# Demand fluctuation in the fine dining restaurant industry: patterns, impacts, and management strategies (A case study in Phuket)

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**Abstract**

It is widely accepted that demand fluctuation has strong impacts on the management of restaurant operations. Because of demand variation, restaurant operators are faced with loss of sales, service quality deterioration leading to damaged reputation, unpredictable business performance and consequently cash flow problems. These issues have become increasingly significant and thus understanding the nature and impacts of demand fluctuation is essential to the management of restaurant business operations. In this study, the researchers empirically investigated patterns, impacts, and management strategies of demand fluctuation specifically on standalone fine dining restaurants in Phuket, Thailand. The study employed a qualitative method involving nineteen in-depth interviews with restaurant entrepreneurs and restaurant managers. The key results showed that patterns of demand fluctuation were slightly different between the restaurants located in Phuket Town and those located in beach front areas, but this reflected the different types of clients namely the locals and tourists. Furthermore, demand fluctuation leaded to different impacts on business. The operational cost became a major issue when the revenue dropped; follow by the awareness of raw material usage and the inconsistency in service delivery patterns. Therefore, it needed demand fluctuated management strategies to recover the instability of income. However, fine dining restaurants in Phuket commonly remained open for business during periods of low customers arriving and attempted to smooth the operation with intelligent enhancement strategies.

**Keywords:** demand fluctuation, fine dining restaurant operations, patterns, impacts, management strategies

## 1. Introduction

In 2016, Tourist arrivals in Phuket spent largest money in top five ranking. The first was accommodation for 34% of total their expense. The second was retail for 23%. The third was food and beverage for 22 %. The fourth was excursion for 10 % and the fifth was spa for 10% respectively. Refer to this statistic, it showed that food and beverage sector was top spending money among tourists [1]. Accordingly, the research of Phuket Tourist Experience Index Project under the Faculty of Hospitality and Tourism, PSU Phuket Campus [2] also supported the large percentage of tourist experience in 2016 rated local food at 16%, which was higher than the beaches preference. Therefore, restaurant sector was the significant part of tourist experience in Phuket.

Phuket is the famous tourist attraction, so it gives a huge impact from seasonality of tourist movement and sensitive for economic impact, then restaurant industry affects to customer arrival in different period. Thus, seasonality (tourist movement) is the important issue that leads to the demand fluctuation for restaurant industry. Especially, fine-dining restaurants are very challenge management due to this type of restaurant provides the exclusive experience to the customer in term of exclusive menu, customer service, and upscale atmosphere. Fine dining customer expects high quality experience and WOW factor [3]. Thus, the operation needs to manage carefully during low customer arrival because of high cost of investment. The research of Hu *et al*. [4] conducted that managing restaurant operation had to consider the different consumption. Then, well planning capacity management was necessary to handle with the demand variation. If the capacity cannot match the variation of demand when the arrival rate was highly (i.e. peak time), the entrepreneur needed to install fixed capacity and organized employees work more shift length, but in the real situation, it cannot implement immediately. This situation leaded to low capacity at the peak arrival time that turned to be long delay and unsatisfied to customer. Moreover, if the service delivery was criticized by comparing with other service providers, it created the negative perception for customer. As the service was intangible, it cannot inventory for the peak time [5, 6]

However, managing the restaurant capacity to match the demand has been a key problem of marketing and management practice. Dilworth [7] suggested, "*Not every service can fit the capacity to their demand because services can rarely achieve consistent utilization of their capacity unless they operate*

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*through appointments*". When demand was over-full than business capacity, the service provider cannot accommodate all of customers. It may lead to lose or decrease revenue and the customer trended to be dissatisfied in services [8, 9]. Generally, the entrepreneur needed to manage the service capacity to meet the maximal or optimal utilization in every time [10]. To measure the efficiency of service was difficult in service industry especially in restaurants [11].

## 2. Research objectives

2.1 To examine the patterns of demand fluctuation in fine dining restaurants in Phuket.

2.2 To examine the impacts of demand fluctuation in fine dining restaurants in Phuket.

2.3 To examine management strategies for demand fluctuation in fine dining restaurants in Phuket.

## 3. Materials and method

This methodology implemented to conduct the patterns, impacts, and management strategies of demand fluctuation specifically on standalone fine dining restaurants in Phuket, Thailand. The study employed a qualitative method involving nineteen in-depth interviews with restaurant entrepreneurs and restaurant managers. The target of population was fine dining restaurant managers and entrepreneurs in Phuket who have the restaurant experience at least two years. Consequently, the participants were in the positions involved directly to restaurant management. The chosen restaurants were opened more than two years in order to acknowledge the cycle of demand fluctuation. The interviewees were asked to talk freely and elaborated into depth detail of the demand patterns, impacts of demand fluctuation, and management strategies implementation. The research applied pre-defined coding method for data analysis which based on literature reviews. Furthermore, the interview conducted the tape record to crosscheck the accurate of information.

## 4. Result and discussion

Regarding to characteristic of nineteen qualitative interviews, the key informants were positioning as restaurateurs, executive chef, and restaurant managers. Eighteen respondents were male. Only one respondent was Female. The major nationalities of respondents were Thai, Italian, French, and Belgian respectively. Working experience was at least two years. The potential population was estimated by purposive location sampling. The restaurants' locations were collected by two restaurants from Kamala Area, three restaurants from Kalim/Patong Area, three restaurants from Cherngtalay/ Bangtao, two restaurants from Kata Area, and nine restaurants from Phuket town. Those chosen fine dining restaurant samples were recommended by Where To Eat official website cited on 2014 until 2016.

According to restaurants' profile, the majority of customer was different by location. Fine dining restaurants in Phuket town were mostly Thai local customer (70–80%) and fine dining beachfront restaurants were 85–90% for foreigner. The target segments of fine dining restaurants mostly were couple, family, and group respectively. The restaurant capacity was approximately 30–40 seats until 80–100 seats. The average price per person was starting from500 baht until 5000 baht per person. The number of employee working in fine dining restaurants in Phuket town and beach front area including permanent staff and temporary staff were generally 10 persons till 15 persons or more.

### Demand pattern

From research investigation, it can separate the type of demand as two outstanding patterns as below;

#### 1) Predictable arrival pattern

This pattern happened cyclically and repeated occurrence in monthly, quarterly, yearly, seasonally, etc. Demand fluctuation reflected different types of clients namely the locals, expatriates, and tourists. The customer arrival relied on high and low seasonality of tourism, as Phuket is a tourist destination. Thus, the peak seasonal months normally start from the beginning of December until March, which affected to overfull customer arrival especially on Christmas festival and New Year celebrating season. On the other hands, lowest customer month of the year was September. Additionally, Big Buddha Days leaded to less customer arriving because the alcohol did not allow selling under Thai law requirement, then the amount of customer dropped automatically. However, predictable pattern can estimate the customer arrival in advance.

#### 2) Unpredictable arrival pattern

This pattern was occurring randomly and cannot predict in advance. The cycle retention was uncertain and relied on additional variables for example unstable political, natural attack, competitors, economic impacts, etc. The research investigated that new opening restaurants and unstable political situation were affected to lower customer coming only the short time of grand opening. It did not affect for long term. Nevertheless, natural attacks as flooding or heavy rain gave a huge impact toward decreased customer particularly in Phuket town and Patong/ Kalim area.

### Demand fluctuation toward any impacts

In restaurant industries, the demand fluctuation which leaded by seasonality was a major problem effect into both supply-side (i.e. entrepreneurs, employees, suppliers) and the demand-side (i.e. customer arrivals, tourists). Cost for operation was the major concern during less consumption demand. The restaurants needed to generate the instable income to cover the fixed costs (i.e. salary, utility cost, rental cost, etc.) and additional expenses. For instant, cost of

**Table 1** Characteristic of interviewees

| No. | Position | | Gender | Nationality | Working experience | Location |
|---|---|---|---|---|---|---|
| 1 | Restaurateur | | Male | Italian | 20 years | Kamala |
| 2 | Restaurateur and Executive Chef | | Male | Thai | 15 years | Kamala |
| 3 | Restaurant manager | | Male | Thai | 16 years | Kalim/ Patong |
| 4 | Restaurant manager | | Male | Thai | 2 years | Cherngtalay/ Bangtao |
| 5 | Restaurateur and Executive chef | | Male | Italian | 28 years | Cherngtalay/ Bangtao |
| 6 | Restaurateur | | Male | Italian | 20 years | Cherngtalay/ Bangtao |
| 7 | Restaurateur and Executive Chef | | Male | French | 25 years | Kalim/ Patong |
| 8 | Restaurant manager | | Male | Thai | 10 years | Kalim/ Patong |
| 9 | Restaurateur | | Male | Thai | 24 years | Kata |
| 10 | Restaurateur and Executive Chef | | Male | Thai | 4 years | Kata |
| 11 | Restaurateur | | Male | Thai | 4 years | Phuket Town |
| 12 | Restaurateur | | Male | Thai | 2 years | Phuket Town |
| 13 | Restaurateur | | Female | Thai | 25 years | Phuket Town |
| 14 | Restaurant manager | | Male | Thai | 17 years | Phuket Town |
| 15 | Restaurant manager | | Male | Thai | 7 years | Phuket Town |
| 16 | Restaurant manager | | Male | Belgian | 4 years | Phuket Town |
| 17 | Restaurateur | | Male | Thai | 2 years | Phuket Town |
| 18 | Restaurant manager | | Male | Thai | 18 years | Phuket Town |
| 19 | Restaurant manager | | Male | Thai | 10 years | Phuket Town |

**Table 2** Restaurants' profile

| Category | Phuket town Area | Beach front Area |
|---|---|---|
| **Type of restaurant** | International (4 restaurants) Thai (2 restaurants) Fusion (2 restaurants) | International (6 restaurants) Thai and International (5 restaurants) |
| **Majority of customer** | Thai local customer 70–80% (7 restaurants) Foreign customer 70–80% (2 restaurants) | Foreign customer 85–90% (11 restaurants) |
| **Restaurant majority market segment** | Couple (5 restaurants) Family (3 restaurants) Group more than 3 people (1 restaurants) | Couple (7 restaurants) Family (4 restaurants) |
| **Maximum Capacity** | 30–40 people (3 restaurants) 50–60 people (3 restaurants) 80–100 people (3 restaurants) | 50–60 person (6 restaurants) 80–100 person (5 restaurants) |
| **Average price per person** | 500–800 ฿ (5 restaurants) 1000–1500 ฿(2 restaurants) 2000–2500 ฿(2 restaurants) | 500–800 ฿(3 restaurants) 1000–1500฿(5 restaurants) 2000–5000฿(3 restaurants) |
| **Number of employee** | less than 10 persons (2 restaurants) 10–15 persons (6 restaurants) more than 15 persons (1restaurant) | less than10 persons (2 restaurants) 10–15 persons (7 restaurants) more than 15 persons (2 restaurants) |

renovation had to reserve for any refurbishment. This situation was hardly to control the revenue and cost balancing. Consequently, the use of resource (Direct operational components) was useless in term of expiration, if the demand was lower than capacity.

Lastly, service delivery leaded to inconsistency in different demand pattern. Especially on peak demand, quality, skill of employees, and sustainable employment were very challenging and difficult to control.

**Demand fluctuation management strategies implementation**

The variation of customer arrival swung up and down related to seasonality of Phuket. Therefore, fine dining restaurants were risky to stabilize the operation and control any expenses, thus it called for different sets of demand management strategies in both peak and off-peak demand fluctuation. There were strategies applying in different demands as below;

**1) Strategies for low demand**

**Stay opening all year**: Fine dining restaurants in Phuket commonly gave precedence for opening restaurant all year instead of closing some part of the year meanwhile lowest customer arriving. Most of interviewees agreed that the strategy showed the potential of restaurant and maintained brand recognition of restaurants especially for brand new opening restaurants. One restaurant manager in Patong area supported "*We try to open restaurant as usual on low season even through the revenue and profit is hardly to touch. If we close restaurant during suffer time, the customer might recognize as we close the business forever. We have to learn the differentiation between slack and peak demand to adapt our restaurant stay balancing. We open all the year for showing our brand awareness to the customer. That is our main point*".

**Add value to product**: Seven restaurant managers and six restaurateurs attempted to increase the revenue during low income by created event, launched the special menu and added value to product presentation. This strategy tried to capture specific target segment and who was interested in restaurant provided. So learning new trend of tourist was necessary for restaurant management because it can seek alternative income in different market for example Russian food, Australian food, or seasonal food, etc. One restaurateur in Kamala Area stated "*To boost the sale in low season, I create the special menu for each table which is different from others. I ask the customer for their preference and create the unique food for the customer. The feedback is very good and productive. The customers feel they are very special one and very VIP. When the customer is happy, they are ready to pay even it is more expensive. That was due to the customer trust what we do*"

**Up selling beverage**: All restaurant managements agreed that tried to up sell beverage can generate the revenue for in-house customer. The staff can approach and engage customer politely. It did not interrupt or force the customer to buy more but it seemed to offer assistance and cheered up in proper time. However, customer needed to be in the right mood. It was effective strategy to increase the daily income more than food up selling. In consequence of the product can launch easily. One executive chef in Chengtalay quoted "*Even we have only one table, we can generate revenue up to 10000 baht per night by up selling the beverage like wine. Mostly, our customer*

*is high end. They promptly pay if they satisfy but the way to up sell should be in the polite way*"

**Conduct training**: Schedule training program on lowest customer arrival time was efficiency in order to retrain the product knowledge, new menus, or any new promotions. This implementation was used by nineteen fine dining restaurants in Phuket. It was productive to recheck the staff performance or any standard practice. It was due to the operation was too slow, and then the managers had more free time to observed and criticized what was the weakness and strongest points for staff improvement. One outstanding informant supported "*We conduct training to all staff on low season in order to learn new menus, new product launch, or practice any improvement*"

**2) Strategies for peak demand**

**Reservation channel**: Most fine dining restaurants in Phuket used reservation channel and deposited payment as a potential tool to forecast future demand consumption. Thus, the restaurant operation can set up in advance. The effective reservation media was telephone channel; followed by online reservation through restaurant's website and walking in reservation respectively. This strategy helped the restaurant limited the number of customer that might be over restaurant's capacity during peak time. It can prevent the customer disappointed in case of unavailable table. Therefore, on hand booking was provided the less of quantity, then the manager can inform customer the seat availability at the moment or what time does the table be available. Moreover, the operation and manpower can prepare accordingly. One restaurant manager in Phuket Town stated, "*We use reservation channel to plan the operation and limit our seat capacity*".

**Temporary employment**: Hiring temporary staff whose had previous restaurant experience was easily to delegate work responsibility in order to support in peak customer arriving. One interviewee at Patong area quoted "*Normally, we must hire the staff who have passed the restaurant experience. It is very easy to let the part time staff work with little training. They do not need to train at the beginning*". However, the main responsibility of temporary staffs was rather limited. It sometimes depended on their performance. Seventeen fine dining restaurants pointed that temporary staffs did not allow taking order because they might not be familiar with menu and product knowledge. Furthermore, if temporary staffs cannot speak English fluently, mistake order happen easily. This process was very significant to memorize and understand customer requirement. Normally, the main duties for temporary staffs were food runner, table cleaning, server, or kitchen helper. Those were not much in guest engagement.

**Informing customer**: All fine dining restaurants respondents in Phuket supported this implementation because this strategy tried to reduce customer dissatisfaction while the restaurant was full

capacity especially for walk-in customer. If the demand can manage properly, it did not lead to over capacity of the restaurant's competency. Therefore, informing and supporting customer wait the table if the customer prefers. One restaurateur in Kalim area pointed, *"In case that we have no seat available or the operation is very busy, we must inform the customer. Then they can decide to wait or leave"*. It was the opportunity to maintain the customer and kept their relationship. Normally, the customers came to tourist destination and that was their attention to go and selected the places including chosen restaurant. They might come to the restaurant by recommendation and they want to taste it. The result conducted that customer was given free drink complimentary during waiting table.

**5. Conclusion**

Based on the research finding, the concept of demand fluctuation in fine dining restaurant depended on the variable of customer arrival, thus the entrepreneur was faced with overcapacity and below capacity. Consequently, it needed to adapt wise management strategies into current situation. Therefore, the entrepreneur had to focus on arrival time, seasonality, economy impacts to acknowledge the cycle of demand. This was consistent with the previous literature of Watson [12]. Moreover, the restaurants had to be readiness for hardly return on investment, resource expiration, and inconsistency of service quality which was in line under the research of Kandampully, 2000 [13]. Furthermore, in term of management strategies were best practice for different demand fluctuation. There were some effective strategies of Getza [14]; Armistread [15];Sasser [16];Shemwell [17] applied for suffer situation such as opening all year, conduct training program to employee try to make and event by added value to product, and up selling beverage product. Those strategies were used to increase daily revenue and consequently retain the quality of brand standard. Additionally, the efficient strategies were applied for peak customer arrival and supported more customers demanding; were reservation channel, hiring temporary staff, and informing customer about current restaurant capacity. However, the finding of this research is beneficial for fine dining restaurant industry in order to be well preparation on their performance and wisely manage adapted to demand fluctuation. Furthermore, it is useful to smooth operation and control expenses in different demand pattern. Due to the customer demand is varied, thus the entrepreneur and manager need to acknowledge the nature of demand. It is significant to learn the demand history in peak season and off-peak season [17]. Moreover, the accurate demand forecast can remain the service level and consequently productive business management.

The recommendations of this research give significance into historic demand record. The entrepreneur needs recording the actual customer upon arrival in daily, weekly, monthly, and yearly as systematic report in order to forecast the demand fluctuation and capacity of restaurant for next period. Consequently, analyzing the demand record with management team regularly in order to handle any impacts when the demand is drop or overfull. Also, sharing the predictable demand record to restaurant team for well preparation of manpower, resources, and additional impacts. In addition, calling for meeting and brainstorming with team how to increase customer arrival during the dropped demand and review the restaurant performance by using the demand record linked the restaurant capacity. So, it is beneficial to learn how to manage the smooth operation. Restaurant management forecast the budget by using the historic demand record as a potential reference. Importantly, the demand record should be accurate for planning and schedule other activities i.e. maintenance work and renovation, training program, marketing and promotion, etc. Finally, the demand record should be easy and not complicated to access by any restaurant stakeholders.

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