

CHAPTER 1

INTERNSHIP AT THE EMERALD HOTEL BANGKOK

1.1 Description of Internship

The author is currently doing a Master degree in Hotel and Tourism Management at Silpakorn University International College, Thailand and Perpignan University in France. The author was required to complete at least five months training due to the stipulation of the course and currently is the last semester for course work in class.

Regarding to training the author had got an opportunity to internship in The Emerald Hotel Bangkok in Food and Beverage department for 5 months in kitchen staff position from July 20th, 2009 to December 21st, 2009. Internship supervisor is Mr. Kongpop Chubchuwong, Executive Sous Chef.

1.1.1 Orientation period

Intern student work six days a week and working hours is start from 8:00 to 17:00 The training program has been assigned by Executive Sous chef. He would like to give the student chance to see as many as kitchens in the hotels in order to see the different working style and cooking process. Intern student working schedule is by following

- 20 Jul – 31 Aug : European Kitchen
- 1-Sep – 31 Oct : Thai Kitchen
- 1-Nov – 30-Nov : Pastry and Bakery Kitchen
- 1-Dec – 21-Dec : Chiness Kitchen

1.1.2 Compare expectations and reality

Before, I start the internship at The Emerald, turn back to seven months ago; I took The Oriental Professional Thai Chef Programme at the Mandarin Oriental Bangkok. I obtain the diploma and Level 2 Award in Food Safety in Catering. During my three months at The Oriental, I had a chance to work almost all sections at the Thai kitchen. Therefore, I do not expect that The Emerald will as good as its; and my expectation is true that all aspects are still too far to reach to the standardize kitchen. However, I have found the good point here that the great food taste and variety of them. Therefore, it makes me so excited to learn the recipes and secret of cooking. I also integrate the theories learned at SUIC on the job regarding how to provide the best service to customers since I have a chance to contact with them regularly.

Learning process

European Kitchen

One and a half months in European kitchen, I was in charged as a general supporter in food preparing, and support customers in the buffet line for carving station. I have learned the process of cooking, the sequence of food preparing and food storage. The buffet menu already set up by Executive sours chef every month. In a month the menu have been set differently every day in a week, they will be changed every month. I also contacted with store and receiving section to take the stuff for my kitchen.

Therefore, I can see a whole process start from issue market list to purchasing department, receive the ingredient and food stuff, food storage, preparing food and service to customers. The hotel still do not have HACCP standard, therefore, I can see improper activities in the kitchen. I also attended the food testing meeting with all department managers to monitor the implementation process of the new menu.

During my working hour, I had been facilitated by European sours chef, he sometimes guided me to improve work by reducing time and increasing quality of out put. Also others members in the kitchen also help me as on the job training.

Thai Kitchen

Two months in Thai Kitchen, I help in ingredient preparation to provide to Chef for final cooking process. Moreover, I was assigned to cook Thai dish salad in the coffee shop buffet to serve guests and work individually to support guest's order that must be in time and tasty. During my working period, there are no complain from guests, on the other hand, there are many compliment about quick cooking process and good taste. I also take an opportunity to observe and compare kitchens and stores current activities with The Key Hygiene Rules (ArabianBusiness.com staff writer on Thursday, 01 February 2007) to have a better understanding when making HACCP implementation project.¹

1.1.3 Learning Goals

- Long term leaning goals
 1. To know well the hotel kitchen operation process particularly in different kitchen style.
 2. To be able to present the improvement plan for HACCP. Since the hotel has not yet apply this standard.
- Short term learning goals
 1. To be able to separate the preparing process and break the complex issues to be manageable level in following kitchens of my training program.
 2. Look into the detail of improper items that related to HACCP standard.

1.1.4 Trends

The Emerald hotel is during reforming team and a lot of new top management almost every department recently join with the company such as Executive Sous Chef ,F&B director, Sales Director and HR Director. Many employees are looking forward to see many changes in the hotel. In fact the President would like to upgrade the hotel to be 5 star rating. Therefore, it becomes staff's dream to see hotel moving forward in the near future.

¹ See appendix A

CHAPTER 2

THE EMERALD HOTEL BANGKOK

2.1 History and Company Overview

The Emerald Hotel, Bangkok was found in November 27, 1992 under the name of P&B Ratchada hotel Co., Ltd managed and owned by Mr. Preecha Tirakijpong Managing Director. The company operates various projects such as land and housing development known as "Preecha project". The hotel located in the heart of Bangkok on Ratchadapisek Road, is a 4-star international standard hotel. In addition the hotels under P&B group are The Palazzo Hotel, The Calypzo Hotel and The Hip Hotel also located near by The Emerald Hotel.

With 605 well-appointed rooms by diving in two building, Atrium Wing and Emerald Tower, Atrium Wing consists of 322 rooms decorated superior guest rooms and suites within 14 floor, including 2 non-smoking floor. The Emerald Tower consists of 283 rooms well appointed "Deluxe" guest including 17 Executive Suites. It is a perfect holiday home for all kinds of travelers.

Hotel Food and Beverage Facilities including The Emerald Coffee Shop, Daiichi Japanese Restaurant, Yok Chinese Restaurant and Mayfair Bar. The function room including 14 Banquet halls which can accommodate small to large meetings of up to 2,000 persons, as well as cocktail reception, Buffet Dinner and other Banquet.

The Business Center is in the hotel's lobby and available every day from 7.00 am. To 23.00 pm. It is deposing over a sitting area which provides newspaper and free guide magazines with a meeting room service, Internet, Telephone, and facsimile services, Photostatting, Scanner. It is available for information for all guests in order to coordinate with other organizations. Other guest services including, Concierge, Courier Service, Room Service, Separate group check-in area, Car Park, and Health Club.

Hotel Summary

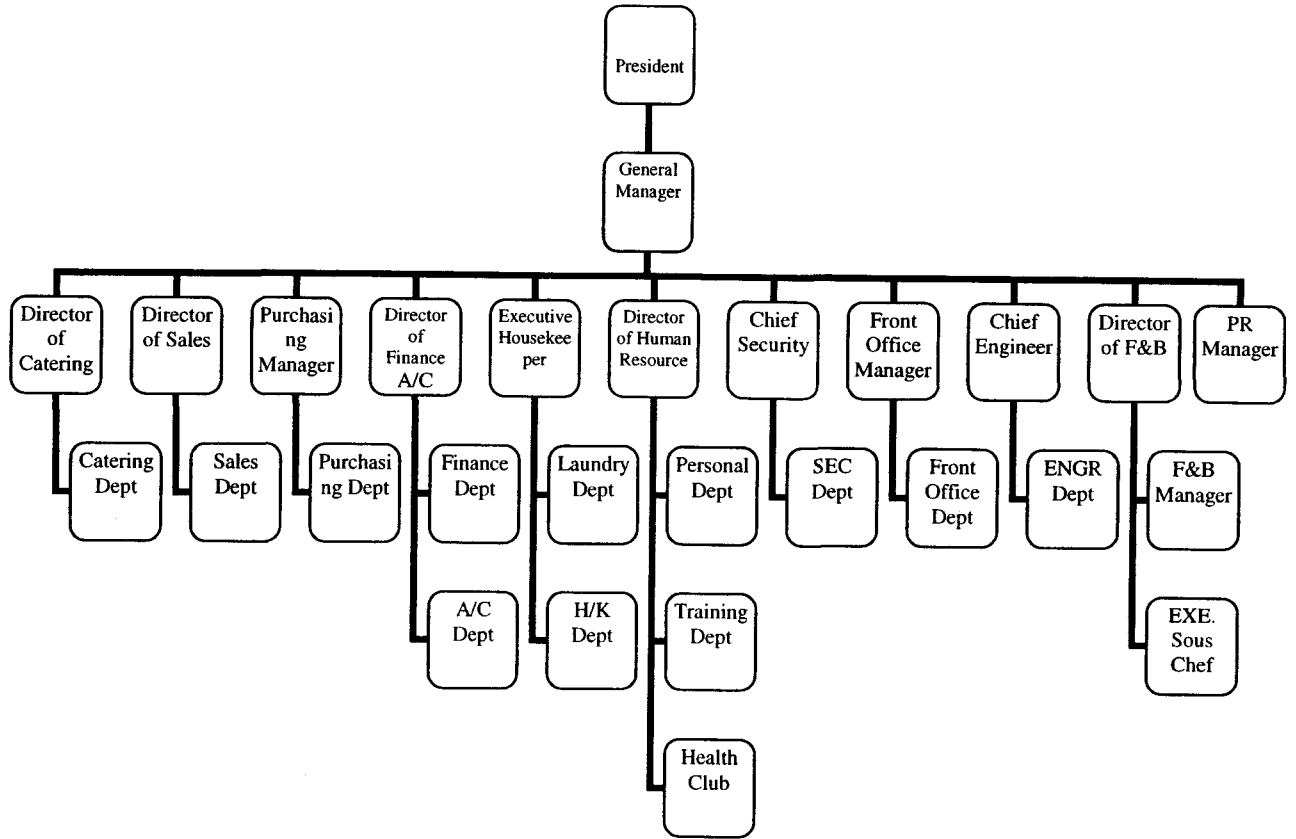
Founded: 1992
Corporate Type: Company Limited
Registered number: 0105533060901
Business Size: Medium
Status: Owned
Location: Semi-Commercial
No. Of Employees: Around 600+ people
Key Executives: Mr. Preecha Tirakijpong – Managing Director
Registered capital: 230,000,000 Baht
Paid-up capital: 230,000,000 Baht

Table 2-1: Hotel Group

Hotel Group	Star rating	No. room
The Emerald Hotel	4	605
The Palazzo Hotel	3	273
The HIP Hotel	3	175
The Calypzo Hotel	3	118

2.2 Organization Chart

Figure 2.1: Organization Chart of The Emerald Hotel



2.3 Ranking in Industry

Table 2.2: Ranking in Industry

Rank By	Fiscal Year			
	2007	2006	2005	2004
Total Revenue	2501	2366	2061	1206
Total Assets	1502	1394	1218	693
Net Income	1996	1883	289	40
No. of Companies with Submitted Financial Statement	2913	2717	2394	2136

2.4 Volume of business

Table 2.3: Volume of business

Revenue 2009	AVE/ Month Million THB	Proportion
Food	15.78	71%
Beverage	1.43	6 %
Room	5.02	23%
Total	22.23	100%

Figure 2.2: F&B Revenue for the month of year 2009

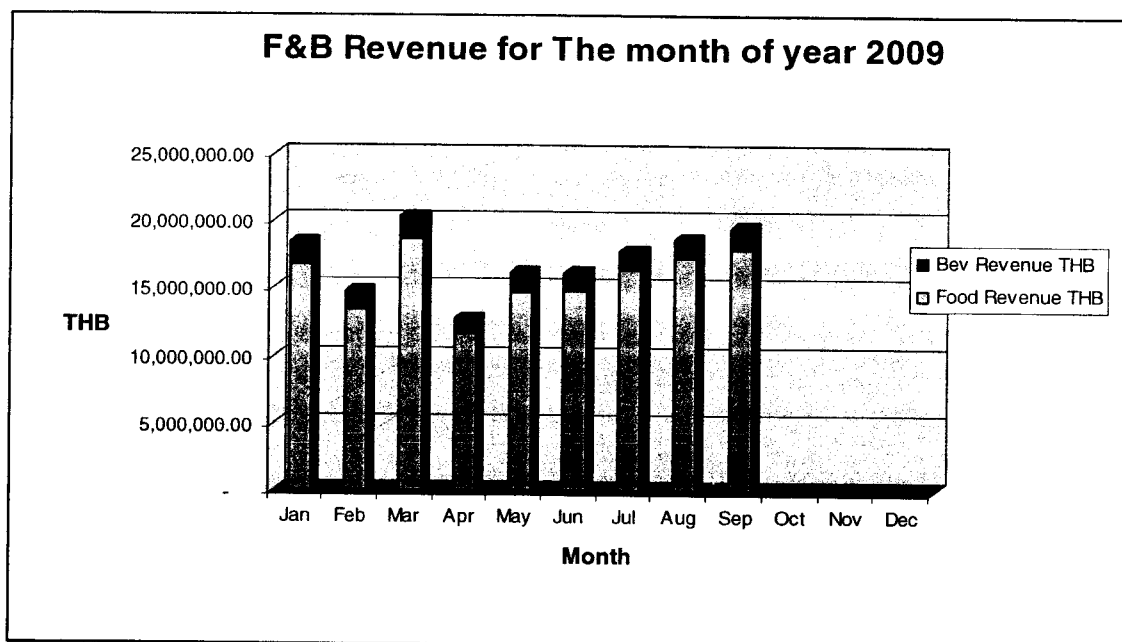
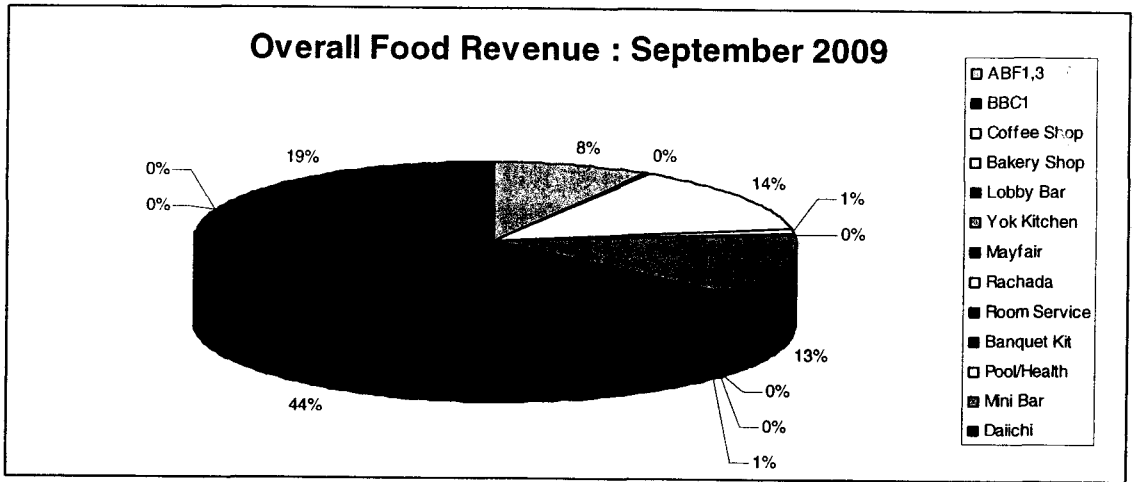
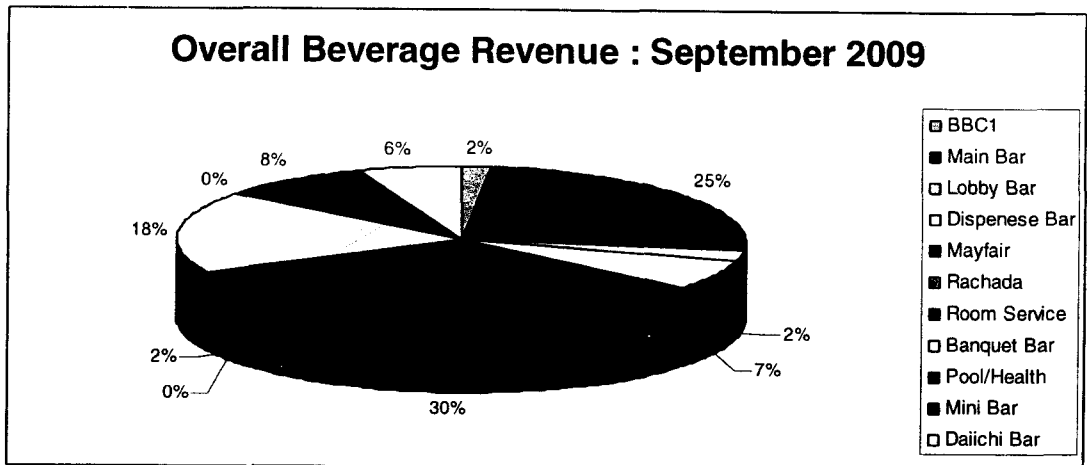


Figure 2.3: Overall Food Revenue: September 2009



1. Banquet Kitchen : 44%
2. Daiichi Japanese Restaurant : 19%
3. Coffee Shop : 14%

Figure 2.4: Overall Beverage Revenue: September 2009



1. Mayfair Bar : 30%
2. Main Bar : 25%
3. Banquet Bar : 18%

2.5 Corporate Culture

The Emerald Hotel has a traditional design by functional structure which departmentalization by function. However, the real management style actually is low departmentalization, wide spans of control particularly centralized authority as same as a simple structure model. Since the president always involve in all departments and final decision must be approved by him, even if the first line staff recruitment.

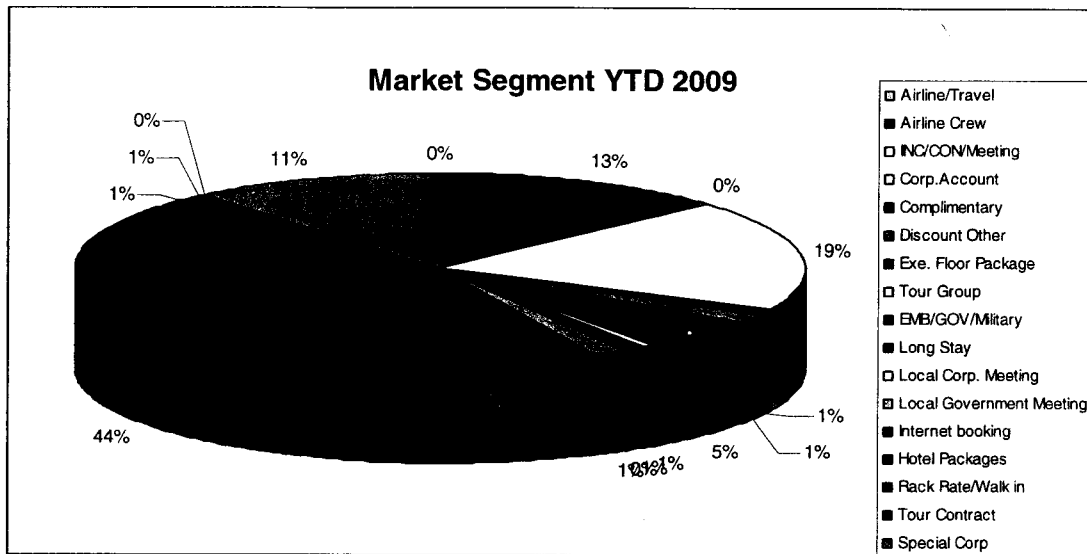
The hotel put the value of team members in a low priority that is not strive to develop and maintain a work environment that fosters the professional advancement and satisfaction of the team members in order to attract the best-qualified applicants. The long service staffs and skillful staffs always resign when they find a better place. The authority to change salary to employees is belong to the top management and the adjustment is not related with corporate salary structure but depend on his decision. The attitude of team members do not focus to provide for the total satisfaction of the hotel guests, but to work for themselves and always think why they have to put so much effort to the hotel, as long as the hotel do not care about them. Regardless of the location, amenities, or price level of the individual hotel property, the hotel is quite far from offering the best lodging value and guest experience in each of the markets in which they operate.

As the top management has a strong connection with the politician and government team, therefore, this bring in a lot of business from government department particularly the significant revenue from function and seminar from government corporate accounts.

2.6 Customers

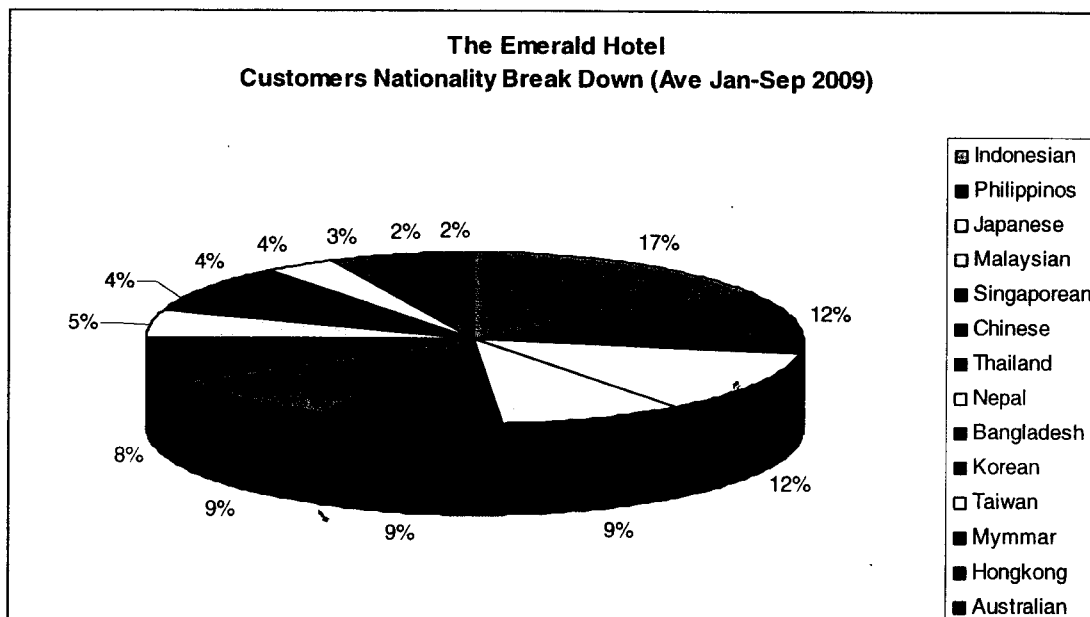
2.6.1 Customer of hotel rooms

Figure 2.5: Market Segment YTD 2009



1. Hotel Package : 44%
2. Corporate Account : 19%
3. Airline Crew: 13%

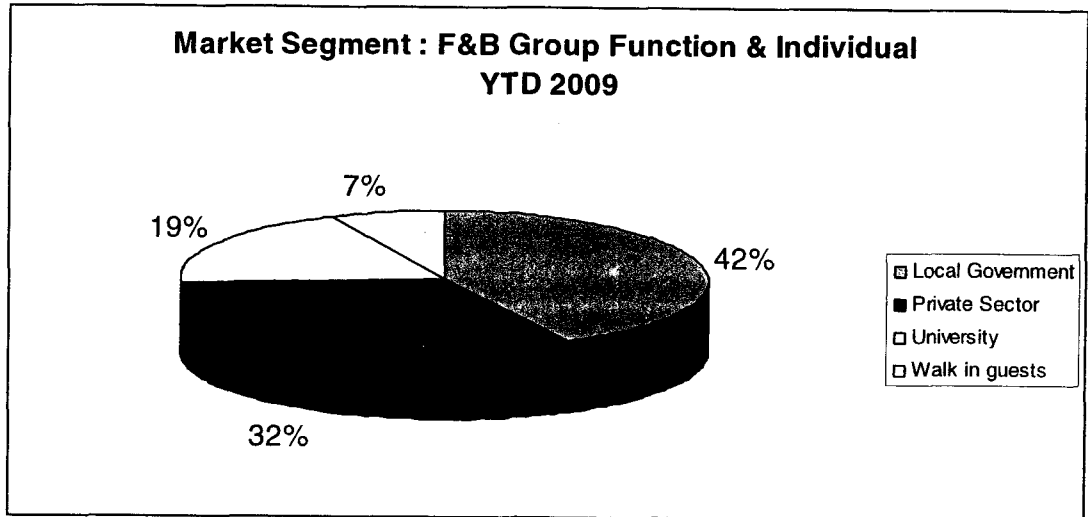
Figure 2.6: Customers Nationality Break Down 2009



1. Indonesia: 17%
2. Philippines: 12%
3. Japanese: 12%

2.6.2 Customer of Food & Beverage

Figure 2.7: Customer of F&B: Market Segment 2009



Reference Customers

Table 2.4: Reference Customers

Government Sector	Private Sector	University
Democrat Party	Thai Life Insurance	Thammasat University
Government Savings Bank	ISO	NIDA
Department of Land	Air Conditioning Association	Mahidol University
Royal Thai Police	SCG	
Bureau of The Budget	Easy Buy	

2.7 Competitors and Quantitative data

Table 2.5: Comparison F&B Revenue

The Emerald Hotel Bangkok Comparison F&B Revenue For the month of September 2009

Hotel	This Month		Last Month		Variance	
	Food	Bev	Food	Bev	Food	Bev
Chaophaya Park	0	0	12.25	2.06	-12.25	-2.06
Sofitel Central Plaza	27.67	4.43	24.94	4.83	2.73	-0.4
Banyantree Bangkok	16.5	9.39	19.33	12.64	-2.83	-3.25
Swissotel Le Concorde	13.5	0.77	12.26	0.86	1.24	-0.09
Grand Mercure Fortune	8.47	0.61	9.08	0.69	-0.61	-0.08
Crowne Plaza Bangkok	6.87	1.31	6.97	1.22	-0.1	0.09
Westin Grand	6.4	1.8	6.87	2.04	-0.47	-0.24
Shangri-La	23.03	5.8	19.58	6.81	3.45	-1.01
Landmark	17.69	7.09	18.95	7.45	-1.26	-0.36
Sheraton Grand	14.19	6.24	14.04	6.46	0.15	-0.22
Pathumwan Princess	10.54	2.2	9.14	1.91	1.4	0.29
Sofitel Silom Bangkok	5.54	1.64	5.71	1.67	-0.17	-0.03
Nai Lert Park Bangkok	8.2	1.54	10.68	1.67	-2.48	-0.13
	0	0	0	0	0	0
The Emerald Hotel	18	1.53	17.25	1.46	0.75	0.07
Daiichi	3.36	0.08	3.93	1.81	-0.57	-1.73
P&B Rachada Hotel	14.63	1.44	13.31	1.36	1.32	0.08
Coffee Shop	2.46	0.39	2.47	0.42	-0.01	-0.03
Chinese	2.29	0.1	2.48	0.12	-0.19	-0.02
Banquet	7.86	0.27	6.65	0.21	1.21	0.06

Table 2.6: Competitive Market Analysis YTD 2009

**The Emerald Hotel Bangkok
Competitive Market Analysis
YTD 2009 (as of 14-Oct-09)**

Competitor	AVL RMS	OCC RMS	OCC %	ARR	RM REV	REVPA R	MPI	ARI	RGI	ACT MKT SHR	PTN MKT SHR
The Emerald	137,700	75,481	54.82	1,504.79	113,583,386	824.86	0.71	0.96	0.68	20.46	26.72
Swissotel	92,846	56,308	60.65	2,218.30	124,907,290	1,345.32	0.82	1.55	1.27	15.26	18.02
Chaophaya Park	91,656	73,178	79.84	1,421.65	104,034,281	1,135.05	1.14	0.90	1.03	19.84	17.79
Radison Hotel	101,916	88,518	86.85	1,353.68	119,824,531	1,175.72	1.28	0.84	1.07	24.00	19.78
Fortune Hotel	91,200	75,391	82.67	1,468.97	110,747,981	1,214.34	1.19	0.93	1.11	20.44	17.70
Total	515,318	368,876	71.58	1,553.63	573,097,469	1,112.12	1.00	1.00	1.00	100.00	100.00
AVERA GE	94,405	73,349	77.70	1,615.65	114,878,521	1,217.61				0	

CHAPTER 3

IMPROVE HOTEL QUALITY SYSTEM WITH HACCP STANDARD

3.1 Hotel Owner statement

“I would like The Emerald Hotel to up-grade current star rating from 4 Star to 5 Star Hotel within five years, increase the number of Japanese guests at least 20% in 2015 and gain competitive advantage among hotel’s competitors.”

According to his statement I have considered how to reach to the final goal for what the operation necessary to improve during my internship experience. At The Emerald I work as a student trainee in four kitchens within five months. As the matter of fact, before I join here, I took three months course of “The Professional Thai Chef Programme from Mar to May 2009 at The Mandarin Oriental Hotel one of the most luxury hotels in Thailand which has five star rating. From this course I obtain the Level 2 Award in Food Safety in Catering² to ensure I have successfully completed a programme of training and an assessment which concluded the course certified by Chartered Institute of Environmental Health, UK.

Therefore, I bring the knowledge from this course to observe and compare The Emerald’s kitchens and The Mandarin Oriental’s kitchens to find out how I can provide the idea for future improvement. The key different is The Emerald has not have The HACCP system. So that, I start to study whether HACCP system is necessary for The Emerald Hotel if it will benefit the hotel to gain the five star rating.

² See appendix B

3.1.1 The way to reach five star rating of The Emerald Hotel

In order to be 5 stars rating the hotel must cooperate with:

THE “THAILAND HOTEL STANDARD” STAR RATING AWARDED TO THAI HOTELS

The Foundation of Standard and Human Resources Development in Service and Tourism Industry and must have the basic qualifications below:

To be eligible, a hotel or resort property applying for the standard must meet the following requirements:

- The hotel must operate in Thailand
- The hotel must have a legal hotel license and must have been in full operation for at least one year.
- The hotel must accept the regulations for the Thai Hotel Standard certification process and must have paid certification fees.

3.1.1.1 Why implement HACCP is necessary for five star hotels?

The Emerald Hotel is eligible to apply for this standard with pass all qualification above and how HACCP is concerned to it, we can refer to the information below.

Major factors in considering the hotel standard

The major factors taken into consideration in the assessment and certification of an individual hotel and resort property are:

- **Physical aspects**
such as location and surroundings
- **Construction aspect**
i.e. the physical structure of the hotel, systems in place, security system, etc.

- **Facilities for hotel guests**

taking into consideration guests who are resident at the hotel (in-house guests) as well as guests who frequent the hotel and use the services provided. For example, the quantity of the facilities, décor, equipment, etc.

- **Quality of Service and the ability to maintain quality**

includes such criteria as personality, the quality of services,

Cleanliness, hygiene, etc.

- **The maintenance of the hotel and the abovementioned facilities.**

The Thai hotel standard covers three aspects

- The standard of construction and facilities
- The standard of maintenance
- The standard of services

In fact, The HACCP is not a legal requirement from Hotel to comply with Thai law while other developed countries are does. However, HACCP is the most effective way of ensuring food safety, as well as offers a simple, systematic approach to identifying and controlling hazards at all stages of the process, from purchase of ingredients through to sale or service. Therefore, to pass one of the major factors in considering the hotel standard of “The Quality of Service and the ability to maintain quality” includes such criteria as personality, the quality of services, **cleanliness, hygiene, etc.**

To conduct HACCP system will help hotel to pass the criteria of cleanliness and hygiene and the standard of services as a whole. That we can see from the similarity of HACCP criteria and 5 stars hotel criteria.³

³ See in appendix C

3.1.2 HACCP is a tool for Marketing Strategies

3.1.2.1 Customers Focus for business expansion

One of hotel long term plan is to increase the number of Japanese guests to increase at least 20% in 5 years. According to the number the Japanese customers is one of the majority customer, and total numbers of Japanese tourists to visit Thailand still high and project to increase year by year. Therefore, hotel has an opportunity to gain more Japanese guests. To satisfy this market HACCP implementation is a necessary tool.

According to second FAO/WHO Global Forum of Food Safety Regulators Bangkok, Thailand, 12-14 October 2004 stated that in Japan, they really concerned of Food Safety and put in a legal requirement that carried out based on The Food Sanitation Law and The Law Concerning the Prevention of Infectious Disease and Medical Care for Patients of Infections to food operations business and project to expand to international level.⁴

At The Emerald Hotel, refer to Figure 2.6: Customers Nationality Break Down in 2009, Japanese guest occupiers about 12% of total guest which mainly from Japan Air line crew stewardesses including a group of Piney JAL trainees. If one day Japanese Government persuade or recommend Japanese people out of the country to stay in the place that having systematic procedures to assure food safety. What the hotel will do? On the other hand, why does not the hotel implement HACCP and announce to Japanese corporate accounts and public conference, it is to focus the individual market preference and also benefit to other groups as well.

⁴ See appendix D

3.1.2.2 Gain competitive advantage among competitors

Table 3.1: Competitors status of HACCP implementation

Competitor	Star Rating	HACCP System
The Emerald	4	No
Swissotel	5	Project to
Chaophaya Park	3	No
Radison Hotel	5	Project to
Fortune Hotel	4	No

According to competitive market analysis, The Emerald hotel is now standing on the top class for F&B revenue among competitors who located surrounding area and share the similar target group. If the Hotel implements HACCP system, it will have a similarity with Swissotel, 5 stars rating located opposite site of the road which has better income from room. If The Emerald establishes HACCP system, the hotel will improve quality standard and increase competitive advantage.

Moreover, the hotel can announce to international market regarding that The Emerald Hotel is on the stage of improvement and focus on social responsiveness. Regarding the information from website <http://www.dininginthailand.com/foodborne.illness.htm> That state to the tourists to be cautious about diseases from food and water when travelling Thailand. Also mention about some hotel and restaurant are taking step to assure the safety food to customers.⁵

3.2 Literature Review

According to Cookery For The Hospitality Industry, (Graham Dodgshun & Michel Peters, 2004 p.20). Hygiene has always been an important factor in all aspects of catering, but despite the best efforts of industry, food poisoning is on the increase worldwide.

⁵ See appendix E

3.2.1 What is HACCP?

Hazard Analysis and Critical Control Points food safety system. HACCP is all about predicting what could possibly go wrong with the safety of the food in a food operation from the time the raw materials or ingredients are received through to the time the food is served or sold. HACCP is a pro-active system that aims to prevent, control and eliminate biological, chemical or physical hazards which may pose a danger to the health of consumers.

HACCP involves identifying the foods and the procedures most likely to cause food-borne illness and putting effective procedures in place to control and monitor those hazards. This means looking at the operation step-by-step, from the selection of menu items and ingredients through to the service of sale of the food to the customer.

3.2.2 What are the origins of HACCP?

HACCP was originally developed by NASA and the Pillsbury Company to prevent astronauts from getting food poisoning on the first manned flights to space. Their goal was to produce '100%' safe food. Pillsbury investigated ways of protecting the food from biological, chemical or physical hazards. They found that the only way they could achieve this was to have control over the raw materials used, the processes, the physical environment and the people. The system they developed to ensure control became known as HACCP.

HACCP is now widely adopted throughout the world as the basis for food safety laws. HACCP is used as a valuable risk management tool for food safety in many industry sectors including food service, manufacturing, packaging, retail, meat production, dairy and agriculture. Together with Good Hygiene Practices, HACCP forms an integral part of an effective Food Safety Program.

New food production and processing practices, emerging food-borne pathogens, and changing eating habits and demographics have contributed to a higher awareness of food-borne illness in recent years. Increasingly, prevention has become the focus.

HACCP systems control food safety hazards through prevention, elimination and reduction.

To address food safety concerns, market forces are driving HACCP implementation throughout the food continuum, particularly the processing sector. When a food illness outbreak occurs, many points in the food continuum suffer, including the retail sector. In response, many retailers and grocers have begun to insist that their suppliers have effective food safety systems, including HACCP, implemented in their facilities; this action drives the adoption of HACCP by many processors to retain their current market and customer base or, in fact, expand it.

3.2.3 Common Benefit of HACCP

HACCP Academy Company, (www.haccpacademy.co.za) Although the adoption of HACCP systems world wide is due primarily to the added food safety protection provided to the consumer, a number of other benefits to the food industry, including The Emerald Hotel, can be realized by implementing a successful HACCP system.

1. Increased Focus and Ownership of Food Safety

Food safety is the responsibility of everyone in the food supply chain. Through the process of developing and implementing a HACCP system, Hotel's employees will become more aware of food safety and their roles in maintaining and contributing to food safety. This increased awareness leads to increased ownership and pride in the production of a safe product.

2. Increased Buyer and Consumer Confidence

There is an increasing trend for buyers to request HACCP from their suppliers. Food processors who have implemented a HACCP system provide buyers and consumers with a greater degree of confidence that the facility is producing a safe food product.

3. Maintaining or Increasing Market Access

Market forces continue to drive food safety awareness and HACCP implementation throughout the food processing sector. As food safety systems, particularly HACCP, become more common, market access is limited for processors who do not implement them. In many cases buyer demands require HACCP implementation to maintain market share and /or gain access to previously inaccessible markets. HACCP implementation may also permit re-entry into a market that had been lost. Considering the economic implications, HACCP implementation may be a necessary cost of business.

4. Business Liability Protection

Implementation of a HACCP system can provide your facility with some degree of increased business liability protection and may lead to reduced insurance premiums. This will be an important factor once the Consumer Protection Bill has been passed by Parliament

5. Reduced Operation Costs

The process of developing and implementing a HACCP system requires that the entire manufacturing process be reviewed and analyzed, and written procedures developed. This process often reveals areas where operational costs can be streamlined. For example, developing a sanitation program may identify that excessive chemical concentrations are being used. Reducing chemicals to the correct concentration may decrease sanitation costs.

6. Efficient Oversight

Similarly, HACCP implementation can provide your company with ongoing efficient oversight. It can be cost effective to implement HACCP in spite of the associated costs. Activities that are performed on a regular basis, such as product and process monitoring, employee training and review of procedures, allow your company to maintain control over the facility and product. You may find there are certain areas of the process that can be made more efficient and productive.

7. Improved Product Quality and Consistency

The implementation of a HACCP system may indirectly enhance product quality. Procedures that minimize the presence and growth of pathogenic micro-organisms can also minimize the presence and growth of spoilage micro-organisms, leading to an increased product shelf life. In addition, the attention given to standardized procedures will improve product consistency.

8. Reduced Wastage

The preventative nature of HACCP allows a company to control costs by minimizing the amount of product requiring rework or rejection, and focusing resources on areas that have been identified as critical in the manufacture of a safe food product. You will find that many problems are addressed before they escalate and before products are dispatched from your facility; you will not simply be waiting for the results of end-product testing. With the regular monitoring inherent in a HACCP system, you will become aware of problems earlier, and your costs of wastage will be reduced.

3.2.4 *The seven principles of HACCP*

According to *Cookery For The Hospitality Industry*, (Graham Dodgshun & Michel Peters, 2004 p.20). ***This is an explanation of the concept, the principles and the application of HACCP in a food service environment*** that will give you the necessary knowledge to reduce food safety risks. This will ensure that you understand the importance of producing safe and suitable food for your customers.

HACCP principles that are summarized below:

Principle 1 Conduct a hazard analysis

Principle 2 Determine the Critical Control Points (CCPs)

Principle 3 Establish critical limits(s)

Principle 4 Establish a system to monitor control of the CCP.

Principle 5 Establish corrective action to be taken when monitoring indicates that a particular CCP is not under control.

Principle 6 Establish procedures for verification to confirm that the HACCP system is working effectively.

Principle 7 Establish documentation concerning all procedures and records appropriate to these principles and their application.

HACCP principles are derived from Codex Alimentarius of the Food and Agriculture Organization of the UN; Vol. IB (Annex to CAC/RCP 1-1969, Rev.3 (1997))⁶

3.3 Is The Emerald Hotel ready for HACCP?

Considerations before implementing HACCP. Of course, improving food safety commonly involves some cost and does not guarantee future cost savings. For this reason, many companies are initially hesitating to implement HACCP since money and resources are usually limiting factors. The development, implementation and maintenance of a HACCP system is a major commitment that will require time, money and other resources. It is highly recommended that you do some preliminary assessments to determine if HACCP is right for the hotel. The following considerations will help you with your assessment.

Ask these questions to all kitchen department head and Executive Sours Chef

- Do you have a through understanding of your facility and its operations?
- Why do you want to implement HACCP?
- What resources would be required to implement HACCP in your facility?
- What are the costs and benefits of implementing HACCP in your facility?

Table 3.2: Quiz: Do you have a Thorough Understanding of Your Facility?

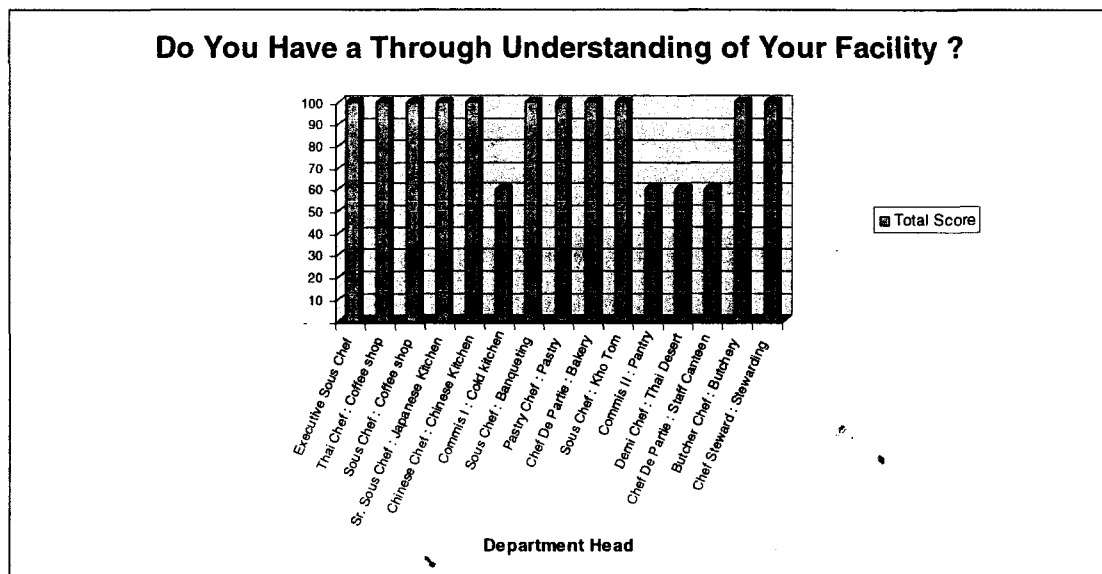
Statement	Yes Or No?
1. I can describe all the products manufactured in my facility.	
2. I can list the main ingredients, incoming materials (e.g., processing aids) and packaging materials of all of these products.	

⁶ See appendix F

3. I can describe the processes used for all of these products.	
4. I can describe the main food safety hazards (chemical, biological, physical, and cross-contamination) of all of the products and processes in my facility.	
5. I can describe the purpose of each piece of equipment in my facility and how each is used.	
6. I understand the maintenance and calibration requirements of each piece of equipment in my facility.	
7. I am fully aware of the physical condition (e.g., stage of repair) of my facility inside and out.	
8. I understand how each area of my facility is used.	
9. I can describe the flow of people and products through my facility.	
10. I understand the role each employee plays in the processing of products and the handling of products, ingredients	

Note: "Yes" = 10 points "No" = Zero point

Figure 3.1: Result of questionnaire "Is the Emerald Hotel ready for HACCP?"



11 persons answered "Yes" to all of the above, they have a thorough understanding of your facility that will assist them to develop a successful HACCP system. However 4 persons were not able to answer "Yes" at this point to all of the above

now is the time to gain a greater understanding, before they are too far into the development of their HACCP system. Failing to gain a greater understanding of their facility will hinder and jeopardize their HACCP system. For example, they may misunderstand certain hazards, overlook key areas of cross-contamination or miss the impact of certain employees. Therefore, to provide the pre-training is also necessary to all of them.

3.4 Applying HACCP to The Emerald Hotel

According to Cookery For The Hospitality Industry, (Graham Dodgshun & Michel Peters, 2004 p.23-35).A Food Safety Program based on the principles of HACCP will consist of a set of HACCP or 'Food Safety' plans which are followed in day-to-day operations and which are supported by standard procedures for good hygiene practice.

For HACCP plans to be effective, the unique features while the process steps in preparing food are often the same, every food-service/ catering business is different. There will be different food safety hazards caused by factors such as:

- Different menus;
- The working space available;
- The type and condition of equipment used;
- The selection and supply of ingredients used;
- The processes used for the preparation production and service of foods;
and
- The standard of good hygiene practices employed in the operation.

It is important to note that the complexity of the HACCP plans will be dependent on the complexity of the food operation. For example, a cook-chill operation for a large hospital will require more complex in-dept HACCP plans than a small cook-serve operation in a restaurant.

Generally, the application of the HACCP principles consists of following a series of established steps, as described below:

Step 1 Assemble a HACCP team

The hotel must choose a team based on their experience and understanding of the processes and food items under review. It is important to ensure that a sufficient number of people with a cross-section of skills and knowledge are included in the team. It is essential that the HACCP team is trained in the principles and application of HACCP and clearly understand their role. They will also need to meet regularly.

Example: The Emerald case

A typical HACCP team may consist of the Executive Chef, Restaurant Manager, Sous Chef, porter and kitchen assistants.

Step 2 Develop a HACCP Implementation Plan

Before the HACCP team begins to apply the principles of HACCP, they need to decide which food items will be included in the HACCP plan(s). HACCP can either be applied to every part of the operation in one go or it can be phased in gradually over time. For example, HACCP plans may be written for every product produced or handled based on food groups, or HACCP plans may be written for a particular group of food items first. Either way, priority should be given to high-risk food items/recipes.

For each HACCP plan, the HACCP team will need to identify what the scope will be, i.e. which process steps will be included in the HACCP plan and which hazards will be included in the HACCP plan (e.g. biological, chemical and /or physical hazards).

Example: The Emerald case

The HACCP team may decide to review hot meat dishes prepared in-house through all stages of the production process, from recipe formulation through to hot holding and service to customers, focusing on biological hazards only.

Principle 1

List all potential hazards associated with each step, conduct a hazard analysis, and consider any measures to control identified hazards

Firstly, the HACCP team must decide whether any of the process steps associated with the product(s) is potential sites for biological, chemical or physical contamination. There will be any issues that will need to be considered during the hazard analysis stage

The team will need to ask:

- Will any 'at risk' population groups purchase or consume the food(s) (for example, immune-compromised, pregnant women, children, that aged etc.)?
- What are the key parameters for the food(s) (for example, ingredients, processing, packaging, storage and distribution methods etc.)?
- Will the food(s) be taken off the premises to be consumed by the customer, and if so, how will it be treated and /or consumed (for example, re-heating, cooking, handling etc.)?
- Is biological contamination likely to occur at this process step? For example:
 - Is the product a potentially high-risk or hazardous food?
 - Does the process step provide the right conditions for bacteria to survive and multiply (for example, time, temperature, acidity, food and the right water activity)?
 - Could the hazard/s cause a food-born illness?
- Is chemical contamination likely to occur at this process step (for example, cleaning and sanitizing chemicals, food additives etc)?
- Is physical contamination likely to occur at this process step (for example, bone, glass, wood, metal, stones, hair etc)?
- What is the likelihood that the hazard will occur and what is the severity if it does occur?
- Are there any hazards that may be present in the raw ingredients (e.g. raw shellfish) or introduced during the process (e.g. contamination from equipment, environment or personnel)?

- What events could realistically occur that may not be covered by the flow chart (e.g. delays, equipment breakdown, temporary storage etc.)?

The HACCP team must then ensure that there are preventative measures in place to control all of the identified hazards.

The purpose of preventative measures is to eliminate hazards or reduce their impact or occurrence to acceptable levels. This will involve the implementation of Standard Procedures for Good Hygiene Practice in the areas of Premises, Equipment, Cleaning, Pest Control, Personal Hygiene, Transport, Receiving and Storage and the Production Process.

Example: The Emerald case

Hot meat dishes

Process Step	Hazard	Preventative Measures
Cooking	Insufficient cooking Allows survival of food Poisoning bacteria and/or Their spores	Follow standard procedures for cooking

Principle 2

Determine Critical Control Points

The HACCP team needs to assess which process steps and procedures for the product(s) are critical to the safety of the product. A Critical Control Point (CCP) is defined as a step at which control can actually be applied and is essential to prevent, eliminate or reduce a hazard to an acceptable level. A typical food item or recipe will have at least one or more CCPs.

To identify whether a process step is a Critical Control Point, the HACCP team will need to ask:

- If I lose control at this step, will a food safety hazard occur which a further step will not be able to eliminate or reduce to an acceptable level?

Examples of Critical Control Points in a food service of The Emerald include:

- Cooking
- Cooling
- Re-heating
- Hot and cold holding
- Mixing (e.g. formulation of acidic ingredients)
- Cleaning and sanitizing procedures
- Prevention of cross contamination.

Example

The Emerald HACCP plan for hot meat dishes to shows which process steps were identified as CCPs. All of the process steps that occur before cooking stage have not been identified as CCPs this is because any biological hazards at these steps will have either been controlled through preventative measures, or will be destroyed during the cooking process.

Process Step	Hazard	CCP
Cooking	Insufficient cooking allows survival of Food poisoning bacteria and/or their spores	Yes
Cooling	Multiplication of any surviving food Poisoning bacteria and/or their sports	Yes
Reheating	Multiplication of any surviving food Poisoning bacteria and/or their sports Toxin production	Yes
Hot holding	Multiplication of any surviving food Poisoning bacteria and/or their sports not killed by cooking Re-contamination of meat from Equipment/food handlers/customers Microbial contamination from any added Ingredients such as garnishes and condiments	Yes

Principle 3

Establish critical limits for each CCP

Having identified the Critical Control Points for the product(s) the HACCP team now need to set Critical Limits. The Critical Limits are the specific standards with in the Preventative Measure that must be met to ensure that the hazard is controlled eliminated or reduced.

Critical Limits must be measurable (e.g. temperature, time), specific (e.g. exact range of temperature and time), realistic and practical.

Examples of typical Critical Limits in the food service of The Emerald will include standards such as:

- Time
- Temperature
- Physical dimensions (i.e. per cent fat content, thickness/ weight of the food item)
- pH
- water activity.

Example

The example below is taken from the HACCP plan for hot meat dishes to illustrate the specific time and temperature standard that must be met to ensure that the hazard is controlled at the cooking step.

Process Step	Hazard	CCP	Preventative Measures	Critical Limit
Cooking Allows survival Of Food Poisoning Bacteria and/or Their spores	Insufficient cooking	Yes	Follow standard procedures for cooking	Cook meat dish to an internal minimum temperature of 74 C or at least 15 seconds

Principle 4

Establish a monitoring system for each CCP

Establishing CCPs in the operation and setting specific criteria for their control is of little value unless they are monitored. When establishing monitoring procedures for Critical Limits, the HACCP team needs to specify:

- What method of monitoring is used (e.g. visual check, temperature recording etc).
- Who is responsible for monitoring the critical limit?
- When should the monitoring take place (e.g. each batch, once every 2 hours etc.) and
- Whether the monitoring needs to be recorded and if so, where.

Monitoring serves several useful purposes:

- It ensures that Critical Limits for CCPs are being met.
- It triggers corrective action when the Critical Limit has not been met.
- It shows how effective the HACCP Plan is.
- It collects data that can be used to modify process steps and working procedures where necessary.
- It can provide written documentation for use in verifying the HACCP Plan (Principle7).

The example below is taken from the HACCP plan for hot meat dishes of The Emerald and shows how and when the Critical Limits for cooking will be monitored.

Process Step	Critical Limits	Monitoring	
		What	When
Cooking	Cook meat dish to an internal Minimum temperature of 74C For at least 15 seconds	Measure internal temperature using a sanitized probe Thermometer	each batch

Principle 5

Establish corrective action

The HACCP team needs to establish what immediate corrective action procedures must be followed when monitoring procedures to show that a Critical Limit has not been met. Corrective Action Procedures should be documented and later reviewed.

Example

The example below is taken from the HACCP plan for hot meat dishes of The Emerald and shows what Corrective Action procedures need to be taken if the critical limit is not met at the cooking step. You will note that the first Corrective Action in this example would need to be carried out immediately. If Corrective Action is continually required at this process step, a longer term solution would be to review standard procedures for cooking and / or retain staff.

Process Step	Hazard	Critical Limit	Corrective Action
Cooking	Insufficient cooking Allows survival of food Poisoning bacteria And/or their spores	Cook meat dish to an internal minimum temperature of 74 C for at least 15 seconds	Continue cooking until meat dish reaches an internal minimum temperature of 74C
			Review standard Procedure Retrain staff

Principle 6

Establish verification procedures

To make sure that the HACCP Program is working correctly, verification and auditing procedures need to be developed and scheduled. Verification should be viewed as an 'HACCP health check'

The HACCP Program and HACCP plans will need to be reviewed and altered if there are any changes such as; legislation, types of customers, menu items and ingredients, customer complaints, suppliers, premises, equipment, production methods etc.

Example

Example of typical verification activities included:

- Annual review of the HACCP plan and flow charts
- Review of CCP records.
- Review of deviations from critical limits and any corrective actions taken.
- Visual inspections of operations and procedures.

- Review and validation of critical limits to ensure they are adequate to control the hazards.
- Audits of records and procedures.
- Random micro-biological testing of products.

Principle 7

Establish documentation and record keeping

Efficient and accurate record keeping is essential to the application of an HACCP Program. The HACCP plans and any associated records will need to be kept on file, easily accessible and kept up-to-date. The complexity of the record keeping system will be dependent on the complexity of the food preparation operation. For example, a cook-chill operation for a large hospital will require a more sophisticated record keeping system than a small cook-serve operation in a restaurant.

Example

Typical records in a food service environment include the following:

- Listing of the HACCP team and their responsibilities
- Description of the products and their intended use
- Flow chart
- HACCP plan
- A list of monitoring forms that are used in the HACCP program to monitor that critical limits are being met
- HACCP team meeting records
- Documented Preventative Measures (i.e. Standard Procedures, Policies Records)
- Records of internal and external audits
- Any documentation relating to customer complaints and product recalls.

3.4.1 Putting the HACCP Plan into action

According to *Cookery For The Hospitality Industry*, (Graham Dodgshun & Michel Peters, 2004 p.31). Once the HACCP team has developed the HACCP plans, they will need to be implemented into the operation. As with any other system, developing the Food Safety Program is just the beginning. To ensure that the Food Safety Program is successful, the standards and systems set up must become a part of everyday life. They should be regarded as an integral part of the business, and not just as an add-on that meets legislative requirements or customer demands. The only way to achieve this is to ensure:

1. management commitment
2. a thoroughly trained and motivated team
3. Staff ownership.

3.4.2 Communicating the Food Safety Program

According to *Cookery For The Hospitality Industry*, (Graham Dodgshun & Michel Peters, 2004 p.31) All staff need to understand the purpose of the Food Safety Program, what it involves and most importantly, what their role is in making it happen. After all, any staff member who lacks commitment to food safety could threaten the entire Food Safety Program as well as the viability and reputation of the business. As a professional chef, it is likely that you will have responsibility for regularly communicating food safety standards to your staff.

While most staff will not be actively involved in the development of the HACCP plans, they still need to be able to understand the parts of the plans that apply to their day-to-day activities. This can be achieved through using practical strategies such as:

- leading by example
- regularly communicating with staff
- on and off the job training sessions
- presenting the information in a way that is easy and simple to follow. For example:

- Placing wall charts in the kitchen which summaries all process steps and how to control hazards at each step, from receiving through to sale or service;
- Including key HACCP information in recipes which will be used by staff

Food Safety Programs based on the principles of HACCP do not need to be complex to be effective. The primary aim of HACCP is to reduce the number of food borne incidents, consistently provide safe and suitable food and thus protect consumers' health.

Recipe for beef curry using HACCP principles

Procedure:		Quantities
	Fresh beef	2.8 kg
	Frozen beef stock	360mL
<i>Thawing</i>	Onion	560g
	Garlic	20g
1 Thaw beef stock in refrigerator.	Vegetable oil	100mL
	Flour	100g
	Curry powder	4g
<i>Preparation</i>	Salt and pepper	5g
2 Wash and dice onion and garlic.		
3 Trim beef and cut into strips.		
4 Assemble dry ingredients.		
 <i>Cooking (CCP)</i>		
5 Heat the oil and add the beef and fry until lightly colored. Removed from the pan.		
6 Add the diced onion and garlic and cook until transparent.		
7 Add flour, curry powder, salt and pepper and cook gently for 3 minutes.		
8 Blend in beef stock and return the meat to the pan.		
9 Cover and leave to simmer until cooked, ensuring mixture reaches a minimum temperature of 74C for 15 seconds. If curry does not reach 74C or higher, continue cooking.		

Cooling (CCP)

10 Decant mixtures into shallow trays.

11 Cool curry to 4C within 4 hours for cold storage. If curry does not cool to 4 C within 4 hours, reheat to 77C to 82C and re-chill.

Refrigerated storage (CCP)

12 Store mixture at 2C to 4 C until required. Clearly label product with name and date.

Reheating (CCP)

13 Reheat curry to a minimum internal temperature of 77C to 82C for at least 15 seconds within 2 hours.

Hot holding/service (CCP)

14 Hot hold curry between 63C to 70C for service. If temperature falls below 63C for more than 2 hours assess product, and either discard, re-chill or re-heat.

Table 3.3: Sample HACCP plan for Hot Meat Dishes

Sample HACCP Plan for Hot Meat Dishes								
Process Step	Hazard	Preventative measures	CCP	Critical Limit(s)	Monitoring Procedure What	Procedure When	Corrective Action	Record
Cooking	-Insufficient cooking allows survival of food and poisoning bacteria and/or spores	-Follow personal hygiene standards. Follow standard procedures for cooking	Yes	Cook meat dish to an internal minimum temperature of 74C for at least 15 seconds	Measure internal temperature using a sanitized probe thermometer	Each batch	-Continue cooking until meat dish reaches an internal minimum temperature of 74C for at least 15 seconds. -Review standard procedures. -Retrain staff	Cook/chill temperature monitoring record
Cooling	-Multiplication of any surviving food poisoning bacteria and/or their spores	-Follow standard procedures for cooling	Yes	Cool to 4C within four hours in a shallow container or blast chill	-Measure temperature using a sanitized probe thermometer. -Measure the air temperature in the refrigerator	Each batch	-Re-heat to 74C for 15 seconds within two hours, then re-cool -Review standard procedures. -Retrain staff	Cook/chill temperature monitoring record

Reheating	-Multiplication of any surviving food poisoning bacteria and/or their spores. - Toxin production	-Follow standard procedures for reheating -Follow personal hygiene standards.	Yes	Reheat rapidly until meat dish reaches an internal temperature of 77-82C for at least 15 seconds within two hours	-Measure temperature using a sanitized probe thermometer	Each batch	-Continue reheating until meat dish reaches an internal temperature of 77-82C. If temperature is not reached within two hours. Discard. -Retrain staff	
Hot holding and serving	-Multiplication of any surviving food poisoning bacteria and/or their spores not killed by cooking. -Re-contamination of meat from equipment/food handlers/customers. -Microbial contamination from any added ingredients such as garnishes and condiments	-Follow standard procedures for hot holding and service. -Follow personal hygiene standards. -Follow standard procedures for cleaning and sanitation. -Follow standard procedures for equipment performance and maintenance.	Yes	-Hold in equipment operating at a temperature of 63C or above. -Only use clean and sanitized garnishes and condiments.	-Measure temperature using a sanitized probe thermometer every two hours	Each batch	-Discard. -Retrain staff	Holding and displaying temperature log.

The sample HACCP plan for hot meat dishes of The Emerald focuses on biological hazards only.

Understanding the emerging risks inherent in the preparation and handling of food and embracing the principles of HACCP will ultimately help you to protect not only your customers but yourself, your business (or your employer's business) and the reputation of the Thailand Hospitality Industry. Remember Prevention is better than Cure.

3.5 Conclusion and Recommendation

To sum up, you may come up with the question "Why would you spend so much money and effort to enact a program that your customers never see"? I would

answer that there is nothing more important than having systematic procedures to assure food safety for all your steak holders. To make the clear understanding that to be a five star hotel, implement HACCP system is not a requirement. However, simple is that sufficient food and safety system consisting of temperature control of food processing, kitchen staff hygiene, food contamination, proper food purchasing procedures and inspections, pest control, theoretical and practical training for kitchen staff while stringent monitoring and recording, verification, review and maintenance are necessary to be fulfilled.

You may think it takes time to get a positive ROI, but why you do not think about to gain competitive advantage and gathering the market share from individual market that HACCP system is one of our weapons. Then we will be in a position of market leader and other will follow. Imagine when other competitors think the same thing, but you are so much ahead and gain benefit from your investment. So at that time you will have more choice of strategies and have more rooms to play the game. By all means, the key hygiene rules must be establish, why don't we work a little bit harder to learn and adhere to the guidelines which are the key to a successful will be done in order to keep the certification. The feasibility study is by following

3.5.1 The expectation after rewarding 5 star rating and start HACCP system

3.5.1.1 Spread the risk by Economic of Scope

The hotel will spread the risk and expand the business to the new market and still can keep the existing customers by switching to another property in the same group and location. While make use of the same HACCP standard to comply within group. If consider the demand from the inbound and outbound, compare with supply from

three hotel's properties. The hotel can increase the opportunity to cover wide range of market start from 3 to 5 stars. Each hotel create different selling point and clearly aim to a different market. (Investopedia, 2009) The economies of scope refer to efficiencies primarily associated with demand-side changes. Economies of scope are one of the main reasons for such marketing strategies as product lining, and family branding. The company will be in the position which sells many product lines (hotels), in the market that will benefit from reduced risk levels as a result of its economies of scope. If one of its product lines falls out of fashion or one customer group has an economic slowdown in their country or sensitive group for uncertain politic and outbreak situation, the company will, most likely, be able to continue selling.

Table 3.4: Hotel Group Identification

Hotel Group	Star rating	No. room	Style	Price range
The Emerald	Project to 5	607	Thai elegance with modern comforts	100
The Palazzo	Project to 4	273	Luxurious Boutique, modern elegance	70
The HIP	3	175	A stylishly designed	60
The Calypzo	3	118	Garden Boutique	60

1,173 rooms in total

3.5.1.2 Increase revenue by using customized marketing strategy

To focus on Japanese guests, (Customized Marketing will give you the edge, Ginette Provost, for about.com) you will learn that you have to give (investment) before you receive and that's what customized marketing is all about. This is a simple rule and you might say, "Why, we are business persons! We are pragmatic and go straight to the point! We mail our price list to prospective customers or clients. But that's not enough. Instead of just giving the customer the same thing that every other customer is given, why not write a small report describing what you can do for them and how you will do it? It means after implement HACCP, the public

relation will necessary to do and more aggressive marketing activities will be required to cooperate with various kinds of marketing channels. ."

(hmcclubhotel.com, 2009)Without a well-targeted audience, marketing to national and international travelers is both costly and ineffective.

For example, to contact with Japanese travel agent, customized marketing does not mean giving away all your secrets, contacts or giving the solutions for free. It means giving your prospective customers the information they need to do business with you with your 5 star rating, competitive price, and international standard of hygiene HACCP. It will only give you an edge over your competitors. This kind of directed, specific marketing may take time in the beginning but you will certainly win or keep a new customer.

Remember the following:

1. 80% of your business comes from 20% of your customers;
2. Finding a new customer is harder than keeping the ones you have. So focus on Japanese group and expansions.

3.5.2 Return on Investment (ROI): Implement HACCP

A performance measure used to evaluate the efficiency of an investment. To calculate ROI, the benefit (return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or a ratio that will show you the feasibility study and support your decision making.

3.5.2.1 Estimate costs

With realistic goals, expectations and estimates of resources and costs in hand, you can now conduct a basis cost-benefit analysis of HACCP for your facility. You will compare the estimates of costs with the estimates of benefits to determine if HACCP implementation will, in the end, be profitable for The Emerald Hotel.

3.5.2.2 Estimate Revenue and ROI

Estimate Revenue

It should be noted that your expectation to gain more revenue regarding the awarding HACCP system result will come to main sections

- Increase revenue from room
- Increase revenue from food and beverage

I. Increase revenue from room

According this assumption, I bring only the revenue from room to calculate ROI and estimate cost of HACCP implementation and to consider to adjust the room rate price will base on bench marks with Swissotel Le Concorde, 5 star hotel, located the same area and on going to implement HACCP. The price increase consider to higher than bench marks hotel in order to maintain price competitive to the market.

Table 3.7: From Oct-09 reservation report

Total guest in a month	6,599	pax
Average for 30 days	220	pax
The number of Japanese guest 12%	26	pax/day

Swissotel Le Concorde Average room rate about 2,100 THB

Return on Investment - ROI

(Financial Management for Hospitality Decision Makers, Chris Guilding, 2002). A performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. To calculate ROI, the benefit (return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or a ratio.

$$ROI = \frac{\text{Gain from Investment} - \text{Cost of Investment}}{\text{Cost of Investment}}$$