出國報告(出國類別:學術發表)

BAI 2013 商管與資訊國際研討會參加心得

(The 10th International Conference on Business And Information)

服務機關:國立高雄餐旅大學

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發表地點:印尼巴里島君悅大酒店(Grand Hyatt Bali Hotel, Indonesia)

出國期間:102年07月07日-07月09日

報告日期: 102年08月10日

摘要

商管與資訊國際研討會(International Conference on BAI)是由 International Business Academics Consortium (iBAC)和 Academy of Taiwan Information Systems Research (ATISR)所籌辦的一年一 度的國際性大型研討會,在亞洲各主要城市巡迴舉辦,每年吸引許多國際學者投稿相關論文, 期間大家共聚一堂,討論最新的國際商管和資訊發展趨勢。2013 年選在印尼巴里島的君悅酒店 (Grand Hyatt Bali Hotel)舉辦,研討會的議程組織包括來自日本、韓國、泰國、澳洲、土耳其和 美國等知名學者,會議時間由 2013 年7月7日到9日,全程採用英文發表和討論,依據大會統 計,2013 年共有來自 38 個國家 716 篇論文投稿,經過嚴格同儕審查後,錄取 428 篇論文在現 場發表。本人的投稿論文取材自 101 年帶領大學部學生完成的專題研究報告成果,並加入新的 分析結果和討論內容轉換為英文方式的學術論文,「A Cases Analysis on Successful Operation Time Control of Food Service Process for Two Different Theme Restaurant Chains」,發表時間為7 月9日下午1點30分到3點之間的Session G6: Operation Management and Industrial Engineering, 本人並且擔任該場次的議程主席(Session Chair),在場聆聽的學者來自印度、韓國和台灣等國家, 大家對於將工業管理的時間控制模式應用去探討最新的連鎖經營管理趨勢的應用型學術論文, 都相當佩服,同時對於餐旅業相關的製程與服務管理控制流程感到興趣,因為現場大部份的研 究課題以資訊技術和程式方法的發展為主,類似本人對於商業經營管理趨勢的實務探討與服務 流程診斷就顯得不同,這次研討會的收穫除了增加本人參加國際研討會的經驗之外,對於宣揚 本校在餐旅業商管研究的努力成果,也有不錯的成效,明年 BAI2014 將在日本名古屋舉行,如 果有材料且有機會的話,希望能夠繼續參加這項一年一度的國際商管和資訊研討盛會。

關鍵字:BAI2013、國際研討會、商管和資訊、連鎖經營管理、時間控制

目錄

摘.	要	••••	• • • • • • • • • • • • • • • • • • • •	•••••	•••••		•••••		•••••	•••••	•••••		. 1
壹	•	E	目的與	計劃			•••••		•••••		•••••		. 3
	_	`	目自	的:	•••••		•••••		•••••		•••••		. 3
	二	`	出国	國人員及	及行程:		•••••		•••••	•••••	•••••		. 3
	三	`	詳約	細行程及	及內容:		•••••		•••••	•••••	•••••		. 3
	四	`	發	表內容		•••••	•••••		•••••	•••••	•••••		. 5
	五	`	預其	胡效益	:		•••••		•••••	•••••	•••••		. 6
貳	`	万	战果報	告	•••••		•••••		•••••	•••••	•••••		. 6
參	•	,×	吉論與	建議	•••••		•••••			••••••	•••••		. 7
附金	錄一	:	簡報格	當摘錄	•••••		•••••			•••••	•••••		. 8
附金	錄二	:	活動原	照片集	•••••	••••••	•••••	••••••	•••••	•••••	•••••	1	0
附金	錄三	:	About	the BA	I		•••••	••••••	•••••	•••••	•••••	1	11
附金	錄四	:	發表語	侖文摘 鏡	; K		•••••				• • • • • • • • • • • • • • • • • • • •	1	13

壹、 目的與計劃

一、 目的:

本校升格為大學之後,為鼓勵師生在學術研究上之發展以及開拓校內師生之國際學術觀, 藉由本次國際研討會之發表,刺激師生於資訊管理學術研究上之前進風氣,並透過此機會接觸 不同領域之專業,除可增加本校日後發展的多元性,亦可提升在國際學術界上之能見度。

二、 出國人員及行程:

姓名	級職	國家	發表地點
劉聰仁	副教授 兼餐飲管理 系系主任	印尼	城市:巴里島 地點:君悅酒店(Grand Hyatt Bali Hotel) 102年07月07日-07月09日

三、 詳細行程及內容:

	July 07, 2013 (Sunday)						
09:15 - 14:20							
14:20 - 17:00	巴里島國際機場(出關手續約1.5 小時) - 住宿酒店,接駁車						
17:00 - 22:00 晚餐及酒店(Ibis Hotel)附近自由活動,準備發表論文							
	July 08, 2013 (Monday)						
08:00 - 09:00	住宿酒店(Ibis) - 前往會議酒店(Hyatt)						
09:00 - 17:00	報到並參與開幕式和當天研討會行程(如下表)						
17:00 – 18:00	會議酒店(Hyatt) - 返回住宿酒店(Ibis)						
	July 09, 2013 (Tuesday)						
08:00 - 09:00	住宿酒店(Ibis) - 前往會議酒店(Hyatt)						
08:30 - 17:00	參與當天研討會行程(如下表)及發表論文與主持會議						
17:00 – 18:00	會議酒店(Hyatt) - 返回住宿酒店(Ibis)						

July 10, 2013 (Wednesday)							
08:00-19:00 参加巴里島當地風俗體驗旅遊							
	July 11, 2013 (Thursday)						
09:00 - 15:30	巴里島市區觀光及前往機場						
15:30 – 20:40	巴里島國際機場 - 桃園機場, CI772, 中華航空						
21:00 -	賦歸						

BAI 2013國際研討會議程總表

International Conference on

Business And Information (BAI 2013)

Summary of Schedule

Sunday, July 07, 2013

17:00~18:00 Pre-Conference Registration

Monday, July 08, 2013

08:30~10:00 Sessions (A1~A8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

10:00~10:30 Tea Break & Poster 1

10:30~12:00 Sessions (B1~B8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

12:00~13:30 Lunch Hyatt Ballroom B1, Opening Ceremony, Best Papers Award Presentation

13:30~15:00 Sessions (C1~C8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

15:00~15:30 Tea Break & Poster 2

15:30~17:00 Sessions (D1~D8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

Tuesday, July 09, 2013

08:30~10:00 Sessions (E1~E8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

10:00~10:30 Tea Break & Poster 3

10:30~12:00 Sessions (F1~F8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

12:00~13:30 Lunch Hyatt Ballroom B1

13:30~15:00 Sessions (G1~G8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

Session G6:Operation Management and Industrial Engineering at Budung II meeting room

我的論文發表場次及主持的研討會會議

15:00~15:30 Tea Break & Poster 4

15:30~17:00 Sessions (H1~H8) Klungkung I,II, Gianyar I,II, Badung I,II, Singaraja I,II (1F, B1)

四、 發表內容:

Session [G6] 13:30 – 15:00 Budung II (B1)

Operation Management and Industrial Engineering

Session Chair: Tsong-Zen Liu National Kaohsiung University of Hospitality and Tourism (擔任該場次的議程主席)

- 1. Application of Importance-Performance Analysis to Improve Cold Logistics Service Quality Kuan-Yu Hu Shu-Te University
- 2. A Cases Analysis on Successful Operation Time Control of Food Service Process for Two Different Theme Restaurant Chains (我的發表論文)

Tsong-Zen Liu National Kaohsiung University of Hospitality and Tourism

3. A Randomized Vacation Queue with Startup and Closedown Times

Tsung-Yin Wang National Taichung University of Science and Technology Chia-Jung Chang National Taichung University of Science and Technology Fu-Min Chang Chaoyang University of Technology

4. Evaluation of Training Effects of S&T Programs' Planning Capability: The Case of Taiwan Agricultural S&T Program

Ling-Chu Lee National Applied Research Laboratories Shan-Shan Li National Applied Research Laboratories

5. Value Chain Analysis for Orchid Cut Flower Business in Chiang Mai

Roengchai Tansuchat Maejo University Chanita Panmanee Maejo University Aree Cheamuangphan Maejo University

6. Economic Effects of Cultural Tourism and Policy Implications

Taek-Seoh Roh Hankuk University of Foreign Studies

註:斜粗體字為該場次本論文的發表順位及論文題目。

五、 預期效益:

本次預期可達到以下效果:

- 1. 了解學術領域近年來國際商管和資訊發展的研究趨勢。
- 2. 促進師生視野與國際環境接軌。
- 3. 強化本校在學術領域之曝光度。
- 4. 提昇本校學術研究水準及風氣。

貳、 成果報告

這次已經是本人第二次到參加 BAI 研討會,同時協助本校餐旅學院宣傳 2014 年 5 月 14-16 日即將在本校舉行的 2014APF 餐旅國際研究生研討會(Asia Pacific Forum for Graduate Students Research in Tourism)。而本次發表的論文為 101 年指導大學部畢業生專題研究的論文成果一部分,由於所有學生都已經畢業無法參加研討會,由於本人已經將專題論文內容濃縮並修改加入更多分析內容,使得內容更為完整及具體,並重新用英文撰寫,因此由本人親自簡報,簡報內容如附錄一,簡報時間約 10 分鐘,全程採用英文發表及英文問答。由於本人同時受邀擔任 G6 該場次的議程主席,必須全程控管會議時間,雖然是很簡單的工作,可是因為議程時間只有 90 分鐘,而卻有六篇論文需要發表,因此時間非常緊迫,對於本人的臨場議程控制能力是一大考驗。而本人研究主題與其他簡報論文的技術性和方法性有很大的差異,與會學者大多深感興趣,希望多了解本人如何結合工業管理的理論和餐廳管理的應用轉換為學術論文的過程。

會後與其他論文發表人又進行了部分學術研究方向的討論,收穫良多,透過這種實質的接觸與深入的討論,讓彼此更進一步的了解互相得研究方向與優缺點,由於本場次的主題為作業管理與產業工程,由於場次安排的關係,G6場次也有些論文是其他類型,其他國家學者的研究題材多樣性,有許多值得借鏡的地方。同時,本次研討會的兩天議程包括許多不錯的商業管理及資訊科技的前瞻性論文發表,透過研討會不同場次的聆聽,發現各國的學者除了基礎研究之外,以商業模式的探討及資訊技術的發展為主。

參、 結論與建議

這次參加的商管與資訊國際研討會(International Conference on BAI)是由 International Business Academics Consortium (iBAC) for Academy of Taiwan Information Systems Research (ATISR)所籌辦的一年一度的國際性大型研討會,在亞洲各主要城市巡迴舉辦,每年吸引許多國 際學者投稿相關論文,期間大家共聚一堂,討論最新的國際商管和資訊發展趨勢。2013年選在 印尼巴里島的君悅酒店(Grand Hyatt Bali Hotel)舉辦,研討會的議程組織包括來自日本、韓國、 泰國、澳洲、土耳其和美國等知名學者,會議時間由2013年7月7日到9日,全程採用英文發 表和討論,依據大會統計,2013年共有來自38個國家716篇論文投稿,經過嚴格同儕審查後, 錄取 428 篇論文在現場發表。本人的投稿論文取材自 101 年帶領大學部學生完成的專題研究報 告成果,並加入新的分析結果和討論內容轉換為英文方式的學術論文,「A Cases Analysis on Successful Operation Time Control of Food Service Process for Two Different Theme Restaurant Chains」,發表時間為7月9日下午1點30分到3點之間的Session G6: Operation Management and Industrial Engineering,本人並且擔任該場次的議程主席(Session Chair),在場聆聽的學者來自印 度、韓國和台灣等國家,大家對於將工業管理的時間控制模式應用去探討最新的連鎖經營管理 趨勢的應用型學術論文,都相當佩服,同時對於餐旅業相關的製程與服務管理控制流程感到興 趣,因為現場大部份的研究課題以資訊技術和程式方法的發展為主,類似本人對於商業經營管 理趨勢的實務探討與服務流程診斷就顯得不同,這次研討會的收穫除了增加本人參加國際研討 會的經驗之外,對於宣揚本校在餐旅業商管研究的努力成果,也有不錯的成效,明年 BAI2014 將在日本名古屋舉行,如果有材料且有機會的話,希望能夠繼續參加這項一年一度的國際商管 和資訊研討盛會。

附錄一: 簡報檔摘錄



Results: S.O.P. Comparison

Step	X restaurant (Amer	ican)	Y restaurant (Taiwan)			
no.	Description	Time	Description	Time		
1	Welcome customers		Welcome customers			
2	Introduce and lead to seat	1 min	Introduce and lead to seat	0.5 min		
3	Add tea and give menu	3 mins	Introduce server and give menu	1 min		
4	Confirm orders and introduce sources	3 mins	Confirm and repeat orders and drinks	1 min		
5	Key in orders to POS		Key in orders to POS	2 mins		
6	Send order to kitchen and bar	7 mins	Send order to kitchen and bar	3 mins		
7	Deliver appetizers		Deliver drinks			
8	Ask for requiring more cabbage	7 mins	Deliver 7" small round disc and wet tissues	7 mins		
9	Deliver main course		Deliver appetizers			

Results: S.O.P. Comparison

Step	X restaurant (Taiw	an)	Y restaurant (American)			
no.	Description	Time	Description	Time		
10	Add tea during the dining		Deliver salad and soup	7 mins		
11	Ask for requiring steam rice		Execute quality assurance and confirm other needs	14 mins		
12	Ask the dining quality at main course 1/3 finished	11 mins	Deliver main course and clean appetizers	14 MINS		
13	Ask to clean table at main course finished		Execute quality assurance of main course	3 mins		
14	Prepare desert and send the customer suggestion sheet	14 mins	Ask for requiring more drinks and clean discs of main course			
15	Deliver deserts and drinks		Deliver deserts	3 mins		
16	Customers leave seats	11 mins	Customers leave seats	2 mins		
17	Check out and settlement	TT HIIIIS	Check out and settlement	2 111115		
18	See customers out		See customers out			
19	Clean table and prepare new setting	1 mins	Clean table and prepare new setting	1 min		

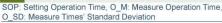
Results: S.O.P. Comparison

- The total used time periods for completing one cycle of customer service process are 46 minutes (X Taiwan)and 37 minutes (Y American) respectively
- The service style of Y restaurant is more flexible than X restaurant.
- The real elapsed time of whole service process of Y (American) restaurant may be larger than that of X (Taiwan) restaurant



Results: On-site Observation

Key Step		X resta	urant (Ta	iwan)			Y restau	rant (An	nerican)	
	SOP	O_M	O_SD	Max	Min	SOP	O_M	O_SD	Max	Min
1	1	1.00	0.00	1.00	1.00	1	0.81	1.50	8.00	0.50
2	2	1.33	0.49	2.00	1.00	1	1.48	0.82	4.00	1.00
3	3	3.44	3.36	13.00	1.00	2	3.36	2.12	8.00	1.00
4	1	2.28	1.56	6.00	1.00	4	2.64	1.82	7.00	0.00
5	7	8.22	3.56	16.00	4.00	7	8.72	4.03	19.00	4.00
6	11	6.67	4.01	14.00	0.00	14	10.16	4.90	22.00	2.00
7	12	10.61	8.90	30.00	0.00	1	11.52	8.88	30.00	0.00
8	4	4.89	5.96	25.00	1.00	2	9.20	12.38	53.00	1.00
9	4	3.44	1.89	7.00	1.00	3	4.36	4.33	18.00	0.00
10	1	3.44	6.82	30.00	1.00	2	3.00	3.11	15.00	1.00
Total	46	45.33				37	55.25			





Results: On-site Observation

- Six observers were trained to execute the observation activities at lunch and dinner times from January to April 2012.
- Numbers of on-site observations are 18 and 25 for X and Y restaurants respectively.
- The service delays of X restaurant were happen at step 3, 4, 5 and 10. number of service delays was 36.
- The service delays of Y restaurant were happen at step 1, 3, 4, 5, 6, 9 and 10. number of service delays was 44.



Conclusions

- Slowing down the guests' number and speed of reception process in order that servers have sufficient time to complete service procedures.
- . Enhancing the service procedure and information communication skills of servers in order to promote the service quality.
- Initiatively concerning and helping new guests to complete ordering dishes in order to decease the waiting time during order process.
- Thanks the 2011 graduate students of food and beverage management department who are Yin-Yin Su, Yi-Zhen Su, Ying-Rou Kuo, Chun-Wei Kuo, Yi-Cheng Chui and Yi-Ling Hsien for their hard assistant works on making the interviews and on-site observations.



附錄二:活動照片集



附錄三: About the BAI

International Conference on Business and Information (BAI) is an annual meeting for scholars around the world. Papers are invited from all related areas of Business and Information.

The aim of the BAI Conference is to serve as a forum for scholars of the business and information disciplines. The BAI Conference has been established on a global basis.

The BAI2012 had been held at Renaissance Sapporo Hotel, Sapporo, July 03-05, 2012.

The **BAI2011** had been held at Landmark Bangkok Hotel, Bangkok, July 04-06, 2011.

The **BAI2010** had been held at Rihga Royal Hotel Kokura, Kitakyushu, July 05-07, 2010.

The **BAI2009** had been held at Parkroyal Hotel Kuala Lumpur, July 06-08, 2009.

The BAI2008 had been held at JW Marriott Hotel, Seoul, July 07-09, 2008.

The **BAI 2007** had been held at InterContinental Hotel, Tokyo Bay, Tokyo, July 10-13, 2007.

The **BAI 2006** had been held at Pan Pacific Hotel, Singapore, July 12-14, 2006.

The BAI 2005 had been held at the Hong Kong Harbour Plaze Hotel, July 14-15, 2005.

The **BAI 2004** had been held at the Chientan Youth Activity Center, Taipei City, Taiwan, March 26, 2004.

The **2013 International Conference on Business and Information (BAI2013)** is to be held at Bali, Indonesia. The scholars are encouraged to submit papers or abstracts on any aspect of business and Information including but not limited to the following topics:

Accounting

Business Administration

Business Policy and Strategy

Economics

Electronic Commerce

Entrepreneurship

Financial and Banking

Health Care Administration

Human Resource

Information System and Technology

International Business

Management and Organization Behavior

Management Education

Management Information System

Managerial Consultation

Marketing

Operations Management

Organizational Development and Change

Non-Profit Sector Management

Research Methods

Social Issues in Management

Technology and Innovation

Web Technology and Management

Other Relevant Topics

附錄四:發表論文摘錄

A CASES ANALYSIS ON SUCCESSFUL OPERATION TIME CONTROL OF FOOD SERVICE PROCESS FOR TWO DIFFERENT THEME RESTAURANT CHAINS

Tsong-Zen Liu,

Department of Food and Beverage Management, National Kaohsiung University of Hospitality and Tourism,

No. 1, Shung-Ho Rd., Hsiao-Kang, Kaohsiung City 81229, Taiwan ROC ltzen@mail.nkuht.edu.tw

ABSTRACT

Goal of this paper is to analyze the successful operation time control models by comparing the food service processes of two famous theme restaurant chains. These two restaurants employ America and Taiwan management style respectively. The research methods include service blueprint analysis, interview records analysis and systemic diverse sampling observation analysis. Results of this research showed that there are eight and four obvious time delayed check points for America and Taiwan management style theme restaurants respectively. In addition, the four main factors which affect effective time control to decrease the service efficacy are the familiar degree of customers to restaurant, the customer number of one meal period, the work efficiency of food preparation and, the familiar degree of field servers to service procedure. Therefore, this study gives the following suggestions to these two theme restaurant chains. First is slowing down the guest number and speed of reception process in order that field servers have sufficient time to complete service procedures. Second is enhancing the service procedure and information communication skills of field servers in order to promote the service quality. Third is initiatively concerning and helping new guests to complete ordering dishes in order to decease the waiting time during order process.

Keywords: Case Analysis, Theme Restaurant Chain, Operation Time Control, Food Service Efficacy

INTRODUCTION

As facing the trend of industry quickly promotion and environment highly competition, food service industry need to consider how to adopt more efficient operating procedure and give consideration to good service quality. Hence, increasing the food service efficacy of field server will become an important issue that needs to be overcome for theme restaurant chains recently. The research targets of this study are two famous theme restaurant chains that employ America and Taiwan management style respectively. Standard operation procedure produced by enterprise headquarter, deep interviews of field servers and real-time measurements of field observations will be used to analyze and compare for recognizing the gaps between these triangle factors.

In this study, there were 4 field servers be interviewed and more than 18 real-time service processes including lunch and dinner periods be observed in the two theme restaurant chains. Results of this research showed that there are 8 and 4 obvious time delayed check points for America and Taiwan management style theme restaurants respectively. In addition, the 4 main factors which affect effective time control to decrease the service efficacy are the familiar degree of customers to restaurant, the customer number of one meal period, the work efficiency of food preparation and, the familiar degree of field servers to service procedure. Therefore, this study gives the following suggestions to these two theme restaurant chains. First is slowing down the guest number and speed of reception process in order that field servers have sufficient time to complete service procedures. Second is enhancing the service procedure and information communication skills of field servers in order to promote the service quality. Third is initiatively concerning and helping new guests to complete ordering dishes in order to decease the waiting time during order process.

RESEARCH METHODS

The qualitative methods used in this study include service blueprint job analysis, interview records analysis and systemic diverse sampling observation analysis. Cross comparisons of the three analysis results are used to describe the relationship between the corporate's business philosophy, the staff's operation opinions and the customer's acceptance behaviors. Detail items of three research methods are shown in Table 1.

Table 1: The detail items of three research method for cross comparison

	S.O.P job analysis	int	erview records analysis	observation analysis		
1.	Collecting background	1.	Setting up questions of	1.	Deciding the process	
	data of the restaurants		interview		items to be observed	
2.	Analyzing S.O.P.s	2.	Choosing the	2.	Choosing the	
3.	Computing service		respondents		observing objects	
	blueprints	3.	Setting up time and	3.	Setting up times and	
4.	Integrating the valued		place of interview		places of observations	
	data of restaurants	4.	Doing the interview	4.	Training the observers	
5.	Cross comparing the	5.	Sorting out interview	5.	Observing the service	
	relationships with		transcripts		process at real site	
	results of interviews	6.	Analyzing interview	6.	Recording the results	
	and observations		results		of observations	
				7.	Analyzing operation	
					time periods	

CASES ANALYSIS

This section will represent the cases analysis of two different restaurant chains with Taiwan and American management styles. The standard operation procedure (S.O.P.) of two theme restaurant

chains will also be described in this section.

Taiwan management style restaurant chain

There are 17 branch restaurants of this restaurant chain. In this paper, restaurant with Taiwan management style was denoted as X restaurant. The brief introduction of X restaurant can be described as followings:

- 1. Area: local brand of Taiwan
- 2. Main dish: pork steak with curry source
- 3. Product attributes : set menu dishes based, cordial and comfortable service, warm, simple and modern atmosphere
- 4. Objective customer level: 25-35 year-old young people who are officers, families or students
- 5. Average consumption: NT\$ 250 to 300
- 6. Number of seats and staff: 108 seats, 17 servers and 12 chefs

American management style restaurant chain

There are 17 branch restaurants of this restaurant chain in Taiwan and hundreds restaurants in the world. In this paper, restaurant with Taiwan management style was denoted as Y restaurant. The brief introduction of Y restaurant can be described as followings:

- 1. Area: international brand of American
- 2. Main dish: pork ribs, kinds of steak, American style foods
- 3. Product attributes: A la carte dishes based, cordial and comfortable service, warm, modern and happy atmosphere
- 4. Objective customer level: 25-35 year-old young people who are officers, families or students
- 5. Average consumption: NT\$ 400 to 500
- 6. Number of seats and staff: 213 seats, 18 servers and 12 chefs

Comparisons of two restaurants' S.O.P.s

According to the official documents of these two restaurant chains, this study analyzed jobs descriptions and operation procedures and conduct into 19 similar steps for comparing time required. Results of S.O.P. comparison are shown in Table 2. The total used time periods for completing one cycle of customer service process are 46 minutes and 37 minutes for X and Y restaurants respectively. Although setting time period of Y restaurant is shorter than X restaurant, the service style of Y restaurant is more flexible than X restaurant. Then, the real elapsed time of whole service process of Y restaurant may be larger than that of X restaurant. This phenomenon will be tested in next section by on-site observing the whole service processes of X and Y restaurants.

Table 2: Results of S.O.P. comparison for two restaurants

Step	X restaurant	1	Y restaurant			
no.	Description	Time	Description	Time		
1	Welcome customers		Welcome customers			
2	Introduce and lead to seat	1 min	Introduce and lead to seat	1 min		
3	Add tea and give menu	2 mins	Introduce server and give menu	1 min		
4	Confirm orders and introduce sources	3 mins	Confirm and repeat orders and drinks	1 min		
5	Key in orders to POS		Key in orders to POS			
6	Send order to kitchen and bar	1 min	Send order to kitchen and bar	4 mins		
7	Deliver appetizers		Deliver drinks			
8	Ask for requiring more cabbage	7 mins	Deliver 7" small round disc and wet tissues	7		
9	Deliver main course		Deliver appetizers	7 mins		
10	Add tea during the dining		Deliver salad and soup			
11	Ask for requiring steam rice		Execute quality assurance and confirm other needs	14		
12	Ask the dining quality at main course 1/3 finished	11 mins	Deliver main course and clean appetizers	14 mins		
13	Ask to clean table at main course finished		Execute quality assurance of main course			
14	Prepare desert and send the customer suggestion sheet	12 mins	Ask for requiring more drinks and clean discs of main course	3 mins		
15	Deliver deserts and drinks	4 mins	Deliver deserts	3 mins		
16	Customers leave seats	4 mins	Customers leave seats			
17	Check out and settlement	+ 1111115	Check out and settlement			
18	See customers out		See customers out	2 mins		
19	Clean table and prepare new setting	1 mins	Clean table and prepare new setting			
	Total used time	46 mins	Total used time	37 mins		

RESULTS OF ON-SITE OBSERVATIONS

Systemic diverse sampling observation method was used in this study to record the elapsed times of

each operation step during the whole service process. According to S.O.P. of two restaurants, this study separated and clustered the whole service process into 10 steps for effective time measurement. Six observers were trained to execute the observation activities at lunch and dinner times from January to April 2012. Numbers of on-site observations are 18 and 25 for X and Y restaurants respectively. The results of on-site observations are shown in Table 3.

Table 3: Results of on-site observations for two restaurants

Key	X restaurant						Y restaurant				
Step	SOP	O_M	O_SD	Max	Min	SOP	O_M	O_SD	Max	Min	
1	1	1.00	0.00	1.00	1.00	1	0.81	1.50	8.00	0.50	
2	2	1.33	0.49	2.00	1.00	1	1.48	0.82	4.00	1.00	
3	3	3.44	3.36	13.00	1.00	2	3.36	2.12	8.00	1.00	
4	1	2.28	1.56	6.00	1.00	4	2.64	1.82	7.00	0.00	
5	7	8.22	3.56	16.00	4.00	7	8.72	4.03	19.00	4.00	
6	11	6.67	4.01	14.00	0.00	14	10.16	4.90	22.00	2.00	
7	12	10.61	8.90	30.00	0.00	1	11.52	8.88	30.00	0.00	
8	4	4.89	5.96	25.00	1.00	2	9.20	12.38	53.00	1.00	
9	4	3.44	1.89	7.00	1.00	3	4.36	4.33	18.00	0.00	
10	1	3.44	6.82	30.00	1.00	2	3.00	3.11	15.00	1.00	
Total	46	45.33				37	55.25				

CONCLUSIONS AND SUGGESTIONS

In this study, there were 4 field servers be interviewed and more than 18 real-time service processes including lunch and dinner periods be observed in the two theme restaurant chains. Results of this research showed that there are 8 and 4 obvious time delayed check points for America and Taiwan management style theme restaurants respectively. In addition, the 4 main factors which affect effective time control to decrease the service efficacy are the familiar degree of customers to restaurant, the customer number of one meal period, the work efficiency of food preparation and, the familiar degree of field servers to service procedure. Therefore, this study gives the following suggestions to these two theme restaurant chains. First is slowing down the guest number and speed of reception process in order that field servers have sufficient time to complete service procedures. Second is enhancing the service procedure and information communication skills of field servers in order to promote the service quality. Third is initiatively concerning and helping new guests to complete ordering dishes in order to decease the waiting time during order process.

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