



# Developing Software for Resort Business

by

Mr. Attaphol Anurutdhikorn

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

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

November 2003

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**St. Gabriel's Library, Au****Developing Software for Resort Business**

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


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## ABSTRACT

This project presents the analysis and design of Similana Resort office management system. This system is developed based on the job environment in resort front office. The scopes of the project cover all networks in resort and management team tasks.

The existing system is manual-based. All the tasks are coordinated through paper and verbal contact. No reports of how the progression of each concerning tasks are made except the verbal contact. There are records on tasks history that are made through computerized system.

The management team is responsible for proposing the computerized system used within the office. It starts from studying the existing system and tries to perceive the problem as much as they can on the current operation. Then, the required analysis, system design and implementation are followed.

System evaluation is also provided for better understanding on how the proposed system is worthwhile for implementing. The cost analysis has also shown that the cost for computerized system is lower than cost for traditional system.

The outcome of the proposed system is the information system that could provide the information needed by management team office and help to coordinated the job within the office well.

## ACKNOWLEDGEMENTS

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The project will not be successful without the kindness of the people who give their valuable time and efforts to provide the information and advice on the project.

Finally, he would like to thank all IEC friends who always helped him in this program and helped him to explore the new life and accomplish this project.

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## I. INTRODUCTION

### 1.1 Background of the project

The objective of computer network for resort is to expand the technology in the hotel business, according to Similana Resort that is to develop and upgrade itself to reach the international standard and also to disseminate the knowledge to the management team. Therefore, the main task of computer network is based on technological knowledge. All the tasks are under the guidance of **Dr. Chaichet Saivichit** , who is my advisor and instructor for Computer Networking of Assumption University.

The methodology on how to disseminate the knowledge is to conduct the seminar and also prepare information for a seminar on particular topics which are mostly concerned with Information Technology and computer network. At the same time, some organizations may invite professionals of network to be a keynote speaker or give lectures on a particular seminar or organized by that organization. Therefore, the information data for that seminar or training must also be prepared.

All information data and articles are prepared and given to responsible persons. This kind of group is called “Management Team”

The tasks of management team are briefly discussed as follows:

- (1) Preparing the contents of the topic that will be used in the seminar.
- (2) Drafting the paper for particular topics.
- (3) Drafting the articles for particular topics.
- (4) Finding information from external organizations, TV program, Telephone network and front office software.

The tasks of management team will not be possible if there is no connection with the front office. Front office will handle all the incoming jobs from external organization such as private hotel, resort.

The tasks for front office are briefly discussed as follows:

- (1) Taking care of in-coming and out-going data.
- (2) Recording and updating lists of clients in hotel, resort.
- (3) Coordinating with other departments in hotel, resort as well as external organizations.
- (4) Coordinating with management team when there is seminar or other tasks that are required to have a paper.
- (5) Managing the schedule of events and preparing a calendar.

The tasks handled by management team and front office team are organized manually. Starting at the front office, when there is new data coming to the office, the staff need to note down all necessary data from that source such as, the date of check in, check out, client data, the subject, the matter of the letter, and so on.

When it is necessary to prepare a paper for a particular event or seminar, the secretarial division will inform staff to prepare and draft the paper for the event. Sometimes secretarial division verbally tell staff but sometimes, staff from secretarial division will fax in the in-coming data that contains all information of the event or seminar.

The problems that are always happened when there are a new clients to be prepared are as follows.

- (1) Staffs from front office forget to inform management team when there is a new in-coming client.
- (2) Front office team does not know whether the paper prepared is to be offset or not, which may result in late submission.
- (3) Staff from front office keeps asking management team when there are confused things or problems about the working on the paper.
- (4) When the paper is done and already approved by management team, front office will be responsible for doing the record of the client data. And management team will not be able to know if that record of client data is sent.

The new computerized system, therefore, is designed to handle all the problems of the existing manual system. It can help to eliminate human errors and make office to be paperless. The system is supposed to serve the staff from front office and staff who need to look for some information about the progress of the task to report to the general manager. Importantly, this system is designed to help the manager know how the tasks are progressing in the office and can help him plan and organize the task effectively.

## **1.2 Objectives of the Project**

The objectives of the project on an office management system are as follows.

- (1) To study the existing networks system for better understanding of the office's current tasks and operations.

- (2) To analyze what the causes of the problems in the existing manual system are, including the users' requirements that will support for designing a better system.
- (3) To design the management system of the existing data that is manually handled in order to reduce the repetitive tasks and make office to be paperless.
- (4) To improve the way on how staff in the office coordinate with each other.
- (5) To help the office achieve the quality standards.

### **1.3 Scope of the project**

The scopes of the project development are as follows.

- (1) Gathering the information from external organization requirements and having discussion with the concerned staff who will use the new system in order to better understand how the tasks are operated in steps.
- (2) Studying the form of in-coming and out-going client circulated in the front office for designing the database and system.
- (3) Studying the nature of preparing paper from management team to design the database and system.
- (4) Installing the new system by using computer server to control and distribute the system to other concerned staff in the office.
- (5) Providing the varieties of functions that are needed and required by particular staff and top-level management.



- (6) Providing the necessary information for particular tasks such as seminars so that anyone in the office can follow the tasks and know how far they have progressed.

#### **1.4 Project Deliverables**

The completion of the computer office management system project will deliver the two formats.

- (1) The system itself that will be ready to be used by the staff once this project is submitted.
- (2) The document of computer office management system including, data dictionary, database design, user manuals, and project implementation and recommendations.

#### **1.5 Steps of the Project's Implementation**

The steps of the project's implementation are as follows:

- (1) Defining the project solution by analyzing the office's existing manual system, and the problems encountered.
- (2) Identifying what the users want from the new system.
- (3) Identifying what the users want from the new system.
- (4) Identifying cost associated with the new system such as project preparation, implementation, installing, evaluation and maintenance.

- (5) Assembling the operating documents or user manual in accordance with the new system.
- (6) Installing the new system resulting from this complete project.
- (7) Running and testing the new system to see if there is any error.

Month	August				September				October			
Week	1	2	3	4	1	2	3	4	1	2	3	4
A. Proposal Submission (1)												
B. Data Collection (1)												
C. Analyze Existing Plans and Strategies (2)												
D. Research Methodology (1)												
E. Develop New Plans and Strategies (2)												
F. Literature Review (1)												
G. Finalize Report (1)												
H. Project Submission (1)												
I. Project Defense (1)												

Figure 1.1. Project Plan of Similana Resort Office Management System.

## **II. THE EXISTING SYSTEM**

### **2.1 Background of the Organization**

Similana resort is located near the area of KHAO LAK LAMRU National Park. Therefore we introduce our resort located in between area of KHAO LAK and area of TAMBOL KUK KAK 90 Km or 1.15 hours drive from PHUKET international airport or 10 minutes drive from TAKUAPA Bus Terminal. Our resort is one of the most beautiful places in PHANG-NGA province, picturesque and relaxing surrounding that escapes the mass tourism development built Thai style in harmony with nature. The Similana Resort offers you a holiday you will never forget, natural beauty, fresh air, pristine beach and wonderful fresh seafood from ANDAMAN sea are all combined in a truly romantic atmosphere in the Similana Resort the luxury of nature (Where the beach meets the jungle). For adventure-seekers, thrills are never far.

### **FOUR STYLES OF ROOM CATEGORY IN 70 UNITS**

**16** Duplex buildings air conditioned, TV, H/C water, Bath tab, general stylish of hotel rooms. Room space is 5x7 square meters included Bath- room and balcony space is 4x3 meters. Double or single room rate is BHT 2,700-/night.

**26** See view Superior Tree Houses air con., H/C water, Shower, its similar to Bungalow in every way, but slightly smaller, 2.30 Mts. Off the ground, using wooden staircases, private verandah, panorama view, most of them are located at in the rain forest, facing to the ocean and just a few minutes walk to the beach.

Room space is 4x6 included Bath room and balcony is 2 ½ x4 meters

Double or single room rate is BHT 2,900.-/night

**15** Beach Front Superior Tree House air con. They are exactly same style as Superior

Tree House Sea View in very way just different in location

Double or Single room rate is BHT 3,300.-/night

**13** Deluxe Bungalows air con., TV H/C water Shower, built Thai style in harmony with nature, they are located almost at hillside and over looking the ANDAMAN sea Room space 6x6 squares meters and balcony is 3x4 meters Double or single is BHT 4,200.-/night

HIGH SEASON

1<sup>st</sup> November 2003 – 30<sup>th</sup> April 2004

GREEN SEASON

1<sup>st</sup> May 2004 – 31<sup>st</sup> October 2004

***50% off during “Green Season promotion campaign”***

#### MEAL RATES

American breakfast BHT 180.-

Lunch BHT 280.-

Dinner BHT 400.-

Seafood dinner BHT 600.-

All room rates are net inclusive of breakfast daily

All room rates are subject to 10% service charge

All room are subject to change without prior notice

### **HOUSE SERVICES**

Swimming Pool, Thai & International, Fine Cuisine restaurant capacity 120 persons,

Candle light restaurant capacity 40 persons, Cocktails bar, Beach bar, Beach Function room capacity 40-50 persons, Safe deposit boxes (Front desk box), Internet service, Long distance call, Facsimile, Gift Shop, Health Club, Spa Currency exchange, Room phone with IDD system, 24 hours Security, Reception Counter 24 hours service and Transfer service arrangement at request.

### **HOTEL FACILITIES**

All kind of massages for health, Sauna & herbal steam bath, Beauty salon, Spa, Indoor gym, Library cottage, Rental service such as Kayak, Bicycle, Jeep, Motorbike, Car and Mini Bus, Sightseeing & Tours and Diving counter.

### **HOTEL ACTIVITIES**

During high season 1<sup>st</sup> November 03 – 31<sup>st</sup> March 04

**CHRISTMAS EVE** on 24<sup>th</sup> December 2003

**NEW YEAR GALA DINNER** on 31<sup>st</sup> December 2003

**LOY KRATHONG** on 8<sup>th</sup> November 2003

**SONG KRAN** on 13<sup>th</sup> April 2004



Free entertainment **SIAMESE NIGHT** every on Monday

Combined with Thai Classical Dances & Traditional Thai Music

And reasonable price for a set of variety of Thai Food **KAN TOK DINNER**

**CANDLE LIGHT DINNER** every Wednesday

Free Class **THAI COOKING** every Friday

**BEACH BARBECUE** every Saturday

We do hope that, we'll have a good opportunity to the pleasure of welcoming your valued clients to **SIMILANA RESORT** the luxury of nature in the very near future.



## 2.2 Literature Review

Since I have studied and researched a lot of information from many sources, I have found one of the most useful resources which come from Marketing on Internet (Judy Strauss, Raymond D. Frost, University of Nevada/1999). This useful source states how marketing on internet is the vital thing for today and future businesses. This report therefore includes the definition and meaning of many technical terms in business and marketing, the reason is for the audience to easily understand I also summarize many strong points of marketing strategies, marketing plan, new product strategies for internet marketing and the efficiency and effectiveness of marketing on the internet. Beside the reader will be issued promotion strategies and pricing strategies on website. Moreover I have short and straight conclusion at the end of the report. However, every detail of the summarizing also is added up with the good examples.

### WHAT IS THE INTERNET?

The Internet ("Net") is a network of computers reaching every country in the world. It is similar in some ways to the telephone system. Just as calls can be made anywhere in the world, so too can a computer contact any other computer connected to the Net. The World Wide Web ("Web") actually began as a very small part of the Internet. It was an experimental child of the Internet which grew up quickly to overtake its parent. The Web is that part of the Internet that can be surfed by following hyperlinks, the underlined text that takes a user from site to site with a click of the mouse. The interconnections between Web pages evokes the image of a spider web-hence the name. The Web has had such tremendous appeal that in a few short years it grew to be far and away the dominant part of the Internet. The Web launched the commercial success of the Internet: it attracted the commercial investment that fueled

its growth. Most people who refer to the Internet are referring to the Web.

So what part of the Internet is separate from the Web? The biggest item is electronic mail. Electronic mail travels over the Internet but it is not part of the World Wide Web. Another item not part of the Web is Usenet. Usenet consists of over 50,000 discussion groups arranged hierarchically by topic. Users post messages under a discussion topic (technical term: thread) which other users can read and then post their responses. Both e-mail and Usenet predate the Web.

### **The Internet As Technology**

One way to understand the Internet is to look at the technology that supports it. The details of that technology are incredibly complex but the concepts behind it are quite simple. To paraphrase Negroponte (1995), the Internet is all about moving bits from one place to another. Bits are the essential building blocks of digital information much as atoms are the building blocks of molecules. A bit can be either a zero or a one. Grouping bits forms more complex information such as letters, words, graphics, sound, or video. From the Internet's perspective a bit is a bit is a bit. The Internet does not distinguish between bits that carry text, graphics, sound, or video. From this humble beginning comes a new marketing landscape: things such as electronic commerce and banner advertising.

If the major task is to move bits from one location to another, then two key subtasks are critical to the Internet's success. First, the infrastructure must move those bits as quickly as possible. Speed is important and will be a repeated theme throughout this text. The Internet is currently too slow (see the leveraging technology sidebar at the end of this chapter to find out why). Slow speeds mean loss of business opportunities. For example, reliably carrying phone calls and music over the Internet requires lots of

speed. The Holy Grail of the Internet architecture is video on demand and for that the speed is nowhere near adequate.

Second, making it easy for users to exchange bits is the basis for the World Wide Web. The Web was created to link all the bits together with a point and click graphical interface. In addition to pictures and sound, users want tools such as search engines to find quickly the bits they need. Tomorrow's users may well demand an intelligent interface that understands speech. For their part, marketers are finding tremendous opportunities based on Internet technologies – we have not seen this number of successful new products since the early 1970s. Marketers can also reach target markets more effectively with tools that track which bits the users are viewing.

### **THE INTERNET AS SOCIAL SPACE**

The Internet is more than computers and their contents: it is a social space where users communicate with each other via e-mail, Usenet, and the Web. It is this feature, as well as the fact that there is no governing body, that allows the Net to be shaped by its users. The Net is truly a grassroots development, and marketers who reflect this philosophy in their Internet programs gain user approval.

### **THE INTERNET AS MARKETING TOOL**

In the early 1950s marketers discovered something innovative: If you give customers what they want, and do it better than the competition, sales will grow. Furthermore, if a firm can do this while making a profit, life is sweet indeed. The yahoo! Case study, which opens this chapter, is an excellent example of how an organization employs the marketing concept.

The Internet is firmly established as a new marketing tool. Marketers use the

Internet to gather data for marketing planning. The Net has become an integral piece of the marketing mix, spawning new products and serving as both a digital distribution channel and an electronic storefront. The Net is also a strong medium for communication with target audience. In this function it is similar to a magazine or television except that the Net allows two-way communication. People are connecting to the Net at a phenomenal rate, and the number of unique Web pages now numbers 320 million.

### **Internet Business Models**

The hierarchy is a good context in which to discuss the question “What are some profitable uses of the Internet?” Another claimed that revenues on the Net can be achieved through advertising, commerce, and subscriptions to online publications. These practitioners were describing current uses of the Net and were also predicting important future uses. Analyzing all of this talk as well as current writing about profitable uses of the Net led to a short list of very strong ways to reach and interact with customers or potential customers and to generate revenues.

If internet companies want to create awareness, knowledge, or positive brand attitudes. Most of these models also have the power to build stakeholder relationships. The models begin with pure marketing communication techniques such as advertising, sales promotion, and public relations without seeking immediate transaction. Firms can implement their strategies through any Internet format: the Web, e-mail, or the Usenet. It is important to remember, however, that the user has control of the mouse and can click away at any point, forming an individual click stream of information. Therefore, stakeholder communication and branding strategies must be different from those used in traditional media (i.e., individualized, global, and quickly enticing).



**Stakeholder communication** refer to information, persuasive or not, about the company and its brands. Stockholders, consumers, employees, the media, suppliers, and the government are all examples of stakeholder groups.

Hierarchy of Effects	Business Model
Cognitive and Attitude	Stakeholder communication (6) Branding (6) Sales promotion incentives (6) Lead generation (6) Customer service (6) E-mail databases (6)
Transactive Behavior (revenue generating)	Sell product (4 & 5) Electronic publishing <ol style="list-style-type: none"> <li>1. Sell content (4 &amp; 5)</li> <li>2. Sell ads (4 &amp; 6)</li> </ol> Agent service (5)

Table 2.1. Internet Business Models

**Branding** is a process of selecting brand names or brand marks and supporting them with marketing communication. A firm wants the public to recognize its brand name and to feel positively about it; thus brand advertising does not attempt to sell product as a direct and immediate effect. The Internet has not been nearly as strong as television for brand advertising, but the Net is gaining in use for branding.

**Sales promotion incentives** are offers of cash or free product to build short-term sales.

**Lead generation** occurs when a company uses e-mail or its Web site to gather names of potential customers.

**Customer service** is extremely important for creating customer satisfaction and building business revenues. Happy customers have positive attitudes and often tell their friends about their experiences.

**E-mail databases** are used increasingly by organizations wanting to build relationships and turn prospective customers into clients. When organizations keep in touch about relevant and useful information and answer e-mail promptly and appropriately, customers are happy.

**Sell product** refers to actual online transactions by companies that sell their own products or resell products they purchased elsewhere (i.e., retailers). There are many ways to create digital value, and lots of firms are trying to understand how to become profitable or save expenses using this model.

**Electronic publishing** is actually a subset of selling product. Media create online versions of their publications and generate revenue in one of two ways: (1) they sell subscriptions (e.g., The Wall Street Journal), and/or (2) they sell advertising space.

**Agent service** occur when firms serve as middlemen but do not take possession of the product.

### **The Web as an Important Part of the Economy**

Imagine for a minute that one day the price of gasoline dropped to 10 cents per gallon. This would create enormous wealth in the U.S. economy. All businesses would see their overhead costs decline for heating, air-conditioning, machinery, lights, and so on. These savings could be passed on to consumers in the form of lower prices. Also, Americans would have more money in their pockets that they were not spending on gasoline. Something like this is happening as a result of the Internet.

## **Efficiency And Effectiveness**

Cheap information allows business to become more efficient by reducing the costs of doing business and more effective by opening up strategic opportunities. Effectiveness refers to choosing the right thing to do in order to maximize a company's competitive advantage. Efficiency refers to doing it with the minimum expense of resources (inputs to outputs). Both concepts at the macro level have an effect on the economy overall. If businesses become more efficient (save money) as a result of the Internet, then they are able to improve their competitive position and lower prices for the consumer. If businesses become more effective (choose good business opportunities), then they are also able to improve their competitive position and introduce more value for the consumer and shareholder.

## **Marketing Plan Tasks**

Marketing is the process of planning and executing the conception, distribution, promotion, and pricing of ideas, goods and services to create exchanges that satisfy individual and organizational objectives.

## **Marketing Information via the Internet**

Marketing use data to assist in decision making, and the Internet has facilitated this process tremendously. Data help marketers understand competitors, consumers, the economic environment, political and legal factors, technological forces, and other factors in the macro environment affecting an organization. Secondary data on the Net are often more current than data published in hard copy, and they are easy, inexpensive, and quick to access. Marketing planners also use the Net to collect primary data about consumers. Through online e-mail and Web surveys, online experiments, focus groups,

and observation of Net user discussions, marketers learn about both current and prospective customers.

A good way to think of the role of data in marketing decision making is by understanding the marketing information system (MIS). The MIS is a system of assessing information needs, gathering information, analyzing it, and disseminating it to marketing decision makers. The process begins when marketing managers have a problem that needs data prior to solution. The next step is to gather those data from internal sources, through secondary sources, or by conducting primary marketing research. Finally, the process ends when the same managers receive this information in a timely and usable form

The Internet as a means of gathering information used in a marketing information system. It does not focus on the information particular to Internet marketing, but rather describes the Internet as a tool for researching all of the firm's marketing information needs. The first topic is secondary data available online. These are data that have been gathered for some other purpose but are useful for the current problem. This part deals with types of secondary data that are available online and suggests ways to evaluate the quality of these data. The second topic is primary data collection online. This part describes the marketing research process, discusses online methodologies, and enumerates the strengths and weaknesses of the Net for primary data collection.

### **Primary Research Steps**

A primary data collection project includes many steps. Briefly, managers must decide the following things:

What is the exact problem? As with secondary data, specificity is vital.

What is the research plan?

**Research approach.** On the basis of the information need, researchers choose from among experiments, focus groups, observation techniques, and survey research.

**Sample design.** At this stage researchers select the sample source and number of desired respondents.

**Contact method.** Ways to contact the sample include traditional methods such as the telephone, mail, and in-person as well as the Internet.

**Instrument design.** If a survey is planned, researchers develop a questionnaire. If the plan calls for an experiment or observations, they develop a protocol to guide the data collection.

**Data collection and analysis.** Researchers gather the information according to plan, then analyze the results in light of the original problem.

How will the data be distributed to decision makers? Research data might be placed in the MIS database or might be presented in written or oral form to marketing managers.

### **New-Product Strategies for Internet Marketing**

Many new products, such as Netscape, Yahoo!, and Amazon were introduced by “one pony” firms. This means that the firm was built around the first successful product. Other firms, such as Microsoft, added Internet products to an already successful product mix. This section explores product mix strategies as well as branding and positioning strategies.

### **Brand Strategies**

A brand includes a name (McDonald's), a symbol (golden arches), or other identifying information. When a firm registers that information with the U.S. Patent office, it becomes a trademark and thus is legally protected from imitation. According to the U.S. government, “a trademark is either a word, phrase, symbol or design, or



combination of words, phrases, symbols or designs, which identifies and distinguishes the source of the goods or services of one party from those of others” (source: [www.uspto.gov](http://www.uspto.gov)). All of the new-product strategies listed in the previous section have branding implications. Companies creating new products face several branding decisions: what domain name to use for the site, whether to apply existing brand names or to create new brand names for new products, and whether or not to lend their brand name as a co-brand with other firms.

### **Creating New Brands for Internet Marketing**

If an organization wants to create a new Internet brand, a good name is very important. Good brand names should suggest something about the product (e.g., [www.Webpromote.com](http://www.Webpromote.com)), should differentiate the product from competitors (e.g., [www.WomensWire.com](http://www.WomensWire.com)), and should be capable of legal protection. On the Internet, a brand name should be short, memorable, and easy to spell and should translate well into other languages. For example, Dell computer at [www.dell.com](http://www.dell.com) is much easier than Hammacker Schlemmer ([www.hammacker.com](http://www.hammacker.com)), the gift retailer. As an example, consider the appropriateness of these search tool names: Yahoo!, Excite, Lycos, Alta Vista, InfoSeek, HotBot, WebCrawler, GoTo.com, and LookSmart. Which ones fit the above criteria?

### **Online Positioning Strategies**

Position refers to a brand, company, or product image relative to the competition, all from the consumer’s perspective. When a brand holds a unique position it is said to have a market niche. For example, Rollerblade has a cool Web site that is the place to go for information about in-line skating activities and news. The goal of most firms is to

build a strong, defensible position on one or more bases that are important to consumer- and to do it better than competitors. The following are a few of the many possible bases of Web site positioning:

*Attribute.* Home Arts allows users to build menus at its site using criteria such as ingredients and calorie counts ([www.homearts.com](http://www.homearts.com)).

*Product user.* GeoCities hosts free Web pages for users that are placed into neighborhoods based on their specific interests. GeoCities is the place users can go to explore a particular interest.

*Competitor.* Some firms are market leaders, some are followers, some are challengers, and some are market nichers. In the fight for hub status, America Online is the industry leader, Yahoo! is a challenger, and there are several followers. For example Aqueous ([www.aqueous.com](http://www.aqueous.com)) is a search engine and directory dedicated entirely to sites with water-related content.

*Scope.* On the Web, a firm can have a comprehensive site with a broad selection of information and offerings. For example, Digital City offers information, chat, and bulletin boards about 27 cities. Alternatively a site can be large and deep, with complete information and offerings in one category. Such is the case for Music Boulevard, Dell Computer, and Travelocity. Finally, a firm can sponsor a small site to introduce users to the product and direct them elsewhere: this is called a microsite. Examples include the separate Web sites that Levis has produced for its Dockers and Slates product lines. A comprehensive site obviously involves much more resource commitment than does a microsite.

*Price leadership.* This strategy is discussed further in the pricing section later in this chapter.

## **Product Differentiation**

Product categories exhibit varying amounts of differentiation among brand entries. On one extreme are commodity products: items such as fruits and vegetables, for which it is difficult to identify product differences, thus making positioning quite difficult. To most Web users, PC modems with a 56kbps capability are included in this category: They are all the same. Products that are unable to differentiate themselves based on benefits or perceptions of differences generally compete on price. On the other extreme are products with many features, either real or perceived, to make them different. For example, Web search tools offer various benefits: Some are directories and some are engines, and each offers unique benefits such as games or a dictionary. Other products falling into this category include clothing and gourmet foods. For these products, the firm has to do a good job differentiating the product in order to command a higher price. Some sites have gotten quite creative in this arena. The Gap, for example, allows customers to mix and match clothing online in order to build a wardrobe. Land Rover allows customers to build their Land Rover online and see the final product with all the accessories. The expectation is that customizable products such as clothing and automobiles will form an increasingly large component of online sales as sites become more sophisticated and bandwidth increases.

## **Pricing**

Online pricing strategies parallel offline strategies. That is, firms set overall strategies based their marketing objectives and then fine-tune for individual products and markets. Many factors influence prices: marketing objectives, cost, product demand, competitive environment, and government influences. Businesses are still experimenting with pricing strategies on the Internet, but one thing is true about Internet

pricing: There is tremendous downward pressure. This section describes factors putting downward pressure on pricing, suggests several areas of cost increases on the Internet channel, and concludes with three low price strategies appropriate for the current pricing environment.

### **Promotional Pricing**

Many online retailers have turned to promotional pricing to encourage a first purchase, to encourage repeat business, and to close a sale.

### **Integrated Marketing Communication (IMC)**

Integrated Marketing Communication (IMC) is a comprehensive plan of communication that includes advertising, sales promotion, public relations, personal selling, and the rest of the marketing mix to provide maximum communication impact with stakeholders.

The following is a brief review of definitions of the key promotion-mix elements along with Internet examples of each.

*Advertising*

*Sales promotions*

*Public relations*

*Personal selling*

### **Internet Advertising**

All paid-for space on a Web site or in an e-mail is considered advertising: conversely, the Web site itself is not advertising, even if it is sponsored by a commercial firm.

## **Brand versus Direct-Response Advertising**

“Brand advertising creates a distinct favorable image that customers associate with a product at the moment they make buying decisions”

## **Banners and Buttons**

Banners and buttons occupy designated space for rent on Web pages. This is similar to the print advertising model used by magazines and newspapers, except on the Net there are video and audio capabilities in that few square inches of space. Buttons are square or round and banners are rectangular. The Internet Advertising Bureau ([www.iab.net](http://www.iab.net)) and the Coalition for Advertising Supported Information and Entertainment ([www.casie.com](http://www.casie.com)) proposed standard dimensions for buttons and banners. See Exhibit 6 – 4. The dimensions of buttons and banners are measured in pixels. A monitor set to standard VGA resolution has screen dimensions of 640 horizontal pixels by 480 vertical pixels.

**Banner effectiveness:** How effective is banner advertising? Some say not at all, yet the advertising dollars pour in. To shed light on this question, it is important to measure effectiveness against the banner’s objective. Web banners help build brand awareness. IAB researchers tested twelve banner ads and found an average 5% increase in brand awareness with just one exposure ([www.mbinteractive.com](http://www.mbinteractive.com)). Other researchers found from 9% to 23% increases in brand awareness from Web browser, ISP, and men’s apparel banners (Briggs & Hollis 1997). Banners also help build brand images. IAB found Volvo banner ads increased brand perceptions 55%, and Briggs and Hollis conclude that banners cause people to change brand attitudes. The top banner ads are seen by as many as 5 million unique viewers a week.



## **Public Relations Activities on the Net**

Public relations is one marketing communication tool that is appropriate for a diverse group of stakeholders. Whereas advertising, sales promotions, and personal selling are most commonly directed to buyers and prospects, public relations is used to create goodwill among a number of different publics. These include the company shareholders and employees, the media, suppliers, and the local community, as well as consumers, business buyers, and many other stakeholder groups. It is important to remember that many different stakeholders will view an organization's site: For example, prospective employees will check out a firm by viewing the site, and community members who may be displeased with local pollution caused by a firm may look for evidence at the Web site.

## **Sales Promotion on the Internet**

Sales promotion activities include coupons, rebates, product sampling contests, sweepstakes, and premiums (free or low-cost gifts). Of these, coupons, sampling, and contests/sweepstakes are widely used on the Internet. While most offline sales promotion tactics are directed to business in the distribution channel, online tactics are directed primarily to consumers. As with offline consumer market sales promotions, many are used in combination with advertising.

## **Sampling**

Some sites allow users to sample product prior to purchase. Many software companies will allow free download of fully functional demo versions of their software. The demo normally expires in 30 to 60 days, after which time the user can choose to purchase the software or remove it from her system. Online music stores similarly allow

customers to sample music before ordering the CD. Market research firms often offer results as a sampling to entice business to purchase reports.

### **The Net as a Medium**

At this point we make a major transition from describing the way promotion tools can be put to work on the Internet to describing how marketers view the Internet as just one of many media to carry marketing communication messages, TV, radio, newspapers, magazines, outdoor (e.g., kiosks, bus cards, and billboards), and direct mail are all channels of communication as is the Internet. Because the Internet is often compared with traditional media, exploring the strengths and weaknesses of each of the major media helps to shed light on the Internet as a medium and thus helps marketers choose among them for buying promotional space. Successful media buys reach the target audience with the right message at the right place and time. Knowing the advantages and disadvantages of various Internet audience measures assists in making informed media buys. Finally, this section explores a few of the considerations media buyers use to select among media for advertising buys.

### **Creating an Internet Marketing Plan**

Creating an Internet marketing plan requires at least seven steps.

Conduct a situation analysis.

Review the existing marketing plan and any other information that can be obtained about the company and its brands.

Examine environmental factors related to online marketing.

Develop a market opportunity analysis (includes a SWOT analysis).

Identify target stakeholders.

Set objective. Some objectives are global while others apply to specific targets.

Design marketing-mix strategies to meet the objectives.

Design an action plan (tactics to implement the strategies).

Develop a budget.

Develop an evaluation plan.

## **Situation Analysis**

### **Review the Existing Marketing Plan**

Some people feel that planning a Web site means starting from scratch. Nothing could be further from the truth. While it may be the case that an organization wishes to launch a product line extension just for the Web, or to establish a different image online (perhaps a bit more high-tech), the online communication will be consistent with the overall marketing goals and current marketing efforts of the organization. What are those marketing goals? Who are the selected target marketing? What competition has already been identified? What marketing materials has the organization already produced?

### **Design Marketing-Mix Strategies to Meet the Objectives**

Now comes the part everyone enjoys: deciding how to accomplish the objectives through the Internet. In this section we present major strategies as a review, focusing on those that are currently being discussed as potentially profitable business models. Marketing-mix strategies are organized as they help to achieve the three general objectives previously outlined:

Cognitive and attitude objectives: stakeholder communication strategies

Transactive behavior goals: selling product and services over the Internet

Internal efficiencies: gaining internal efficiencies through online strategies

## **Advertising and Sponsorships**

One way to communicate with stakeholders is by purchasing advertising on other Web site. The ads can be used to create brand awareness or to position a brand. Firms may also pay to send ads with e-mail. This strategy is better for awareness building than branding because a significant number of users cannot receive multimedia content in their e-mail. Companies can also sponsor content on other sites. For example, Bloomberg sponsors investor information on the Women's Wire site. Microsoft sponsors Hotmail, the largest free e-mail service in the world. The Microsoft sponsorship allows Microsoft to cross-promote --- directing users back to the Microsoft site when they log out of their Hotmail accounts. Obviously, firms can advertising on Web sites even if they do not have their own online presence.

## **Selling Product and Service over the Internet**

Strategies in this area help firms achieve sales and market share objectives by soliciting online transactions. Strategies range from introducing new products and services that capitalize on new technologies to using the Internet as a distribution channel for current products. New-product introductions carry more risk than opening an electronic storefront for existing products, yet the Internet landscape is heavily populated with success stories. Below are a few common strategies.

## **Pricing Strategies**

Online pricing strategies are similar to offline strategies. Two important online pricing strategies are penetration pricing and price leadership. Penetration pricing is the practice of charging a low price for a product for the purpose of gaining market share. This

strategy is particularly effective in a price-sensitive market like the Internet. The best examples of low-price leadership are found in the highly competitive markets for computer components. However, a vendor competing on price had better be among the lowest price or risk going unnoticed.

According to the theoretical background and useful information of the above, I have learned that these practical information will be applicable to any business not only tourism and hotel industry but every business you would like to sell on line. And as I stated on previously that all marketing strategies the book has explained will be adaptable, I will then prove my understanding with a case of the resort industry. Similana resort is my chosen case.

### **2.3 Marketing Communication Strategy via the Internet**

Since marketing is one of the most vital things for tourism and hotel industry, hotels must carefully search the most effective way to convey products to reach the end consumer. By this method we found that most potential to do is to create marketing communication strategy via Internet. As we all know now the number of Internet users has rapidly increases, then almost every hotel is using marketing communication in the internet by posting the hotel web site in the popular search engine and apart from that there are new rivals of the hotel industry. Consequently, there is more competition in the search engine, therefore we think the better way to compete with other competitors is to find more channels to reach consumer.

The first strategy we use is advertising on line. By this method we will advertise our hotel directly to the end consumer by sending both interesting information of the hotel and hotel website through personal e-mail address of the consumer. For example



we introduce our resort by sending most attractive pictures and information of resort to arouse consumer interest before Christmas break, which we think normally most people will plan and find vacation places. However, we will be able to gather consumers e-mail addresses from company who has business in selling the marketing research information of Internet users. Beside, this company will divide groups of people who are in the group of sea lovers which would help us easily to get directly to our target group. Somehow, this method also has a drawback which is sometime consumer does not even open the message sent by us, because consumer may consider our mail as junk mail since they do not know our address.

Secondly, we use exchanging and linking information method. By this method we exchange information and website with other resorts and hotels. Initially we make an agreement with resorts or hotels we want to exchange information and website, then we advertise that resort pressing its logo or shortcut on our website and then when consumers open our resort websites, they also see other resort's logo and if they would like to visit other resort website, the consumer then just click at that logo. Consumer then will be able to be connect to that resort automatically. On the other hand we will do exactly the same way to other resorts as well by put our resort logo into other resort website and if the consumer want to visit our hotel then just click on our resort logo. For example we put Similana resort logo in blue colour with sea picture Andaman resort website, and we will put Andaman resort logo on to our website as well then, when Mr.A wants to visit our website via Andaman website, Mr.A then just click on the small logo of us.

Thirdly, we use banners and buttons strategy. This method is not complicated, we just only rent the space of the most popular website and press our resort advertisement on the first page or any other page we would like to commercialize. We found that this method will be effective since we use only a small space such as small box and use one or two sentences as slogan to advertise and impress the visitors, then if visitors want to enter to our website, they can only just click on our resort box. Besides, by advertising via popular information we will have more chances to reach to consumers since there are a lot of internet users who come into the website. In addition we have to be careful in using the slogan and sentence to arouse interest, just make only short, direct and impress. For example we rent front page space of Yahoo website which we consider Yahoo is one of the most popular websites having more than 10,000 internet visitors a day. However, this strategy may have to spend much more money than other strategies but we found it is the most effective way to reach to the consumer.

Finally, we use public relation and promotion activities through the Internet. This method is used for continued users by sending coupons, gift vouchers and special offers to consumer via one's e-mail address. For example special discount 30% for second time consumer. This methods is indirectly creates customer loyalty as well.

In conclusion, we use marketing communication strategy in order to reach to target consumer by using advertising, and promotion via e-mail address. We consider that to increase the number of our resort visitors is to advertise and make people aware of our product which is Similana resort as much as we can, therefore the effective ways are to make a strong and potential commercial to arouse consumer interest, beside we have to advertise in the best place that we think have a lot of people who would see our

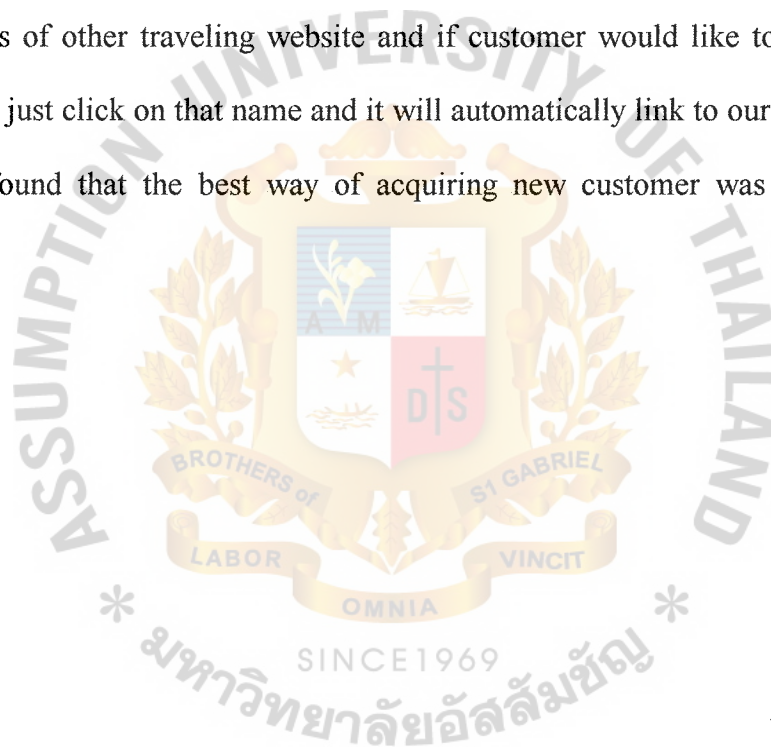
product which we explain in the previous paragraph that is the most popular website, and finally after we invite consumers to visit our place, we also should convince them to visit us twice or often by using promotion to create continue use of the product.



## **2.4 The evolution of Similana Resort in acquiring customer**

Initially acquiring customer for similar resort was walk in process, Customer who came to stay at resort was just walk in. We placed our brochures to many attractive places around Phuket, Krabi and Phang-Nga. This method was not really effective because we had to wait for the customer who really saw our brochures and interested in our resort. We thought that we should pull customer to come to us rather than waiting customer walk in. After that we had improved our strategy by contacting with many tourist agencies, by this method tourist agencies will help us in acquiring customer, we both signed contact and make a deal that within a month resort will get how many customer and tourist agencies will received commission in return. Anyhow tourist agencies will confirm us the date that customer will check in at least two weeks otherwise resort will cancel the reservation. This method gave us a lot of customer but on the other hand we also had to pay highly commission as 30%. We then found the solution to solve this weakness was we will use web site as the tool mechanical in acquiring new customer. After we had our own website, we then put our website address in our brochure. This strategy was help us easy connect to customer, as customer who really interest to reserve room can easily get in to our website and make reservation pass through internet. We found that our number of reservation was slightly increased, then we thought we should develop and promote our website more efficiency in order to acquiring more customer. Promoting our website pass through popular search engine was our first improving strategy. The advantage that we found by promoting our website pass through search engine was customer will easily know where is our resort

located and can directly connect to our resort. Consequently, the number of reservation was increased more than usual. Thus, we aware that by using search engine was efficiency in pulling customer. By the way the most effective way to acquire customer was placing our website into the traveling website. Traveling website has more than 300 chain link to other traveling website, so we found this to be our advantage as if we put our website in to one traveling website, as though we put our website into other 300 website as well. That's mean if customer click in to A traveling website will find more than 300 lists of other traveling website and if customer would like to visit similana website, they just click on that name and it will automatically link to our resort website. Finally we found that the best way of acquiring new customer was using the last strategy.





Strategies	Years					
	1993	1995	1997	1999	2001	2003
Walk in	9,600	9,750	9,530	9,221	8,993	9,882
Brochures		2,500	2,457	2,219	2,005	1,991
Tourist Agencies			10,080	15,775	14,397	16,552
Website				1,930	2,226	3,755
Search Engine					2,560	2,735
Placed on Traveling Website						4,485
Total Occupancies Rate	9,600	12,250	22,067	29,145	30,181	39,400

Comparing the occupancies rate (amounts of room) from year 1993-2003

Strategies	Years					
	1993	1995	1997	1999	2001	2003
Walk in	9,867,559	10,652,997	7,438,931	7,990,435	6,800,235	7,721,423
Brochures		3,895,423	3,543,077	3,221,768	3,176,934	2,993,448
Tourist Agencies			8,663,370	9,793,550	9,554,927	9,815,634
Website				2,290,008	3,187,040	3,312,900
Search Engine					3,780,664	4,870,457
Placed on Traveling Website						5,456,772
Total Revenue	9,867,559	14,548,420	19,645,378	23,295,761	26,499,800	29,300,177

Comparing the total revenue from year 1993-2003

### III. THE PROPOSED SYSTEM FRONT OFFICE SOFTWARE

#### 3.1 User's Requirements

The user's requirements are obtained from the users and the existing manual system evaluation. The method on how to obtain the information is to ask them to prepare the job description and also interview them on how each task is arranged step by step. In addition, the observation of day to day operating tasks by all concerned parties is also taken.

The main development of the front office software system is to improve the coordination between the front office and management team, searching customer history organizing check in, check out and data collection. The user's requirements are as follows:

- (1) To record all in-coming and out-going clients database.
- (2) To be able to refer to the previous in-coming and out-going letters in a short time when necessary.
- (3) To be able to find the clients history in the past very quickly.
- (4) To update the clients record and articles which have been done so far.
- (5) To coordinate with management team on in-coming paper to be prepared without verbal contact.
- (6) To minimize the number of photocopy and fax papers.
- (7) To improve the speed of information retrieval.
- (8) To enhance the overall organization performance and delivery of the right information and knowledge to team work.
- (9) To be an automated office for correspondence in the name of the organization that is mainly on information technology.

### 3.2 System Design

After the user's requirements have been discussed, the design of the proposed system will be focused. The database schema and other relevant factors will also be mentioned in this part.

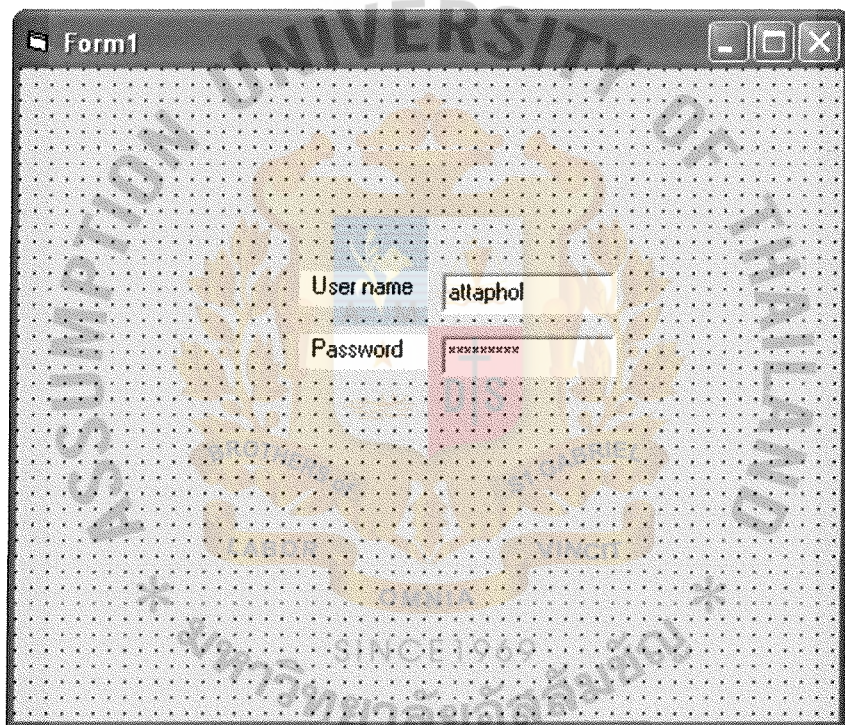


Figure 3.1. First page – Login Page.

This part is the first page of the reservation from computerized system. The unauthorized persons cannot login because of they didn't have the correct user name and password. Front office staffs have own user name and password for each other. Before they're login the system they must put the user name and password in the user name and password box on that page.



Form1

**Personal Data**

Name  Gender ☐ Male ☐ Female

Family name  Age

Country  Address

Tel. no.

E-Mail

Figure 3.2. Second Page – Personal Data.

After they're login to the system, it's move to the second part of the reservation by computerized system. This part called "Personal Data". It's mean that front office staffs have to record the personal data of customer who want to stay at the hotel. Customers have to give all details to the hotel. The personal data that hotels want are name, family name, gender, age, country, telephone number, address and e-mail address. These records will be kept in the customer history files in the server computer. It's easy to find the customer data if they come to stay at the hotel again. Just load the customer history from the server it's no need to register again.

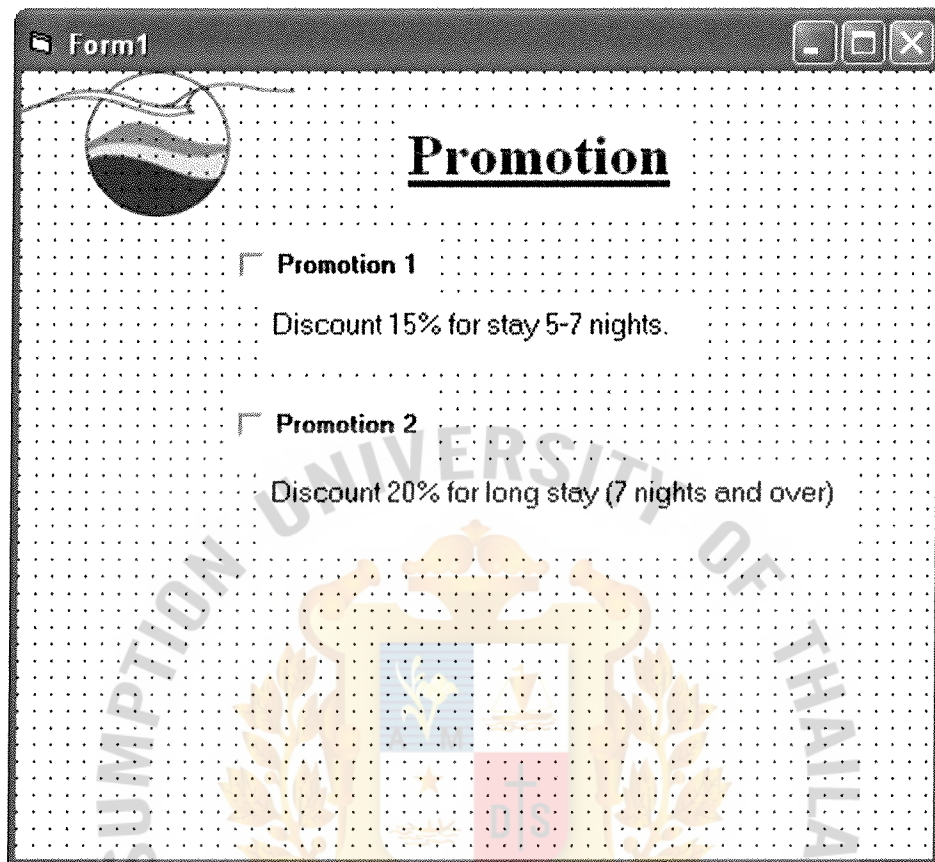


**Reservation Data**

Start Period (mm/dd/yy)	January	01	2003
End Period (mm/dd/yy)	January	01	2003
Room Type	Deluxe Bungalow		Min.Stay 01
Price	4,200 Bht.	Included	ABF
Currency	Baht	Deposit	20%
Available	Yes		

Figure 3.3. Third Page – Reservation Data.

After finished from personal data part, the display will show the reservation page. This part called “Reservation Data” After front office staff finish record the personal data next step is get reservation data from client. In this page consist of start and end of period that the client want or minimum of stay, which room type that the client want, price of room per night, the extra things that included in room such as ABF (American Breakfast), the currency that client would like to pay (Baht, Dollar, Euro etc.), deposit from client and computerized will be confirm that the room is available or not. All these data will be check and calculate from server computer if it's not available client can change to another room type. After finish key reservation data, all data will be kept in the computer server.



**Promotion**

☐ Promotion 1  
Discount 15% for stay 5-7 nights.

☐ Promotion 2  
Discount 20% for long stay (7 nights and over)

Figure 3.4. Fourth Page – Promotion.

The next page is about the promotion in the hotel. This part called “Promotion” This is the special offer from hotel if client stay longer they’ll get a special discount. For the example promotion, promotion 1 if client stay 5-7 nights they’ll be get 15% discount, promotion 2 discount 20% if stay 7 nights and over. These are the marketing strategies that increase the amount of occupancies rate in the hotel. But these promotions can change anytime it’s up to period of time in the year.

The screenshot shows a window titled 'Form1' with a standard Windows-style title bar (minimize, maximize, close buttons). The main content area has a dotted grid background. At the top, the text 'CLIENT STATUS' is centered and underlined. Below this, the following information is displayed:

Mr. Robbie William	
Country - England	Age - 33
E-Mail - robbie_w@hotmail.com	
Check in - 15 Jan. 2004	
Check out - 10 Feb. 2004	
Room type - Superior Tree house Sea View	

Figure 3.5. Fifth Page – Client Status

Last part is about the client status and the summary of reservation. This page will be show after finished these four parts. Detail of reservation, special offer and promotion will show in this page. Client can see and confirm reservation after check out this summary. After client confirm reservation computer will print out the status and front office staff will kept it in the data paper file.

## Data Dictionary

The table of Data Dictionary is listed in Table 3.1.

Table 3.1. Data Dictionary of Resort Front Office Management System  
(Reservation Module).

Reservation	Module
Booking : Individual, Group	Reservation : Reservation Forecast
Re-Booking : Individual, Group	: Occupancy Forecast : Revenue Forecast
Waiting-List : Waiting : Re-Waiting	: Room Sold in 30 Days : Arrival by Date List : Arrival by Agent
Expected Arrival : Arrival Date	: Expected VIP Arrival : Additional Requirement
Enquiry : Guest : Arrival Date : Group : Book by	: Individual Booking : Group Booking : Print Reservation Slip : Canceled Booking : Waiting List
Check Room Available : By Date Deposit	: Company List : Rate Contract : Allotment Contract
Room Assignment : Booking : Departure : Arrival : Room	: Agent Productivity : Market & Rate Analysis : Today Activity : Room Schedule Table

Table 3.2. Data Dictionary of Resort Front Office Management System  
(Registration Module).

Registration	Module
Amendment : Individual, Group	Registration Report : Rooming List
Individual Check-in : Individual, Group, Walk-in	: Room Changed : Rate Changed
Group Check-in : Individual, Group, Walk-in	: Guest in House : Expected Departure
Re-Check in : Individual, Group, Walk-in	: Check-in Today : Check-out Today
Guest Information : Individual, Group, Walk-in	: Addition Requirement : Complimentary
Update Departure : Individual, Group, Walk-in	: No Show List : Discount List
Miscellaneous : Room Change Schedule : Room Assignment : Meal Charge Schedule	: Night Clerk Room Count : Early Check-out List : VIP In House : Meal Plan List : Extra Bed List : Non-Extension Guest : Change Rate Schedule : Re Check-in : Room Situation Report

### 3.3 Hardware and Software Requirement

As the proposed system is designed for use by many users in the office, it is suitable to implement the server technology. It can be easily managed and maintained. All the client computers will be connected through Local Area Network (LAN) in the office.

The main database will be kept at the computer server. This is to prevent data redundancy when there is a case that 2 users update the same records at the same time. If one user updates a particular record, that record will be locked and cannot be updated by



another user until the first user finished updating that record. However, only authorized users can update and modify data or record. Others can only view how the tasks are progressed and cannot update or modify them.

The hardware and software specifications for the computer server of proposed system are shown in Tables respectively.

Table 3.3. The Hardware Specification for the Server.

Hardware	Specification
CPU	Pentium 4 - 1.8 GHz.
Cache	512 KB. or higher
Memory	DDRAM 256 MB.
Hard Disk	40 GB. Ultra ATA-100 / 7200 RPM
CD-Rom Drive	50 X
Floppy Drive	1.44 MB
Network Adapter	10 / 100 MB Ethernet LAN
Display Adapter	GeForge 4 MX DDR 64 MB.
Display	15"

Table 3.4. The Software Specification for the Server.

Software	Specification
Operating System	Microsoft Windows 2000 (Server)
Database Server	Microsoft Visual Basic v.6.0
Application Software	Microsoft Visual Basic v.6.0

For the users computer, the users also need to use other application programs as well such as, Microsoft Word, Microsoft Excel, and Microsoft Power Point. Other Internet

application programs are also required for coordinating within the office such as ICQ, MSN Messenger, E-mail program, and FTP program. Therefore, all users computers should have enough hardware and software for handling all those programs. Microsoft Windows 98 Second Edition and Microsoft Office 2000 would be minimum requirement for the users computers.

The Hardware and Software specifications for each user's computer are shown in Table respectively.

Table 3.5. The Hardware Specification for User's Computer.

Hardware	Specification
CPU	Pentium Celeron 2 – 1.1 GHz.
Cache	512 KB.
Memory	SD RAM 128 MB.
Hard Disk	10 GB.
CD-Rom Drive	N/A
Floppy Drive	1.44 MB.
Network Adapter	10 / 100 Ethernet LAN
Display Adapter	PCI, VGA with 4MB VRAM
Display	14"

Table 3.6. The Software Specification for Each User's Computer.

Software	Specification
Operating System	Microsoft Windows 98, SE
Application Software	Microsoft Visual Basic v.6.0
Application Software	Microsoft Visual Basic v.6.0

In addition to the hardware and software requirements, some hardware peripherals are necessary to have. Therefore, a printer is required for printing the report when necessary. A Scanner is required for scanning a document such as in-coming and out-going data for reference in digital format. The hardware peripherals for the new proposed system are shown in Table 3.7

Table 3.7. The Hardware Peripherals of the New Proposed System.

Hardware	Specification
Printer	Epson LQ-2080i
	Epson LQ-300
Scanner	Epson Perfection 1660 Photo Scanner
Hub Switch	Ethernet Hub 8 Ports, 10 Base-T
UPS for Server Computer	APC UPS 1000 VA.
UPS for User Computer	Linegard UPS 750 VA.

Since the network or LAN are available in the existing environment, and the new proposed system can be implemented with the existing network infrastructure, the network peripherals will not be discussed at this stage.

### 3.4 Security and Control

The information security or computer security is an important issue nowadays when there are more than one computer linking to one another. Therefore, the security and control issues are important.

The security and control system is categorized as follows:

(1) User's Security

Only authorized users can gain access to the system. Therefore, the user verification needs to be checked. The method for user verification is to ask user to enter login name and password. If the user cannot enter valid login name and password, the user will not be able to gain access to the system.

(2) Data Security

Since the data kept in database is recorded by different divisions, each user will have different levels for accessing data in the system. Only an authorized user is able to add, delete, and modify the data. While other users can only view the status of the records to see how the tasks are progressed.

All the activities on accessing the system will be kept as a log file. Therefore, the log file can be reviewed who does what in the system at what time.

(3) Hardware Security

All the users' computers are located in the working area where the outside people cannot enter. Therefore, hardware security for outside people is not much important. But for inside people or staff in the office, hardware security is very much important. It might happen that the authorized user who can gain access to the system and has high priority to work on data forgets to logout when not using the system. The unauthorized user may be able to gain access to the system and modify the data. And to prevent the power loss, the UPS

(Uninterrupted Power Supply) is compulsory to have. It is recommended to prevent the loss of data during power failure.





## IV. SYSTEM EVALUATION

### 4.1 System Cost and Analysis

#### (1) Costs of Manual System

As shown in Table 4.1, the factors that are considered for the existing manual cost composed of salary cost and office supplies & miscellaneous. The fixed cost is disregarded for the existing manual cost since there is no fixed cost for computers, printer, or other equipments.

The salary costs are taken from the normal monthly salary rate of Similana Resort. And a one-step increase will be given every year.

The cost of office supplies and miscellaneous are collected from the requisition report which collects all expenses that Similana Resort has spent on the office supplies and miscellaneous, made by purchasing department in resort on monthly basis. The cost of office supplies and miscellaneous that are considered here are stationary, papers, and miscellaneous for management team and front office only.

The amount of office supplies and miscellaneous for the next 4 years are calculated by multiplying the inflation rate to the previous amount of office supplies and

miscellaneous. The inflation rate used is 2% taken from the press release on inflation report, April 2003 and forecasted by the bank of Thailand.

Table 4.1. Manual System Cost Analysis, Baht.

Cost Items	Year				
	1	2	3	4	5
<u>Operating Cost</u>					
<u>Salary Cost</u>					
Front Office Staff	45,000.00	46,500.00	48,000.00	49,500.00	51,000.00
Admin Staff	30,000.00	31,000.00	32,000.00	33,000.00	34,000.00
<b>Total monthly Salary Cost</b>	<b>75,000.00</b>	<b>77,500.00</b>	<b>80,000.00</b>	<b>82,500.00</b>	<b>85,000.00</b>
<u>Office Supplies &amp; Miscellaneous Cost</u>					
Stationary per Annum	23,600.00	24,072.00	24,553.44	25,044.50	25,545.39
Paper per Annum	31,700.00	32,334.00	32,980.68	33,640.29	34,313.09
Miscellaneous per Annum	41,200.00	42,024.00	42,864.48	43,721.76	44,596.20
<b>Total Annual Office Supplies &amp; Miscellaneous Cost</b>	<b>96,500.00</b>	<b>98,430.00</b>	<b>100,398.60</b>	<b>102,406.55</b>	<b>104,454.68</b>
<b>Total Annual Operating Cost</b>	<b>171,500.00</b>	<b>175,930.00</b>	<b>180,398.60</b>	<b>184,906.55</b>	<b>189,454.68</b>

Based on inflation rate = 2% from the Bank of Thailand

Table 4.2. Five Years' Manual System Cost, Baht.

Year	Total Manual Cost	Accumulated Cost
1	171,500.00	171,500.00
2	175,930.00	347,430.00
3	180,398.60	527,828.60
4	184,906.55	712,735.15
5	189,454.68	902,189.83
Total	902,189.83	-

(2) Cost of Computerized System

As shown in Table 4.3, the factors that are considered for the computerized system cost is composed of fixed cost, salary cost and office supplies & miscellaneous. The fixed cost is regarded as computerized system cost because of the need of computers, printers, or other equipments. Since the office already has computers and other equipments, the fixed cost is based on the normal rate of currently installed computer hardware and software.

Since the computers are used for handling the tasks, it helps to minimize the need of more staff. Therefore, the staff from front office and administrative division will be reduced by one each.

The cost of office supplies and miscellaneous are also reduced since the computerized system can help staff coordinate each other through computer without using papers or at least using smaller amount of paper than before.

Table 4.3. Computerized System Cost analysis, Baht.

Cost Items	Year				
	1	2	3	4	5
<u>Fixed Cost</u>					
Computer Hardware and Software	40,500.00				
<b>Total Fixed cost</b>	<b>40,500.00</b>				
<u>Operating Cost</u>					
<u>Salary Cost</u>					
Front Office Staff	30,000.00	31,000.00	32,000.00	33,000.00	34,000.00
Admin Staff	15,000.00	15,500.00	16,000.00	16,500.00	17,000.00
<b>Total Monthly Salary Cost</b>	<b>45,000.00</b>	<b>46,500.00</b>	<b>48,000.00</b>	<b>49,500.00</b>	<b>51,000.00</b>
<u>Office Supplies &amp; Miscellaneous Cost</u>					
Stationary per Annum	19,800.00	20,196.00	20,599.92	21,011.91	21,432.15
Paper per Annum	24,300.00	24,786.00	25,281.72	25,787.35	26,303.10
Miscellaneous per Annum	37,700.00	38,454.00	39,223.08	40,007.54	40,807.69
<b>Total Annual Office Supplies &amp; Miscellaneous Cost</b>	<b>81,800.00</b>	<b>83,436.00</b>	<b>85,104.72</b>	<b>86,806.80</b>	<b>88,542.94</b>
<b>Total Annual Operating Cost</b>	<b>126,800.00</b>	<b>129,936.00</b>	<b>133,104.72</b>	<b>136,306.80</b>	<b>139,542.94</b>
<b>Total Annual Cost</b>	<b>167,300.00</b>	<b>170,436.00</b>	<b>173,604.72</b>	<b>176,806.80</b>	<b>180,042.94</b>

Based on inflation rate = 2% from the Bank of Thailand

Table 4.4. Five Years' Computerized System Cost, Baht.

Year	Total Computerized Cost	Accumulated Cost
1	167,300.00	167,300.00
2	170,436.00	337,736.00
3	173,604.72	511,340.72
4	176,806.80	688,147.52
5	180,042.94	868,190.46
Total	868,190.46	-

- (3) The Comparison of the system Costs between Computerized System and Manual System

As shown in Table 4.5, the comparison of the accumulated system costs between manual cost and computerized cost and also the present value of system cost are provided for clearer picture. It can be concluded that the cost of computerized system is lesser than the cost of manual cost which means that the computerized system is worth installing in Similana Resort.



Table 4.5. The Comparison of the Accumulated System Cost, Baht.

Year	Accumulated Manual Cost	Accumulated Computerized Cost
1	171,500.00	167,300.00
2	175,930.00	170,436.00
3	180,398.60	173,604.72
4	184,906.55	176,806.80
5	189,454.68	180,042.94

#### 4.2 Benefits from Using the System

In addition to the cost reducing from using the proposed system, there are also some intangible benefits from using the proposed system.

Here are some intangible benefits:

##### (1) Time.

Since staff from front office and management team can access the system to input the data and also check the status of each tasks, the need of using

telephone for questioning how the tasks are progressed will be minimized. The users from both divisions can check the status of each task through their computers. And they can report the status in a minute of time.

(2) Save Overtime.

Since the staff use the proposed system, they know the priority of tasks and they will be able to plan and manage the tasks. If they know the due date of the task and can submit the task on time for normal working days, the overtime expense will be minimized.

(3) Improve staff performance.

The proposed system can help staff in showing how the task progressed, when asking any staff about the progression of tasks, no matter what he or she can answer questions and can satisfy it.

(4) Better working atmosphere.

When the manager is happy with the job performed by the staff, it helps create good working atmosphere because staff can work without having pressure. If the tasks are not organized well or not coordinated well within the office, it can create serious problems. The manager will not be happy will not happy and then staff may work under pressure which can cause a bad working atmosphere.

## **V. PROJECT IMPLEMENTATION**

### **5.1 Overview of System Implementation**

After the input and output system design is finished, the database design, and the system implementation can begin. The system implementation can begin in a very simple way.

The system demonstration will be conducted in the user working area. All concerned users will be given a quick overview of the proposed system, such as the objective of the system, the user's requirements, the benefits of using this system instead of using the manual system. After a quick overview has been given to the users, the prototype technique will be used for better understanding of using this system.

Since this is the first computerized system, there is no real data available in the relational table constructed for the system. The tested data must be made for prototyping the system. The examples of real situation will be set up. After the sample data has been recorded to the database, the way on how to play around with the system or user interface will be introduced and discussed for a better understanding.

This application can be done by using Visual Basic, the input and output design or user interface design. In addition, the users can also easily get the useful reports and can submit to the manager or staff.

### **5.2 Test Plan**

In order to make sure that the proposed system can be done without errors, testing in the next important factor to introduce into the system since functional tests examine the

observable behavior of software as evidenced by its outputs without reference to internal functions, such as software code or programming module. If the program consistently provides the desired features with acceptable performance, it is not necessary to find specific source code features.

Tests better address the modern programming paradigm, as object-oriented programming, automatic code generation and code re-use become more prevalent, analysis of source code itself becomes less important and functional tests become more important.

Tests also better attack the quality target. Only the system user will pay attention to the system and determine if it meets their needs.

### **5.3 Conversion**

Since the current system is a manual system which is completely independent from the new proposed system, the parallel conversion of the new proposed system needs to be conducted. Both manual system and new proposed system will be operated together. For example, when there is a new in-coming data coming, a staff or users will do the traditional way which is to note all the details in the book and enter those data to the new proposed system. This is to prevent any errors in the proposed system. If that situation occurs, the user can be sure that he or she still has records in the book.

## VI. CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Conclusions

The existing system is manual and does not use the computer system for processing the task. Therefore, there are some problems staff can not keep schedules of task and lack good coordination among them.

Therefore, Similana Office Management System introduced to help minimize those problems. The users can get benefits by using the system as follows:

- (1) There is a better coordination among staff in the office.
- (2) All the tasks can be well managed because the manager or staff can know the progression of each task.
- (3) All data can be retrieved more easily and faster.
- (4) Files of papers and articles can be easily found.
- (5) There will be no errors to refer to the articles or papers in the past.
- (6) It can minimize the use of fax paper or photocopy of in-coming data since it can be viewed on the computer screen.
- (7) The tasks can be accomplished faster.

Therefore, the new proposed system can effectively improve the overall office performance. The front office and management team can coordinate with each other through computerized system. Each of them can check the progression of the tasks done by management team and also accomplish tasks faster.



## 6.2 Recommendations

In order to become a fully integration system, all other tasks are to be put in the system such as staff overtime records which can be filled via the computer. This is to prevent the loss of overtime paper. If the staff can key in the overtime task in a computer, it can assure that all data will be in a computer and they can take a look any time they want.

As the system is being developed, there are many functions that are required to be implemented, such as, the scanning of In-coming and out-going clients data. It can reduce the need of making a hardcopy of in-coming and out-going data or faxing the letters. This function will be soon implemented and ready for use. Another function is notifying user the incomplete tasks or the tasks that are nearly due. If this function can be implemented successfully, it can help the manager or staff follow the tasks and manage them properly.

Since the existing system is a manually based system, and the users are not familiar with entering the data via computer, the training or a brief introduction of using the new proposed system is a must. General knowledge on how to choose the menu or use buttons on the form is required in order to prevent user errors on using the system. In order to prevent some resistances to change, the users need to understand the benefits of using the newly proposed system, and the department should educate them that they will not lose the job if the new proposed system is introduced.

In addition, the technical staff who have specialized in programming code or programming structure can take care of this new proposed system. This is to prevent some mistakes that might occur, such as the user making errors on keying the data. The problem must be solved instantly.

In the future, some other departments in Similana Resort need to use this kind of system to help them manage their tasks and coordinate with each other well. And they can make use of the system and apply it to be suitable in their job environments.



