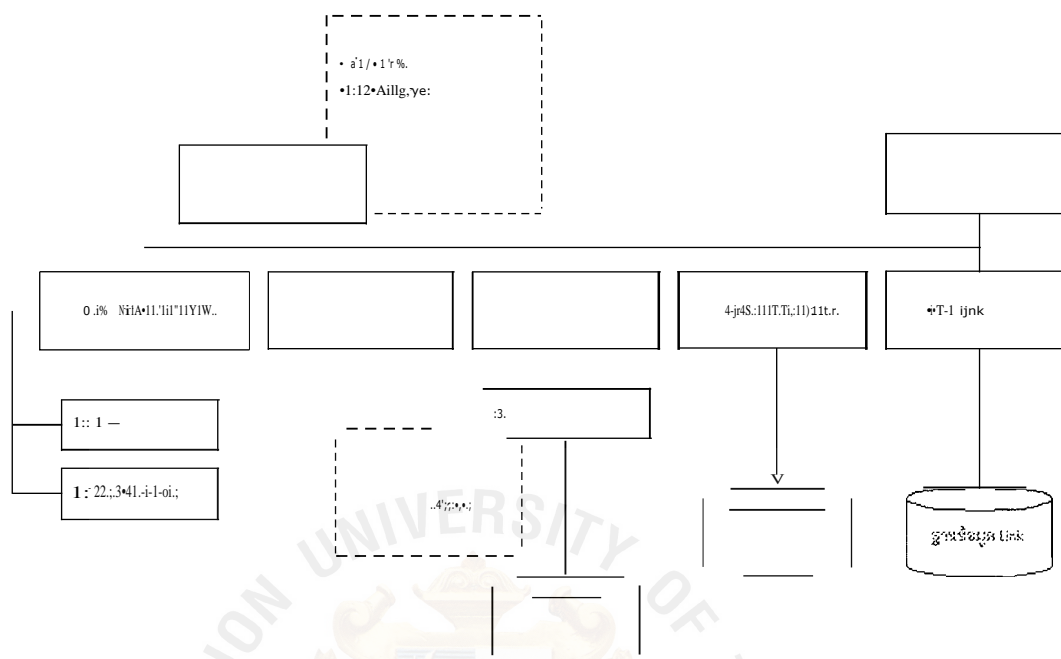


Figure 4.2. Site Structure.

Home Page

Home Page will be designed as the central for this website that presenting the unique services of Mitraparp Memorial Hospital and also important information in Mitraparp's web site in which there are the following items:

- (1) Corporate Logo
- (2) Navigation bar with links to main sections
 - (a) About Mitraparp
 - (b) Service for Life
 - (c) Good to know (Health Update, News, Promotion etc.)
 - (d) Ask Doctor (FAQ)
 - (e) Related Link
 - (f) Contact us

- (3) Newsletter subscription box, the visitor can subscribe for e-mail newsletter by provide his/her e-mail.

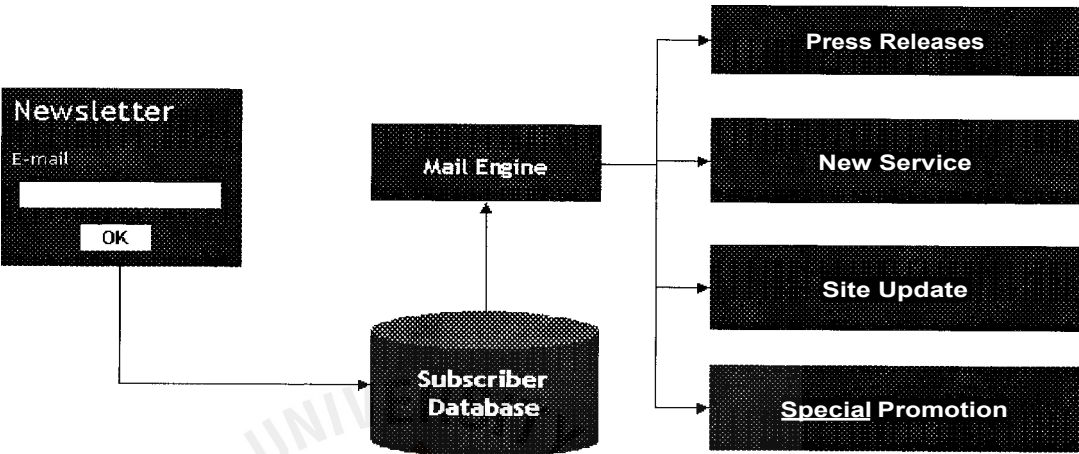


Figure 4.3. Flowchart of Newsletter Subscription Box.

- (4) Ask Doctors

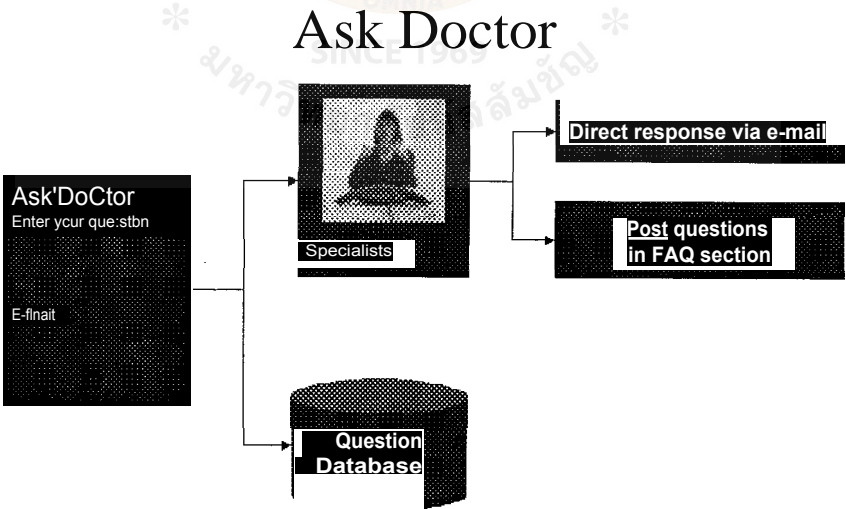


Figure 4.4. Flowchart of FAQ.

Full graphics will be presented in the center to make the page more attractive. Understanding of Mitraparp services will also be created through th, graphics and attractive graphics icon menu. The target market can go to every part of the site with just one click at a graphics icon menu or dropdown menu on the top.

About Mitraparp

- (1) There are corporate profile General information about Mitraparp Hospital including vision and mission.
- (2) Information of company history concerning all company milestones.
- (3) Information about the board including organization chart Newly created organization using vector graphics.

Service

List all of 110,1 is service and special package/offers located in the home page. There is download summary table for comparing each service.

Good to Know

- (1) This section educates people in health care and gives interesting health news to them.
- (2) There is bi-weekly update for this part to encourage the user target visit the web site more frequency.
- (3) The contents are grouped in Health News, Health Tips, and Good Food Good Health.
- (4) To reduce web maintenance cost, 1 tis system provide, the web administrator system as an infrastructure for Mitraparp Memorial Hospital staff. After log-in, an authorized web administrator can update web content for this section.

Ask Doctors

(1) **"Ask Doctor"** function will also create a direct communication channel between Mittraprap Memorial Hospital and users.

Related Links

- (1) List name of interesting website and sponsor's website

Contact us

- (1) Mittraparp Memorial Hospital contact information together with comment form and immediately online submitted.
- (2) System will automatically created E-mail based on received message and then will send this E-mail to Mittraparp staff.

E-Reminder

As mentioned previously, there is no efficient communication channel where we can reach existing patient and prospect without utilizing a phone call. With this new system implemented, a promotional package can be distributed efficiently through emailed. In addition a follow up on doctor's appointment, health check up or any update could be email to remind patient effectively and efficiently. This tool is very useful and at the same time, add value tremendously to the patient. It helps the hospital communicate the care we have for the patient. The email message can be created to communicate friendliness reminder to strength the philosophy of Mittraparp hospital as well.

V. MARKETING STRATEGIES AND PLAN

Target: Mitraparp Memorials Hospital can divide the target market into 3 groups:

- (1) Existing patient. These are the patient who have come to visit and utilize service from Mitraparp Memorials Hospital. This group could also be classified as General Information Gatherers who are expected to be the most likely of the targeted segments to use this resource as the site provides useful health information. This the main focus target since the plan is to enhance "Your Friendly Hospital" philosophy and hospital brand.
- (2) Prospect customers. These are the people who have heard or not even heard of Mitraparp Memorials Hospital. We want to create brand awareness and attract them to come to the hospital with valuable resources and expertise the hospital provides on the website. They could learn more about health, services, doctors and the hospital itself from the website.
- (3) Any health conscious Internet learners who represent all of the targeted segments that re are just beginning to become familiar with the Internet and will increase their use of the Internet over time.

5.1 Market Needs

The people that visit the site are looking for the information about health, sickness, herb and etc. They have opportunity to choose to search the topic that they are interested in related to mostly health, how to take good care of children, how to nurture them correctly and many more. With our "ask doctor" and discussion forum, users can discuss and exchange their knowledge and experiences. We hope that we can be one of the means to promote health for the public. With this in mind we are focusing on:

- (1) Accessibility. Users can browse around the site and also communicate with other users and our doctors through "ask doctor" and email to have access to additional assistance after reviewing the information on the site. We are encouraging user to ask question and interact with our doctors to create the value of the website and ultimately the hospital.
- (2) Availability. Certain levels of health information and FAQ are available online for anyone who seeks for them.
- (3) Friendliness web design and ease of use. We want the users especially patient who have come to Mitraparp Memorials Hospital before to have somewhat a similar experience when the visit the site and surf through.

5.2 Market Outlook

A lot of hospitals in metropolitan areas are adopting the use of website to promote the hospital. However there are not many suburb or rural hospitals that has its own website. With this website up and running, we want to create a competitive edge over our competitor in 50 km radius. We want to attract more patient with our on-line communication or even SMS services to come to our hospital.

5.3 Marketing Strategy

Service. The website focus on health information, we will provide various kinds of health information, hospital service and promotional package. There is a section like food supplementary where information such as type of supplementary or herbs in form of tablet, capsule, and gel tab that can be taken to enhance health and wellness.

With the full utilization of this website and system, promotional package such as seasonal or annual health check up can be electronically distributed to users of the website via emails. This is a great tool since hospital can effectively and efficiently

distribute this promotion to patients and users of the site as compare to people who must at least have to come to the hospital to learn about these packages.

Since the purpose of this website is to promote the Mitraparp Memorial hospital and its brand, we will provide a wide range of useful information that will benefit the users. Our service information comes in many forms like web board "Ask doctor" where doctors will answer all questions.

5.4 Promoting www.mitraparphospital.com

In order for patient to know the existence of this website, since they are our primary target, we will print a website address on the medicine bag where patient can easily see the web address. There will be small poster attached within many hospital areas, such as information desk, in front of X-ray room, and even in the toilet where many researches has shown that it is a place communication can be done very effectively. The web address will be printed on the appointment card as well any materials that hospital distributes to patient.

The next method is personal communication by the doctors. So at anytime the patient visit the doctor, we ask doctor to promote and acknowledge the web site. The doctor will have to spend a little more time on what patient could find very useful, knowledge, health tips, supplementary and etc from the website.

Many billboards in Saraburi area will have to add the web address as well to promote the site.

With the above methods, it is still very limited. I also would like to propose an online Communication as well

Online Communication Plan

Siam2you Online Communications Solution is powerful. With more than 180,000 members in our database, 6,000,000 page views each month. With **14** channels those

can be selected to match the clients' target. This will bring enormous traffic to clients' web site.

Target Groups

Internet users

- (1) Business Professionals
- (2) College students

Website Statistics

- (1) Registered Members: 180,000 members
- (2) Hit Rate: 20 million hits/month
- (3) Page View: 6,000,000/month
- (4) Unique Visitors: > 300,000/month

Users Statistics

- (1) Age: 16-22: 32%, 23-40: 50%, Others: 18%
- (2) Sex: Female: 57%, Male: 43%
- (3) Jobs: Business Professionals: 60%, Student: 40%

Channels

- (¹) Main Page, News, Weather, Business, Career, Directory, Community, Sport, Entertainment, Guide, Love, Travel, Student, Mobile, Women

Advertising Options

- (1) Banner Advertising: Larger banner advertising with 4 different options depending on the advertising objectives. Location and numbers of times the advertising shown can be customized to suit the need of each client.
- (2) Hot Button: Small fix banner in each channel on the right-top position of each channel main page. The price is varied depending on channel.

- (3) **Multi Channel Hot Button:** Small fix channel with text located in the right-bottom position in all channel main page.
- (4) **Section Sponsor:** Combining with content in the website, sponsor will get the logo on specific section on the top of the content that customized to the objective.
- (5) **E-mail Newsletter:** Direct mail online in HTML format with the banner advertising attached to the mail. Averagely, 10% response rate with E-newsletter.

Online communication plan will be discussed during the web development period.

Advertising rate for Siam2you is described below:

Table 5.1. Online Communication Plan.

Large Banner (468 * 60)	1 month	3 months	6 months	12 months
Specific Channel				
<150,000	450	430	410	390
> 150,000	400	380	360	340
Across all section				
< 150,000	320	300	280	260
> 150,000	300	280	260	240

Fixed Banner (120 * 60)	1 month	3 months	6 months	12 months
		5%	10%	20%
Main Page	50,000	47,500	45,000	40,000
Channel Main 1	35,000	33,250	31,500	28,000
Channel Main 2	25,000	23,750	22,500	20,000
Channel Main 3	20,000	19,000	18,000	16,000

Channel Main 1: Business, Love, Entertainment, Student, Mobile, Women, Mail

Channel Main 2: Career, Sport, Member, Directory

Channel Main 3: Travel, Guide, News

E-mail Newsletter (468 * 60)

All member 2 baht/mail

Selected criteria + 0.5 baht/mail

Criteria option Age, Gender, Occupation, Industry, Location,
Interest

Pop — up Window (300 * 300)

Main page 1000 CPM

Channel Main Page 850 CPM

Siam2you can customize the online communication package in order to give the best effort in brand awareness and strengthen "Your Friendly Hospital" understanding for 12 months period.

Table 5.2. Online Communication Options.

	DETAILS	MEDIA VALUE	SPECIAL OFFER FOR YEARLY PLAN
* Column Sponsor - Advertorial message to promote Mitraparp - Vertical Banner on the right menu bar - Text link to Mitraparphospital.com - Sponsor menu bar and logo above the sponsored column - Monthly banner redesign to suit Mitraparp campaign - One page design to make online appointment through Siam2you.com	* Women Channel in "Ask Doctor" topic	75,000 Baht / month 12 months = 900,000 Baht	660,000 Baht
E-Newsletter (Vertical) in Member Channel Send once a quarter	Sending to member: both male and female aged between 20-45 years old.	20,000 * 2.5 baht = 50,000 baht 4 quarters = 200,000 Baht	96,000 Baht
D-news Update every month	Siam2you Home page	30,000 baht 12 months = 360,000 Baht	276,000 Baht
Discount Partner	Be Siam2you card discount partner	Free of Charge	-
Searching List Ranking (5,000 impressions)	Sponsored list, shown on the top in Siamguru.com	7,5000 Baht per month 12 months = 90,000 Baht	60,000 Baht
Total			1,092,000 Baht
Special Offer Discount 20%			873,600 Baht

The above package must be considered seriously to be effective and justify the cost of this type of marketing communication only for the website. As you can see that the cost of this communication is very high as well.

5.5 SWOT Analysis

Strengths

- (1) New efficient marketing technique that can be done easily and integrate with existing process. Reduce the use of marketing material especially paper. Able to reach out to more people. Add value to service and provide valuable knowledge.
- (2) Provide more convenience for customers to contact the hospital. By conducting business via this web site such as E-mail. Customers can post requests or questions on "Ask doctor" or send them via E-mail.
- (3) Providing more efficiency in distributing news, knowledge and information about the hospital. Website can help the hospital distribute news and information as well as promotion and its details to customers. Also, all information on this Web site is up-to-date.

Weakness

- (1) High cost for developing company's Web site: Like any first time challenge, setting up the company's website usually takes lots of money, effort and information gathering. The Hospital has to invest money for this coming technology, including training employees, hardware, software and other equipment.
- (2) Lack of IT personnel who are experts in Web technology and e-commerce business: In order to create stable Website that match our requirements and suitable for our business, we need IT personnel who are capable and expert in web technology.
- (3) Hospital will now require doctors or PR department who keep update the information on company website as well as answer more question posted on the website.
- (4) There is also additional cost in promoting the website for user to come to visit the site.

Opportunity

Popularity of Internet in Thailand: Internet becomes popular in Thailand for both personal and business use. Many businesses have seen a lot of benefits of the Internet and are rapidly moving toward electronic communication via the Internet in order to improve business-to-business interaction.

As the use of Internet get wider and the cost get lower, there is a possibility to expand to business to business transaction especially for hospital to form a supply chain management.

There are few competitors in the market: Although there are many hospital and clinic in the local area, but there are few hospital who does marketing activities and add value to its services on-line.

Thailand is now seeing a tremendous growth rate of the Internet users.

Threat

Lack of well-designed network and telecommunication infrastructure in Thailand: The Internet infrastructure in Thailand is still in a poor stage. The use of Internet requires a well-designed network and telecommunication infrastructure. But Thailand currently faces the limitation of bandwidth. It will effect the Internet's user if is too slow in retrieving information from our web site.

Cost of the Internet is still expensive. Although the cost of the Internet is cheaper than 2 years ago but it is still expensive for investing. The hospital must pay high cost for the Internet.

Economic crisis has not yet been recovered well, then there are still some effects to some people who want to acquire a computer. Since computer is the main tool in connecting to the Internet.

The number of Internet user in Thailand is low when compare with other modernized country which will result in the limitation for distributing knowledge, information and the use of the new system on the Internet.

ปัญหาที่สำคัญของอินเทอร์เน็ต

Perceived Problems Concerning the Internet

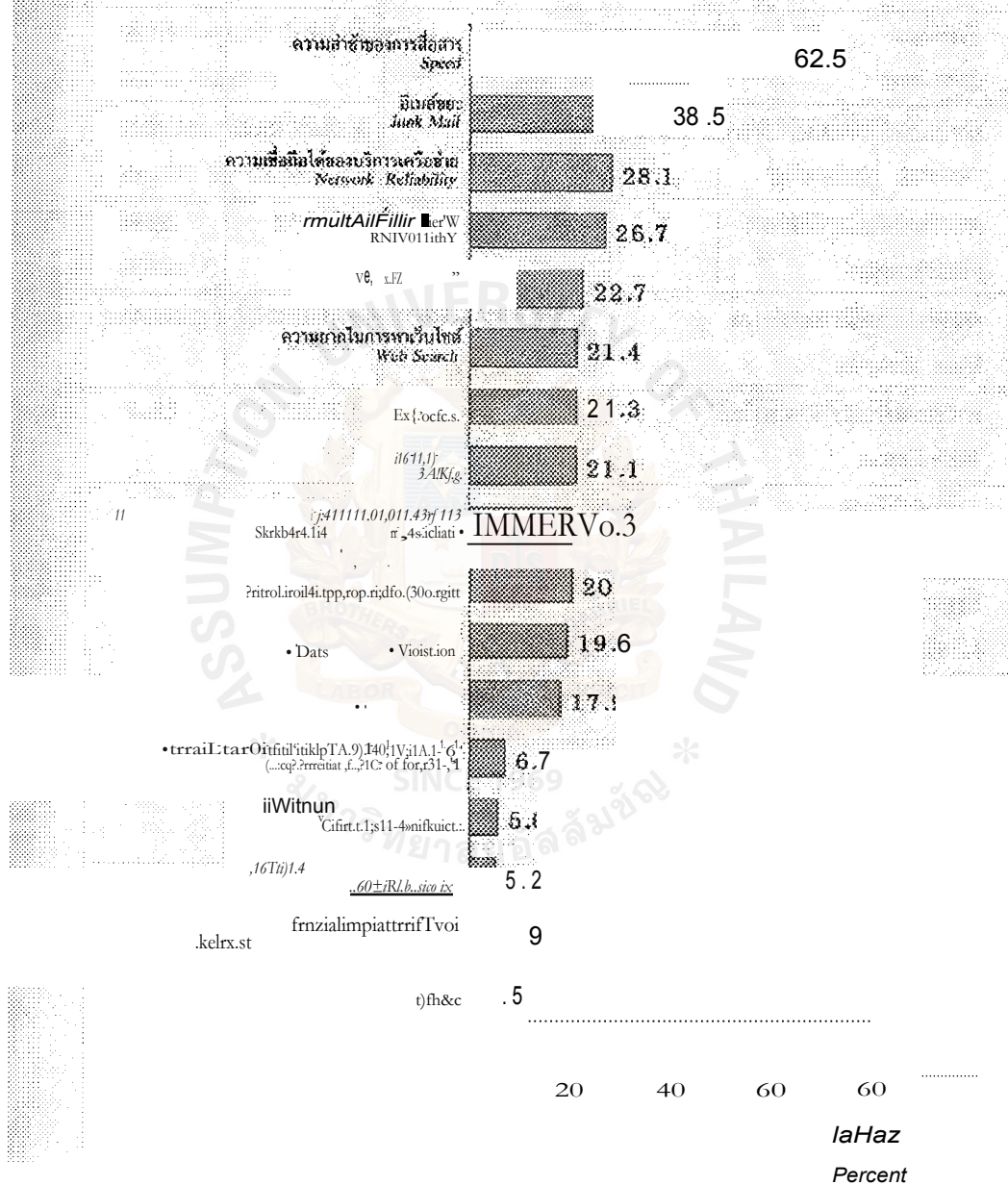


Figure 5.1. Perceived Problems Concerning the Internet.

5.6 Cost and Benefit Analysis

Cost Analysis occurs from evaluating the resource that will be needed to develop and operate a system. It includes the expense for computer hardware (since the hospital does not have any hardware that is compatible with this application), application software and the expense occur during the developing process and implement.

Table 5.3. Cost of the Computerize System.

Description	Quantity	Price/Unit	Total Price
Fixed Cost			
Hardware Cost:			
Server Computer	1	39,900	39,900
Client Computer	3	25,000	75,000
Scanner	1	7,000	7,000
Hub	1	14,000	14,000
Software Cost			
Windows NT Server	1	28,000	28,000
Window 98	5	3,600	18,000
MS Office XP	5	15,000	75,000
Macromedia Web Design Studio	1	17,000	17,000
Norton Anti Virus	4	2,100	8,400
Adobe Photoshop	1	42,000	42,000
Domain Name Registration	1 Year	1,000	1,000
Web Hosting 20 MB, 10 E-Mail	12 months	500	6,000
Internet Access 60 hours	12 months	480	5,760
Total Fixed Cost			337,060

It is very difficult to do the cost and benefit analysis. It is very similar to any brand building campaign where cost is very hard to justify. However, we would like to acknowledge that money spend on this website is not a one time investment, but a

marketing expense of brand building and enhancing relationship of Mitraparp Memorials Hospital and patients. But marketing expense should be well spent, there are some ways that we can get around in measuring the effectiveness of this website. It is very crucial to all business that a survey of relevant issues is to be conducted. As in the case of this website, a general survey on the use of web site and satisfaction.

5.7 Risks and Assumptions

The risks of the website includes:

- (1) Marginal revenue that will be generated after the website is implemented is very difficult to measured and might not cover the costs and result in a cash drain on the business.
- (2) We do not receive enough traffic to provide a service or bolster patient loyalty through the site.
- (3) Users might find the use of website very confusing.

VI. WEB DESIGN AND DEVELOPMENT

6.1 Content Management System

Web Administrator System is the system helping beginners to be able to update the web pages or product information easily with only little knowledge about technical stuffs. Web Administrator system is easier to learn and master. Mitraparp Memorial Hospital needs not to stick with web developer to update the site for Mitraparp Memorial Hospital because Mitraparp staffs can do it themselves.

With this program developed technology, Mitraparp staffs can administrate the site from anywhere (any computers) and anytime. All the updates are on real-time basis and flexible. The interface is very easy to understand, even for the novice computer users. The only requirement for updating the web pages is to have Internet Explorer 5.0 or up installed on the computer. Fortunately, most computers already have this free-licensed software installed.

Easy to maintain

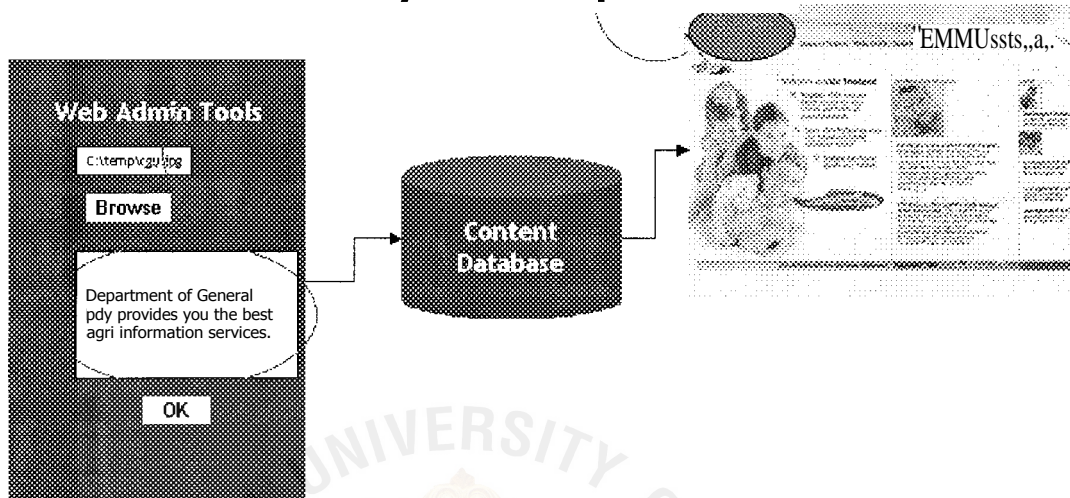


Figure 6.1. Web Administrator Tool.

To reduce web maintenance cost, I will provide the web administrator system as an infrastructure for Mitraparp team.

6.2 Web Administrator System

An example of web administrator system

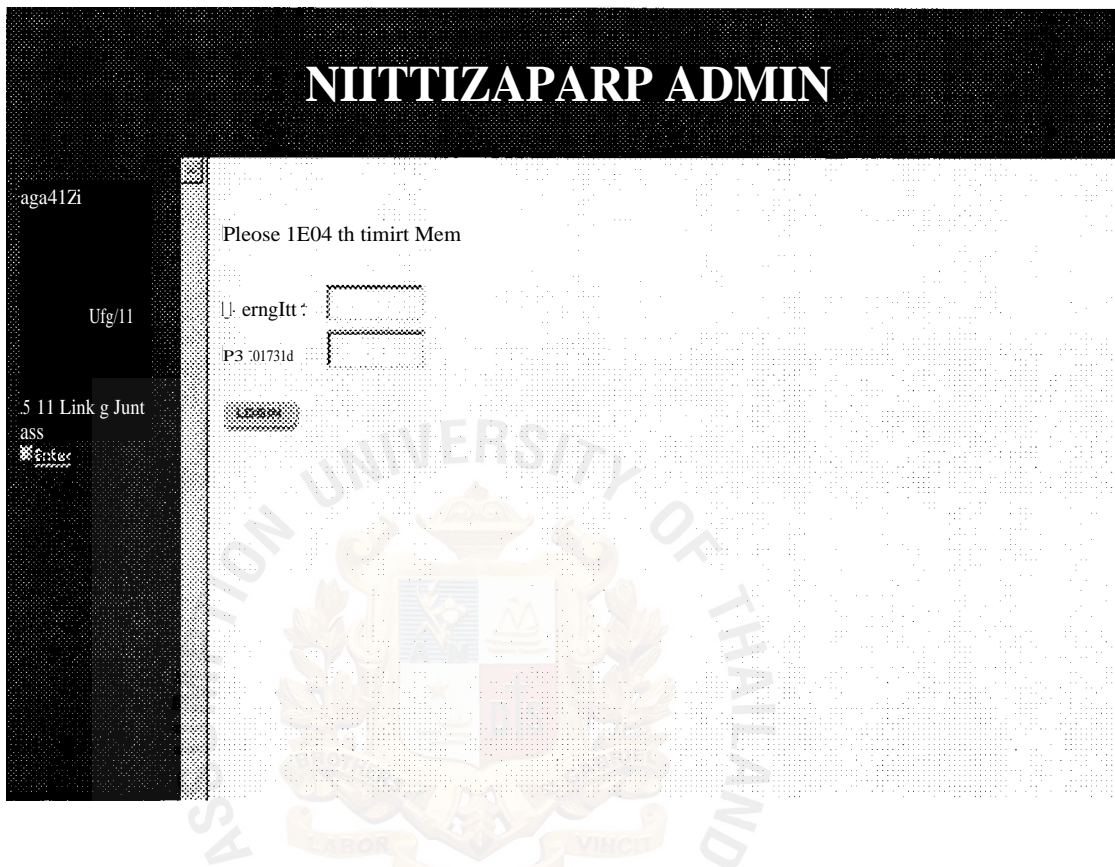


Figure 6.2. Web Administrator System.

Back Web Application

A person who is assigned to responsible for updating the content of this website will have to enter into this page. He or she must sign in with User and Password.

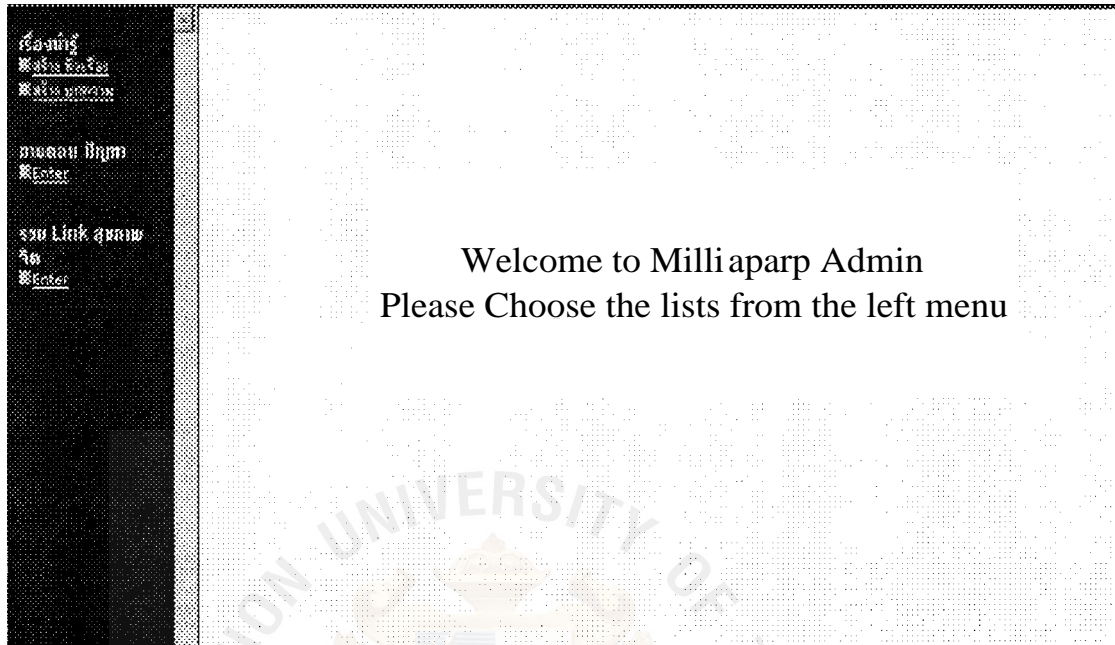
NIITRAPARP ADMIN

Figure 6.3. Registration Page.

Once User Name and Password have been entered, there is a welcome page with menu bar on the left of the page. The user, then, choose what content or subject he or she want to update.

NIITTRAPARP ADMIN

M itraparp What's riew-Main pig Admin.

ชื่อผู้ใช้งาน :

รหัสผ่าน :

ยืนยันรหัสผ่าน :

อีเมล :

ชื่อจริง :

นามสกุล :

ตำแหน่ง :

เบอร์โทรศัพท์ :

ที่อยู่ :

เว็บไซต์ :

วันที่สมัคร :

เวลาที่สมัคร :

เวลาที่สมัคร :

เวลาที่สมัคร :

สมัครสมาชิก เข้าสู่ระบบ ลืมรหัสผ่าน

What's new - Mahi Page List

ลำดับ	ชื่อเรื่อง	วันที่	สถานะ
1	หน้าใหม่	2010-10-10	ใหม่
2	หน้าใหม่	2010-10-10	ใหม่

Figure 6.4. What's New Page.

Example, this page is for updating the "Good to know" picture and subject. The body will then be updated with the new picture and subject. When the user enters, user can choose to display the content which

ure and subject. The body will then be displayed in a list. The user can choose to display the content when the user clicks on the link.

NIITTRkPARP .AEINTIN

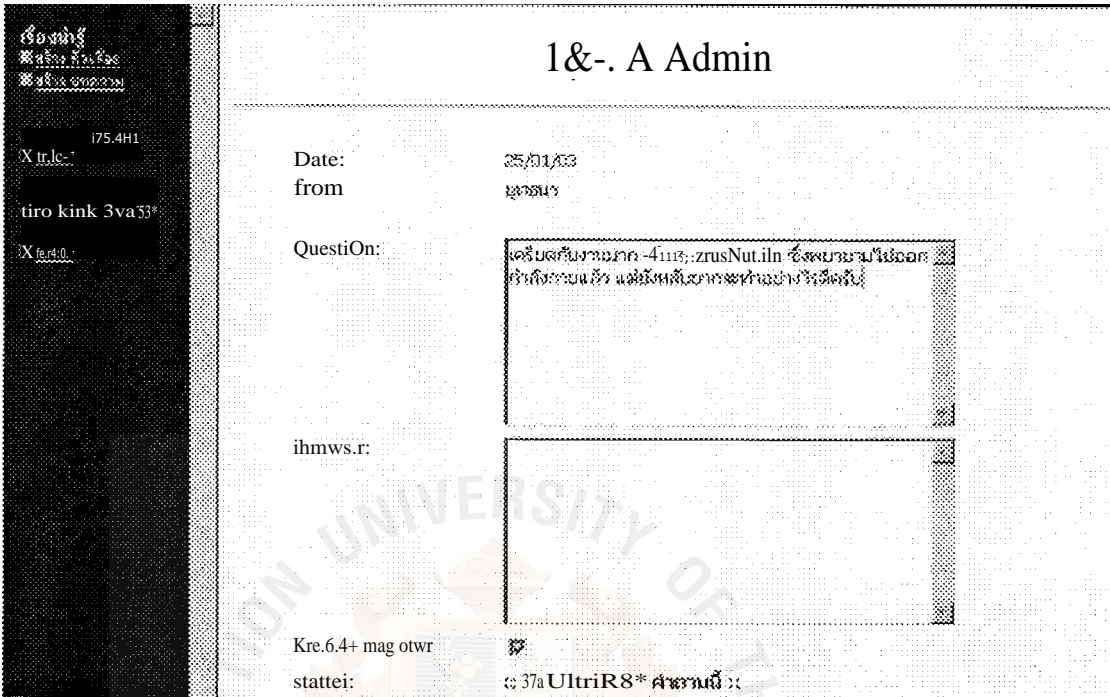


Figure 6.5. Q&A Page.

This page belongs to "Ask Doctor" or "FAQ".

Once visitor of the website post questions, then the system will automatically send this message to the staff or doctors. Doctors and staff will screen and monitor the question to see the appropriateness. This question can be answered an post on the web page or be answered on individual basis (sending answer directly to visitor).

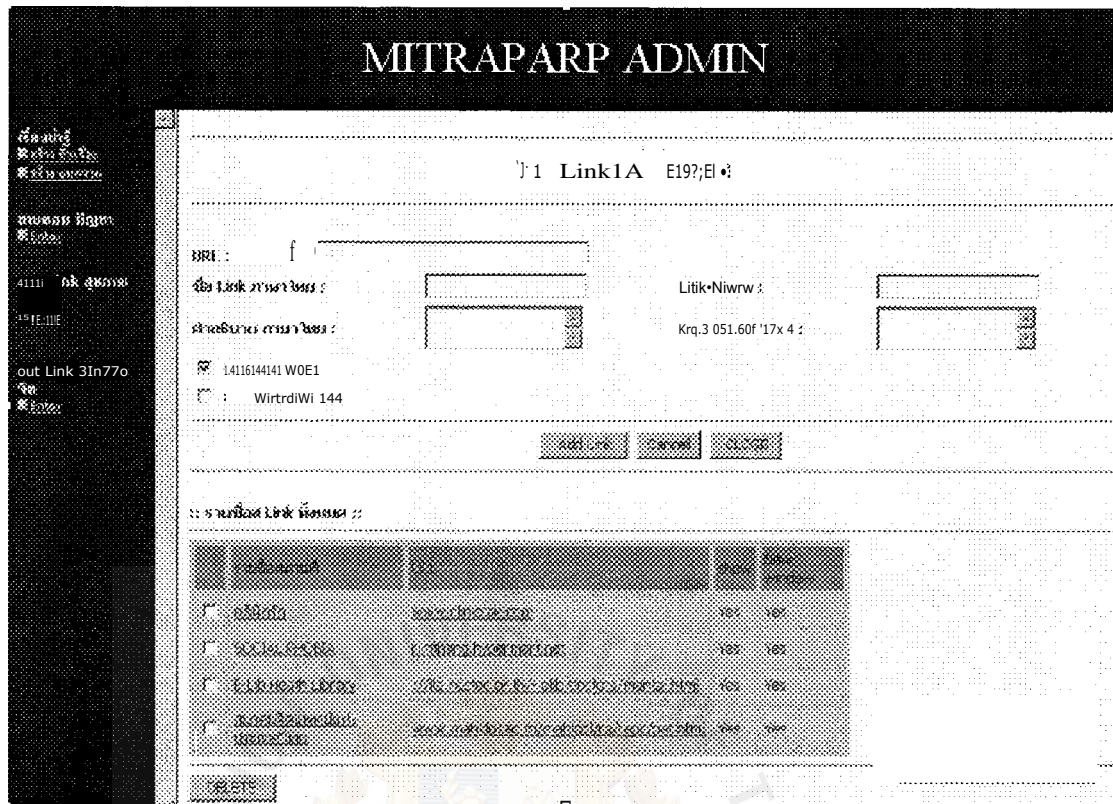


Figure 6.6. Link Page.

User can choose to add or delete from the web site the interested and important link he or she think it is appropriate. In this link section, Mitraparp Memorial Hospital can choose to display its partner link for advertisement sake.

6.3 Central Content Database

To present Mitraparphospital.com as an informative web site while maintaining easiness in navigation and surfing, I will design the central content database to be flexible and robust. Shown below is a list of information databases related to this project.

- (1) Health Tips database
- (2) FAQ database
- (3) Link database

6.4 Web Design and Implementation

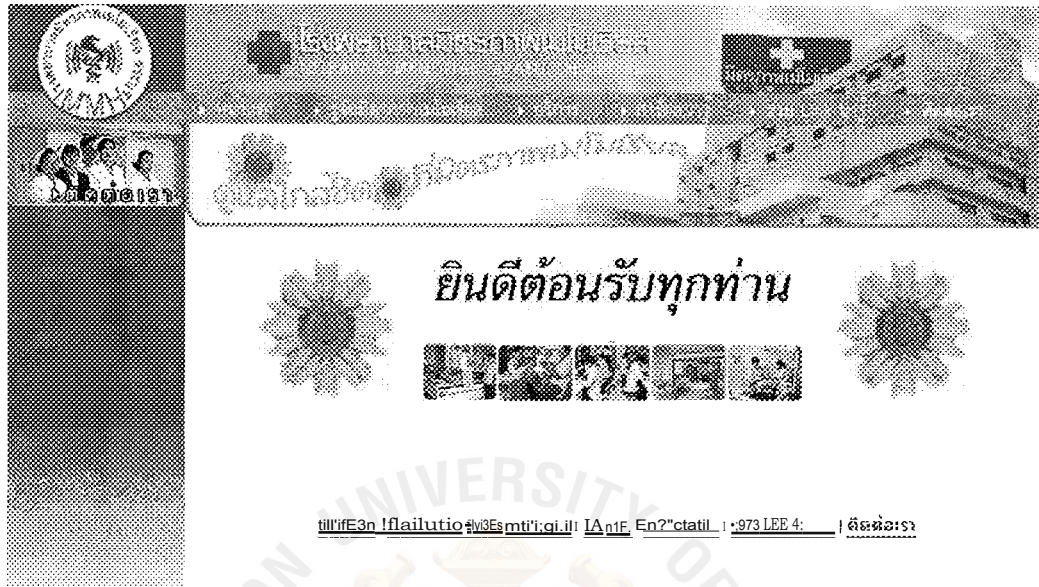


Figure 6.7. Homepage of www.Mitraparphospital.com.

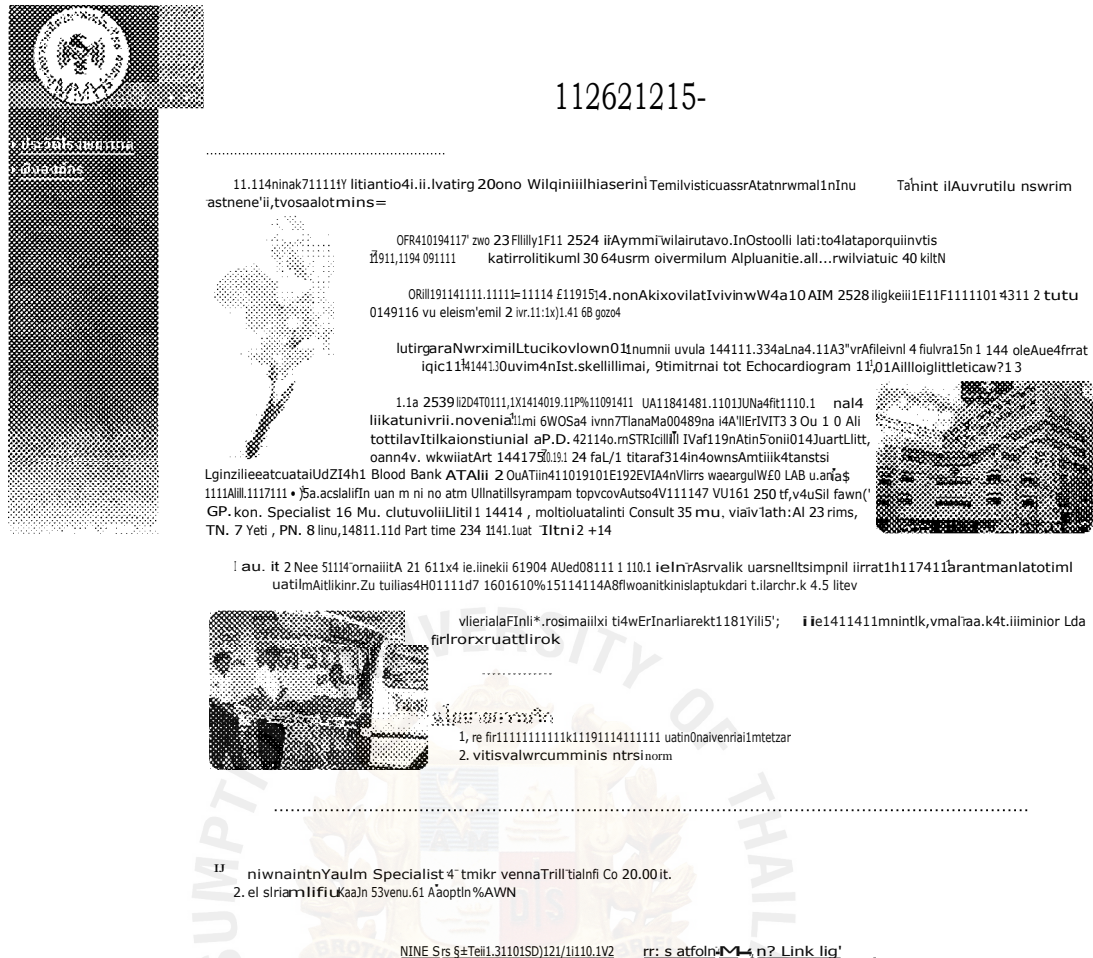


Figure 6.8. About Mitraparp Page.

About Mitraparp

- (1) There are corporate profile General information about Mitraparp Hospital including vision and mission.
- (2) Information of company history concerning all company milestones.
 Information about the board including organization chart Newly created organization using vector graphics.

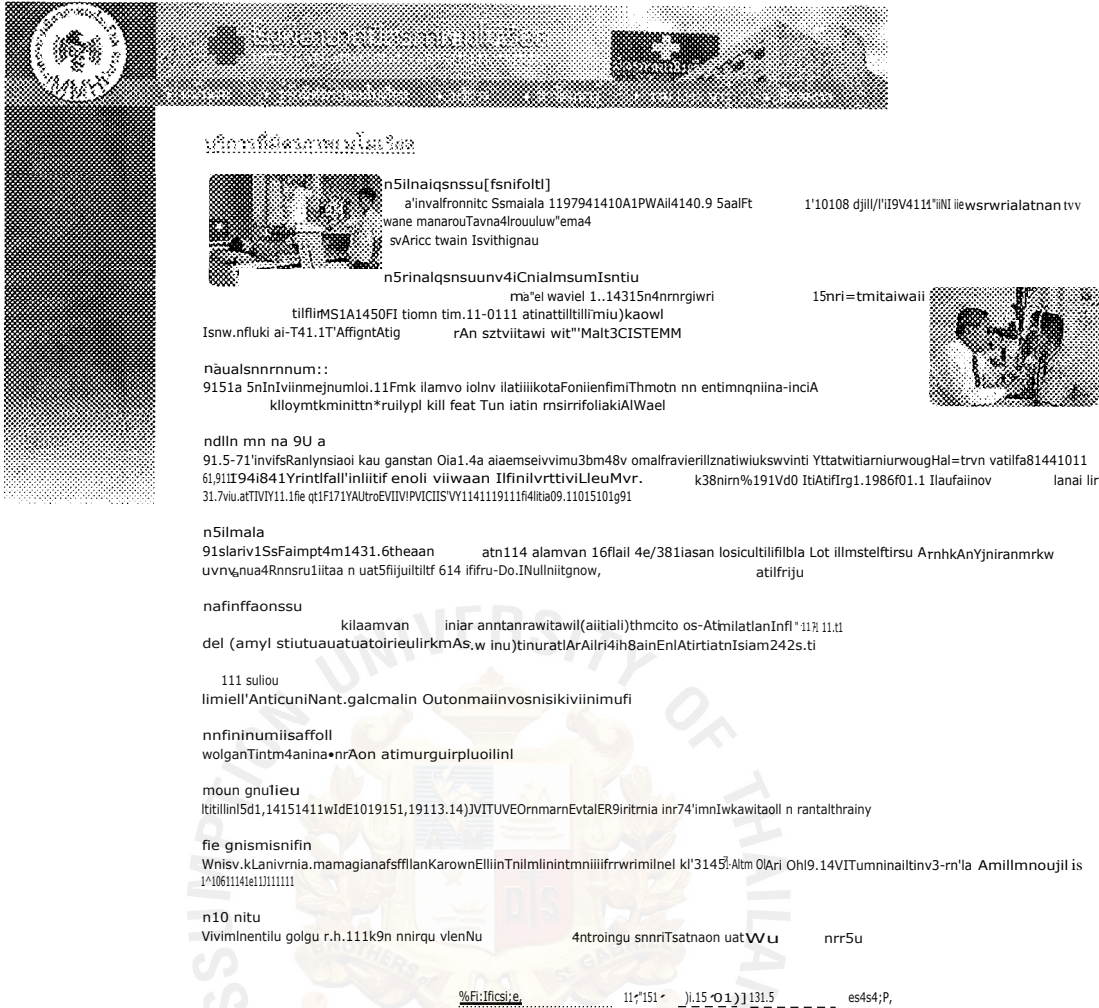


Figure 6.9. Service Page.

Service

List all of hospital service and special package/offer locate in the home page.

There is download summary table for comparing each service.

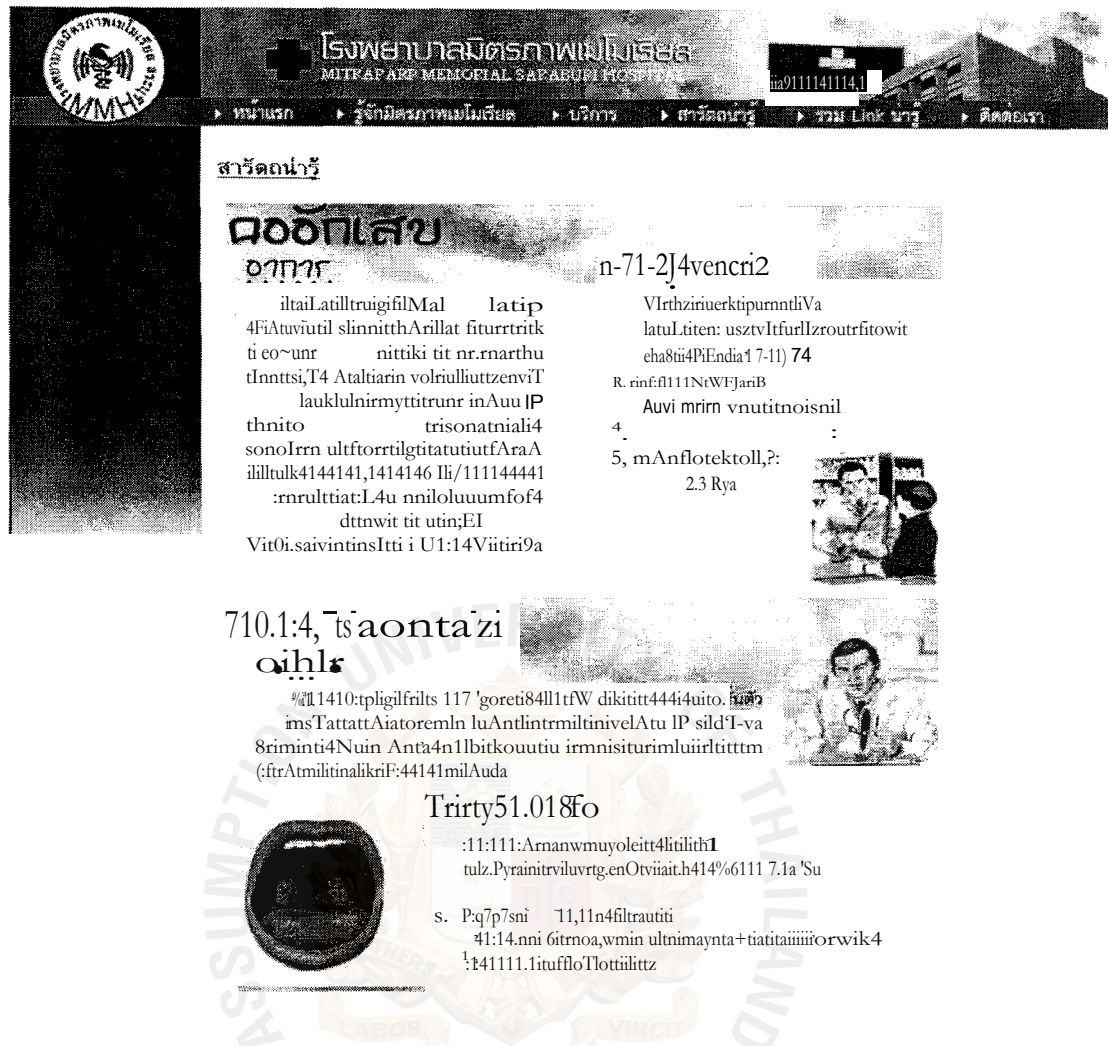


Figure 6.10. Good to Know & What's News Page.

Good to Know

- (1) This section educates people in health care and gives interesting health news to them.
- (2) There is bi-weekly update for this part to encourage the user target visit the web site more frequency.
- (3) The contents are grouped in Health News, Health Tips, and Good Food Good Health.





กระทรวงสาธารณสุข
 กรมสุขภาพจิต
 สถาบันสุขภาพจิต
 โรงพยาบาลจิตเวชขอนแก่นราชนครินทร์

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Figure 6.11. Related Link P

Related Links

- (1) List name of interesting website and sponsor's website

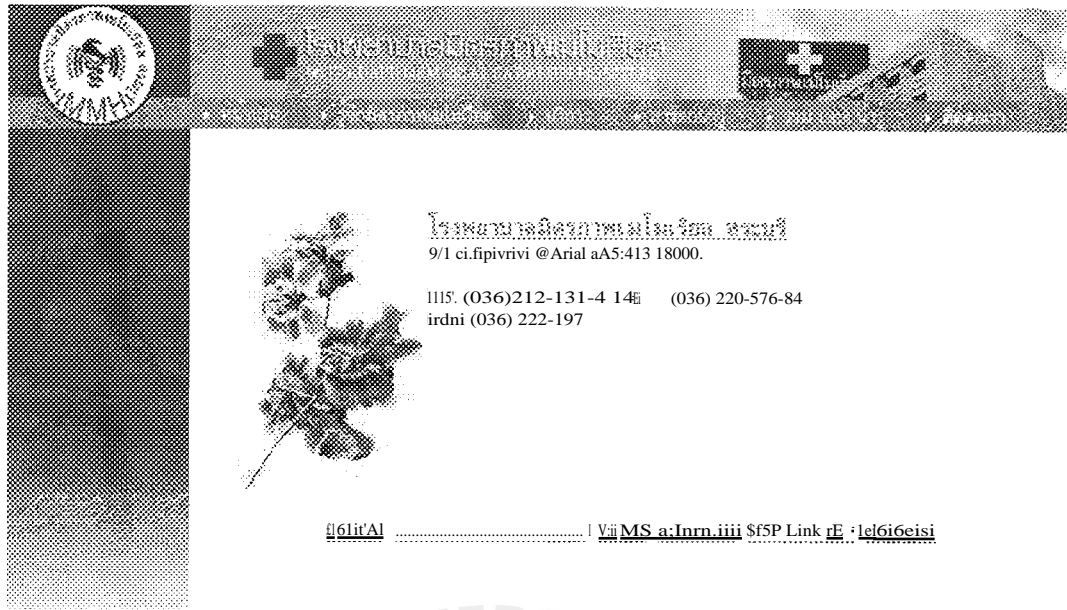


Figure 6.12. Contact us Page.

Contact us

- (1) Mitraparp Memorial Hospital contact information together with comment form and immediately online submitted.
- (2) System will automatically created E-mail based on received message and then will send this E-mail to Mitraparp staff

VII. DEVELOPMENT PROCESS

7.1 Overview of Process

Website Management is a key issue for many businesses. An organization can keep all those web pages in the right order and have them searchable. It can be a very costly and time-consuming task for web masters. If the organization designs the site and architects a powerful normalized database and have it power the website, we will find that it solves many of these issues for us.

We know that creating websites using Flexible Internet Architecture is the best way. The average timeline for a website project is now four to six weeks. We believe that it would be impossible to implement a successful data driven website in that time period. While writing this three part series on Flexible Internet Architecture, the organization that has regretted beginning with a static site only to turn around and implement a dynamic solution a few months later. These are the steps before beginning to create a successful website for the organization.

- (1) Research a number of the websites that we like, those sites that are in our industry and most importantly, our competitors, Use this research to create our wish list and to benchmark our future progress.
- (2) Plan a wish list of what we want on our site, along with the desired images.
- (3) Seek advice from professionals with experience in designing, developing, implementing, and enhancing E-business applications.
- (4) Set objective and get feedback on costs and timelines
- (5) Implement
- (6) Review the results.

7.2 Hardware Specification

To develop the project, we use a computer to work as web server and clients.
Hardware suitable for using to create the project is listed in the table below.

Table 7.1. Hardware Specification for Server.

Hardware	Details
CPU	Intel Pentium III 450 Mhz
Memory	At least 256 Mb
Hard disk	At least 40 GB
CD-ROM	36X Speed up
Monitor	

7.3 Software Requirement

Software section is used to create website. The major software server that helps personal computer to perform web server so we can use only one computer to work as both web server and clients.

Table 7.2. Software Requirement.

Software	Details	Description
Operating Systems	Windows 95 and later versions or Windows NT 4.0	We use Window 98
Web Servers	<ul style="list-style-type: none"> • Personal Web Server 4.0 when using Windows 95 / 98 • ITS 4.0 when using Windows NT • IIS 5.0 when using Windows 2000 	We use Personal Web Server
Web Browser	Eithelr Internet Explorer MX or Netscape 4.0 and the later versions	We use both Internet Explorer 5.0 and Netscape
Graphic Tool	Adobe Photoshop V.70, Flash MX / Illustrator	Edit and decorate image
HTML & ASP Editor	Homesite 4.5, Edit Plus	Write HTML and ASP code
Database Tool	MS Access 2000	Design and make database

VIII. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

The purpose of this project is to analyze the business and marketing model of Mitraparp Memorials Hospital in order to design and develop new marketing plan and strategy that will utilize the proposed system. As stated earlier, this project has a primary of objective in enhancing brand and create more value to customer(patient). With this objective, the proposed web page will utilize tremendous benefits of Internet by setting up company's web site to create marketing activities and interactively communicate with customers.

Currently the hospital operates its business without doing much marketing activities and communication due to high marketing cost. With this website system implemented, cost of interaction and communication will be lowered, there will be a lot more marketing activities especially one to one marketing between hospital and patient. Mitraparp Memorial Hospital will be able to increase the service level, enhance brand and loyalty. Patients will find the website very useful and informative. And lastly, we hope to create an online community from www.mitraparphospital.com.

8.2 Recommendations

Although there is a considerable cost for this web design and implementation, there are so many potential benefits as well. In this day and age, in my opinion, a company web site is a must have for any company. However, the success of the website very much depend on how the hospital utilize the propose system. Keep in mind that in order for this system to work according to the new marketing plan. A lot of current processes mush be reengineered to fit the new marketing plan and strategies as well as budget allocation on both creating marketing activities from the website and

promoting the existence of this website. Mitraparp Memorial Hospital must also form a new marketing team or committee to assign work, role and responsibility in marketing, communication and update news and content as well as answer question posted on the website.

In the future, depending on the level of success of this system, we might be able to expand the utilization of internet technology for the hospital. We want to explore the possibility of implementing Intranet to improve internal process, retrieve important information and share knowledge within organization. For example, the system that retrieve patient's medical information such as historical visit, medicine use and etc. This system will tremendously improve internal process, making work so much more efficient and help reduce cost such as the use of paper and many more. In addition, time for finding and retrieving information can be reduced accordingly, there by help cut patient waiting time and finally improve patient satisfaction.

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