

## Using IPA and CSI to Evaluation the Service Quality and Customer Satisfaction of Indonesian Restaurants

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### Abstract

Customers are the main factor of running a business and the satisfied customers are the base of the business for the growth in profitability and in the competitive business market. This study aimed to determine the priority of each attribute service that influences to the customer and to measure customer satisfaction index. The population of this research consists of 290 actual Indonesian restaurant customers. Using the importance-performance analysis (IPA) model and Customer satisfaction index (CSI).

Based on the results that have been presented in this research, it can be concluded that all of the customers of Indonesian restaurant have a different perception on customer's satisfaction in gender, occupation, and education characteristic. The several points that lead to the purpose of this study state the factors that have the highest priority in the study are in quadrant 1 ( waiters can provide the services customers need on time, the exactness of the information provided by staff, Service staff will give priority to the needs and benefits of your meal). In other the item that excepted to quadrant two also become the priority items in service quality. In another quadrant 3 and 4 has low priority for the service quality but the manager should not ignore it. **III IV**

According to the gap value of all dimensions indicated that reliability aspect has the highest gap between expectation with the perception of customers with value -1.34 which means consumers are still not fully pleased with the service provided by Indonesian restaurants. Refer to the customer satisfaction index represent that overall dimensions of service quality providing by Indonesian restaurant are make customers satisfied with result 80.07 it's meant the manager still has the opportunity to fulfill their service performance..

Keywords: Service Quality, Customer Satisfaction, CSI, Importance-performance analysis ( IPA), Indonesian Restaurant

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## I. Introduction

The number of Indonesian immigrant in Taiwan, on the whole, are commonly increasing. Taiwan becomes the second country destination of the immigrant from Indonesia after Malaysia country around 72,373 newcomers to this country (BNP2PTKI, 2018). Although there have been fluctuations Indonesian migrant workers over the past three years. Restaurants are one of the competitive business sectors where they offer a lot of mixed food and drinks. Discussing food and taste in the current era the household has changed a lot because everyone is interested in different foods. The market was contributed more from restaurant industry sector in the developed and developing countries, it becomes an unassailable interest in broader economic performance and indications of the development of experience-based service experiences and the high-value service industry that characterizes the twenty-first-century economy (Truong et al, 2017).

Customers are the main factor and a fundamental main of business, it is having a basis for profitability growth in a competitive market by looking at aspects of customer excitement. The defiance for running an enterprise now is to change over from the product perspective to customer perspective. Therefore, this condition becomes more adversity because they increase with accurate knowledge, information, and high education. They have high hopefulness of the quality of service they want to accept. They have great desire and do not want to be deceived. Therefore, nowadays, customers are compliance to be carried out as an individual. They always want to be respected and to feel their habit and custom are most important. Service organizations constantly make a great effort to achieve a higher level of customer services (Sarah, C. 2002).

In a highly competitive business environment, focus on the customer to making a judge of service quality is very great importance for the survival of service companies. Nalini and Samuel (2011) argued that one of the most vital features that seize a business in aiding its customers to get complete satisfaction in the service provided is quality. To be able to achieve it, every business should be able to distinguish the true expectations and requirements of their consumers. The experts in this field argue that if an organization wants to develop a sustainable future, they should make it their prime responsibility to know the requirements of their customers (Ryu and Jang, 2008).

The purposes research to determine the best service to the customer in the Indonesian Restaurant. The conceptual of this research is according to the opportunity for the restaurant business in the Indonesian people perspective. The variable that measured in this research were assurance, empathy, tangibles, reliability, and responsiveness. Next step is literature study, identification, formulation of problems, identifying questionnaire attributes, identifying the number of samples, compiling and distributing questionnaires. The data will be tested with Validity, Reliability, T-test, ANOVA, IPA, and CSI with SERQUEL model then discussion, it followed by preparation of conclusions and suggestions.

## **II. Literature Review**

### **2.1 Service quality**

The theory commonly used for service quality from (Parasuraman, Zeithaml & Berry, 1988) show that service quality is differentiation among a strong belief and feelings for consumers after getting an actual service. Moreover, these academic create a questionnaire for quality service namely (SERQUAL) to recognizing and differentiate the service quality as a statically difference. Furthermore, the perceiving of service quality depends on the type of service and also provided the context of service (Sumaedi and Yarmen, 2015).

Parasuraman et al. (1981; 1988) stated that Gap model has developed such a service quality estimation. They convinced that the method uses to make sure customer perceptions of service quality, and another way to get the comparison of customer expectations in service quality with the product quality that actually received for deciding the service level. five aspects that usually used for quality of service perceptions will consider to five-point there are assurance, empathy, tangible, reliability, and responsiveness.

Based on Brady and Cronin (2001), three aspects of service must be covered by the owner of the business are results, environment, and interaction. The results must connect to services provided, reciprocal action to service delivery, and the surroundings connect with the servicescape of the place service is provided.

### **2.2 Customer Satisfaction**

The definition of customer satisfaction is the meeting of expectations with the customer in terms of parameters related to satisfaction (Malik and Ghaffor, 2012). (Thorsten and Alexander (1997) Stated that the strategic factor for competitive advantage for customer satisfaction is the product and services of the company. Therefore, (Lin and Wu, 2011) Argued the mode that presides to long-term customer retention is in the scope between relationship marketing with the customer satisfaction aspect because satisfied of customers have a very advanced rating.

### **2.3 Customer Expectations and Perception**

Customers' expectations are beliefs and principles related to service distribution that will function as reference standards compared to the performance decided (Pizam, 2010). The customer made up or structure from their experiences in the past, the information from friends and kindred, seller or marketers' and the promises from another rival (Kotler et al, 2009). A similar thought is shared by (Garvin, 1988) The total package assets of product attributes or services that influence customers to create their purchasing decisions and encourage market share are the perceived of the quality. The sight of the quality differs from objective quality or technology that is particularly measured by the corporation. It is structured of a number of attributes which belonging conformance, features, performance, reliability, durability, and serviceability.

### **2.4 Importance-Performance Analysis (IPA)**

Techniques that are considered very simple and useful that can help managers identify which attributes need to be improved and to be decreased overall customer satisfaction is IPA (Importance performance analysis), this method supports the adoption of the IPA as an alternative framework for evaluating customer satisfaction and useful for further research. According to mantilla and James (1977), Important performance analysis (IPA) can be connected between important and performance on the customer perspective.

Bacon (2003) argued of although various researchers have proposed minor modifications to the technique over the years, the basic framework has largely remained the same. The IPA is graphically presented on a grid divided into four quadrants, that it's illustrated the IPA grid as shown in figure 1.

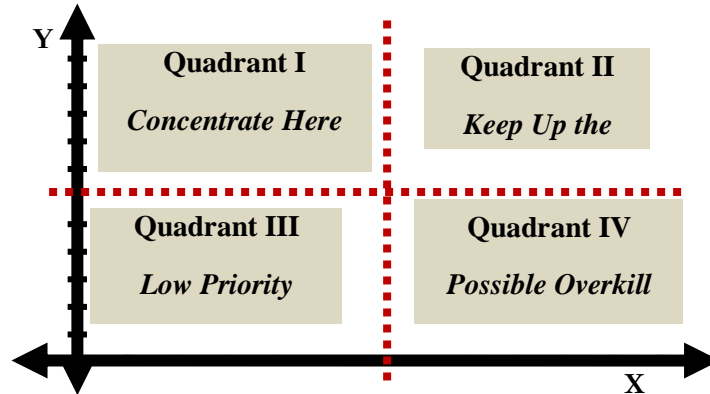


Figure 1. Importance-performance grid.  
Source: Mantilla and James (1977)

- Quadrant I: Respondent show that perceived attributes mostly important but performance still low. In case manager should improve their efforts and should be concentrated in this cell
- Quadrant II: It is shown that this element is very needed to the respondent, and it makes managers seem to have a high-performance level. Hence, it is required to keep up and enhance the good work in this activity.
- Quadrant III: The result shows that the respondent indicates in low importance and the manager shows the low performance. Although managers should not be overly concerned since the attributes in this cell are not perceived to be very important
- Quadrant IV: The attributes in this cell are of low importance for the respondent but have a high performance. the participant feels satisfied with the performance of the service, but the owner should consider present efforts on the attributes of this cell as being worthless and less value (Chu and Choi (2000)).

## 2.5 Customer Satisfaction Index

The other method which will support the improvement of an attribute of service quality is the Customer Satisfaction Index (CSI), this method used to tell and find the level of customer satisfaction. This method has several advantages such the efficiency to obtain information related to the dimension attributes that need to be corrected, this method also easy and simple to use, the scale has very highly, sensitivity and reliability (Anggraini, et.al. 2015). Suryawan and Dharmayanti (2013) argued that customer satisfaction is made a firm decision and being resolved by customer perceptions of the performance of a product or service in meeting customer expectations.

### III. Study Design and Methodology

#### 3.1 Research framework

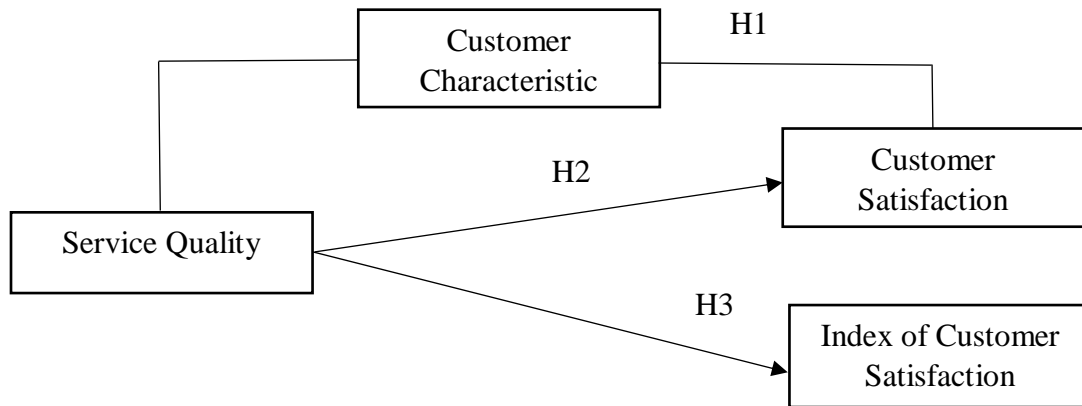


Figure 2. Research Framework

Source: This Research

Following the earlier discussions in this paper and reviewing the rhetorical background of this work based on what was done in the past, the hypothesis in this work is developed and presented in this section, the present study investigates three hypotheses which test (1) The causal relationship between customer characteristics such as gender, age, occupation, monthly income, and place of living with customer satisfaction. (2) The causal relationship between service qualities with customer's satisfaction. (3) The causal relationship between service quality with the index of customer satisfaction. There are three hypotheses are presented below.

H1: Customer characteristic has a significant difference in customers' satisfaction.

H2: Service quality has a significant influence on the customer's satisfaction.

H3: Service quality has a significant relationship with the index of customer satisfaction

This analysis could be very useful for an Indonesian restaurant manager since the ranking helps them to identification and analysis the more important service quality for their business and helps the manager to allocate resources to each dimension in order to improve service quality in the Indonesian restaurant.

#### 3.2 Instrument

The data used in this research is primary and secondary. The primary data that was collected by questionnaire. This research was held at an Indonesian restaurant in Kaohsiung city since February – March 2019. Research stage was preceded by a preliminary survey. The secondary data will be obtained from the literature, the books that are relevant to this research, from an Indonesian restaurant, and another textbook.

The instrument was the standard SERQUAL questionnaire which was designed on the basis of Likert's five scales and distributed among the participants (Parasuraman, et.al. 1985; 1991; 1994). The respondent required to rate on five points of Likert's scale service quality

attributes they perceived to be importance and performance. Scale Likert's for Important (1. Least important, 2. Not important, 3. Neutral, 4. Important, 5. Strongly important). Scala Likert's for performance (1. Least satisfied, 2. Not satisfied 3. Neutral 4. Satisfied, 5. Strongly satisfied) (Obonyo, et al. 2012). A five-point scale Likert's is used for measuring in all 25 questioners.

### 3.3 Data Collection

The population in this study is focused on the customer in Chen Lili Indonesian Restaurant in Kaohsiung city. The sample was collected from the customer that eat at that restaurant in March for dinner or lunch and also collected by online to collect from a customer that had eaten at the restaurant before. Using a 95% confidence level, the margin of error 0.05.

To measure a sample of Indonesian Restaurant Customer population in this research using Slovin formula (Sevila, 2007).

The formula of sampling in this method:

$$n = N / (1 + (N \times e^2))$$

Where:

n: number of samples

N: number of populations

e: estimated deviation of 0.05

Overall, 290 samples were chosen and usable questionnaires were collected and used for data analysis. The data was analyzed using statistical package for social science (SPSS) version 23.

## IV. Result

### 4.1 Demographic features

After the questionnaires were collected reliability, validity, IPA and CSI analysis were performed through the application of Statistical Packages for the Social Sciences 23th Edition (SPSS 23). The 290 valid questionnaires were collected and the result showed 55.5% of them were completed by female customers and 45.5% male. The largest group of respondents was <30 years (77.9%) so 31-41 years were 20.3% and the smallest group were 41-50 (1.8%). In the income backgrounds of the respondents. 41% or 119 of the respondents were between 16,000 – 20,000 NTD, 31% of respondent are below 15,000 NTD. 24% or 69 of respondent were 21,000-30,000 NTD. 2.3% or 7 of respondent were 31,000- 40,000 NTD and more than 41.000 only 5 or 1.7% of respondent. In Occupation 58% of respondent are employees 38% is student, 0.6 farmers/fisher and 3.4% another job. More than half of the respondents have a high school or below (70%) of the total respondents, those with the university (college) represented 20% of the respondents, while 3% respectively had a master (included) or above and the other respondents are 7%. The place of living 94% of respondents are living in South Taiwan (Tainan, Kaohsiung, and Pingtung), 3.7% in Middle Taiwan and 1.3% are living in North Taiwan.

### 4.2 Data Analysis

#### 4.2.1 Validity, Reliability, and ANOVA Test

In order to make sure that the factors studied are in line with the selected variables, Validity and Reliability is used in this paper. The value of KMO and Bartlett's Test show that validity

value is between 0.849-0.887 it shows that the data is valid and worthy for further analysis. The average variance extracted (AVE) of all dimensions was more than 0.50, respectively, all exceeding the benchmark of 0.50 for convergent validity (Fornell, C and Larcker, D.F., 1981). The data collected from the mentioned sample is reliable and respondents answered accurately because the variables are between 0.850–0.909 which is the standard of acceptance for reliability. Byrne, B. M. (1994) Argued that Cronbach's alpha coefficient above 0.7 indicates valid reliability.

The research used T-test to analysis different perception between gender (male or female) with customer satisfaction and the result show that gender has a significant difference in customer satisfaction that results proven by look to the value of Sig (2-tailed) importance attributes and performance attributes  $< 0.05$  it means to have a significant difference between gender with important of attributes and performance. The research also applied the one-way analysis of variance (ANOVA) to explore the service quality gap difference (Satisfaction-Importance) of different customer attributes (age, education, occupation, monthly income and place of living) as the reference for fine-dining restaurants to correspond to the strategy of different customer attributes. According to the analysis result, customers with different gender, age, education, occupation, monthly income and place of living have a significant difference ( $p < 0.05$ ) between the gaps of the five restaurant service quality dimensions. The hypotheses (H1) was tested in this section. These findings show that customer's characteristic has a significant difference to satisfaction  $H_1$  accepted  $H_0$  rejected with a score  $< 0.05$ , this result show that hypotheses 1 is supported.

#### 4.2.2 Gap Value of Expected with Perceived

The next step is to analyze answers from 290 respondents tested validity, reliability and ANOVA is gap value calculate and will show in Table 1 the results gap calculation using SERVQUAL.

Table 1. Results of SERVQUAL Gap Calculation

Attributes	Important	Performance	Gap Value (P-E)
Tangible	20.52	19.78	-0.74
Reliability	21.07	19.73	-1.34
Responsiveness	20.92	19.81	-1.11
Assurance	21.51	21.00	-0.51
Empathy	20.71	19.67	-1.04

Source: This Research

The result showed that all attributes have a negative value. The overall value of expectation obtained is higher when compared to the value of perception. The high value of all expectations results in all attributes having a negative gap value. This shows that the actual conditions are not yet in line or have not met the customer's desires optimally (Bonjanic, D.C., and Rosen, L.D. 2004). The highest gap value from Reliability that means customers not satisfied with service in this dimension. As it knows that reliability represents the capability to accomplish the service with consistently and truthfully. It is similarly meaning that service carries punctual, in

an equal way, and deprived of an error every time. Therefore, the manager should give special attention to the reliability of service quality.

#### 4.2.3 Perceived Importance and Performance Restaurant Service Quality Attributes

Respondents were asked to rate the perceived importance of 25 attributes of restaurants service on Indonesian Restaurant with a five-point scale. The finding of this study about perceived importance restaurant service quality attributes was calculated and ranked. Mean score of importance is around 3.6 – 4.43 that means many off participant ranked all attributes as very important. The top fifth of service quality attributes in perceived performance is the highest rank is from assurance dimensions (available food is guaranteed halal for consumption) Mean = 4.43 and SD = 0.846. Second high rank is from tangible dimensions (Restaurant is clean and comfortable) Mean = 4.41 and SD = 0.686. The third rank is from tangible dimensions (variety and availability of menu) Mean = 4.38 SD = 0.763. The fourth rank is from assurance dimensions (the meals are delicious) Mean = 4.43 and SD = 0.815. The fifth rank is from reliability dimensions (the ingredients are fresh) Mean = 4.34 and SD = 0.782. The least, attributes as perceived importance as tangible dimensions (the restaurant has a lot of parking area) with score Mean = 3.6 and SD = 0.98. The second is from tangible dimensions (restaurant staff wears neat clothes) with score Mean 4 and SD = 0.817. The third rank is from empathy dimensions (restaurant staff gives consumer individual attention) with score Mean = 4.04 and SD = 0.824. The fourth-ranking from assurance (Image and reputation) Mean = 4.06 and SD = 0.824. The fifth rank is from empathy dimensions (Staff can really respond to your opinions) Mean = 4.08 and SD = 0.828. Mean ranking of all attributes shown in Table 2 below.

The five highest attributes performance of service quality are from assurance dimension (available food is guaranteed halal for consumption) Mean = 4.41 and SD = 0.767, (The restaurant meals are delicious) Mean = 4.3 SD = 0.723, from tangible dimensions (variety and availability of food menu), Mean = 4.2 SD = 0.85, from assurance dimensions (the quality and nutritious of the restaurant meal), Mean = 4.14 and SD = 0.768, (the image and reputation of restaurant) Mean = 4.1 and SD = 0.822. The 5 five least ranking for performance are from tangible dimensions (the restaurant has a lot of parking area) Mean = 3.69 and SD = 0.964, from reliability dimensions (waiters can provide the services customers need on time) Mean = 3.83 and SD = 0.904, from tangible dimension (restaurant staff wears neat clothes) Mean = 3.88 and SD = 0.892, from empathy dimension (Restaurant staff give consumer individual attention) Mean = 3.91 and SD = 0.81, and (Restaurants can really respond to your opinions about restaurants, service staff, and food) Mean = 3.91 and SD = 0.834. Mean ranking of all attributes shown in Table 2 below.

In order to address the performance of restaurant service were calculated with mean and standard deviation with ranking items. The survey result shown in Table 1 the 25 service attributes indicating respondents' opinions about the surveyed Indonesian food restaurants in descending order of respondents' agreements. Overall, respondents' feelings about the service quality at the Indonesian restaurants are relatively positive. Out of the 25 items, only 7 items have a mean of 4 indicating "agree". All the other items have a mean value between 3.99 and 3.75 indicating that some of the responses are "Neither agree nor disagree". The 3 highest attributes in performance of service quality are from assurance dimension (available food is guaranteed halal for consumption) Mean = 4.38 and SD = 0.836, (The restaurant meals are delicious) Mean = 4.28 SD = 0.783, and from tangible dimensions (variety and availability of food menu) Mean = 4.18 SD = 0.878. The least ranking for performance are from tangible



dimensions (restaurant has a lot of parking area) Mean = 3.75 and SD = 0.962, from reliability dimensions (waiters can provide the services customers need on time) Mean = 3.76 and SD = 0.938 and the last from tangible dimension (restaurant staff wears neat clothes) Mean = 3.81 and SD = 0.893. The hypotheses (H2) was tested in this method, our finding indicated that different PZB model has a different customers satisfaction. The result was supported too (H2) that argued the different PZB model has different customer satisfaction.

Table 2. Perceived Importance and Performance

No	Service quality attributes	Importance			Performance		
		Mean	Std. dev	Rank	Mean	Std. dev	Rank
1	Restaurant I is exquisite and attentive	4.14	0.793	18	3.96	0.916	12
2	Restaurant is clean and comfortable	4.41	0.686	2	4.04	0.865	7
3	Restaurant staff wear neat clothes	4	0.817	24	3.88	0.892	23
4	Variety and availability of food menu	4.38	0.763	3	4.2	0.85	3
5	The restaurant has a lot of parking area	3.6	0.98	25	3.69	0.964	25
6	The ingredients in the restaurant are fresh	4.34	0.782	5	4.04	0.816	7
7	Staff provide fast service	4.12	0.856	20	3.93	0.903	16
8	Waiters can provide the service on time	4.23	0.775	10	3.83	0.904	24
9	The exactness of the information provided by staff	4.21	0.729	11	3.92	0.844	19
10	The chef is professional and reliable	4.17	0.851	13	4.01	0.874	10
11	Service providers accurately	4.14	0.739	18	3.93	0.858	16
12	Immediate response to consumers demand	4.16	0.738	16	3.96	0.841	12
13	Service staff can patiently handle customer opinions	4.17	0.775	13	3.94	0.89	14
14	The chef can modify the dishes and tastes at any time according to the needs of the customers	4.28	0.816	8	4.04	0.768	7
15	Restaurant staff does not need to ask the supervisor to be able to provide better services directly	4.17	0.753	13	3.94	0.856	14

Table 2. Perceived Importance and Performance (continue)

16	The image and reputation of the restaurant	4.06	0.824	22	4.1	0.822	5
17	The quality and nutritious of the restaurant meal	4.33	0.803	6	4.14	0.768	4
18	The restaurant meals are delicious	4.35	0.815	4	4.3	0.723	2
19	Available food is guaranteed halal for consumption	4.43	0.846	1	4.41	0.767	1
20	Friendly and courteous service from the service staff	4.33	0.755	6	4.05	0.845	6
21	Service staff will give priority to the needs and benefits of your meal	4.26	0.747	9	3.99	0.813	11
22	Service staff have good communication with consumers	4.16	0.818	16	3.92	0.865	19
23	Waiter staff can understand consumer desires	4.18	0.789	12	3.93	0.893	16
24	Restaurants can really respond to your opinions about restaurants. Service staff. And food	4.08	0.828	21	3.91	0.834	21
25	Restaurant staff give consumer individual attention	4.04	0.824	23	3.91	0.81	21
	Grand mean	4.17			3.96		

Source: This Research

#### 4.2.4 Importance and performance of Indonesian restaurant service quality attributes

IPA grid was shown 4 quadrants in Figure 3 below, for all point of service quality. The points that recognized to quadrant 1 are 8, 9 and 21. Quadrant II are 2, 4, 6, 14, 17, 18, 19, and 20. Quadrant III 1, 3, 5, 7, 11, 12, 13, 15, 22, 23, 24, and 25. Quadrant IV are 10 and 16.

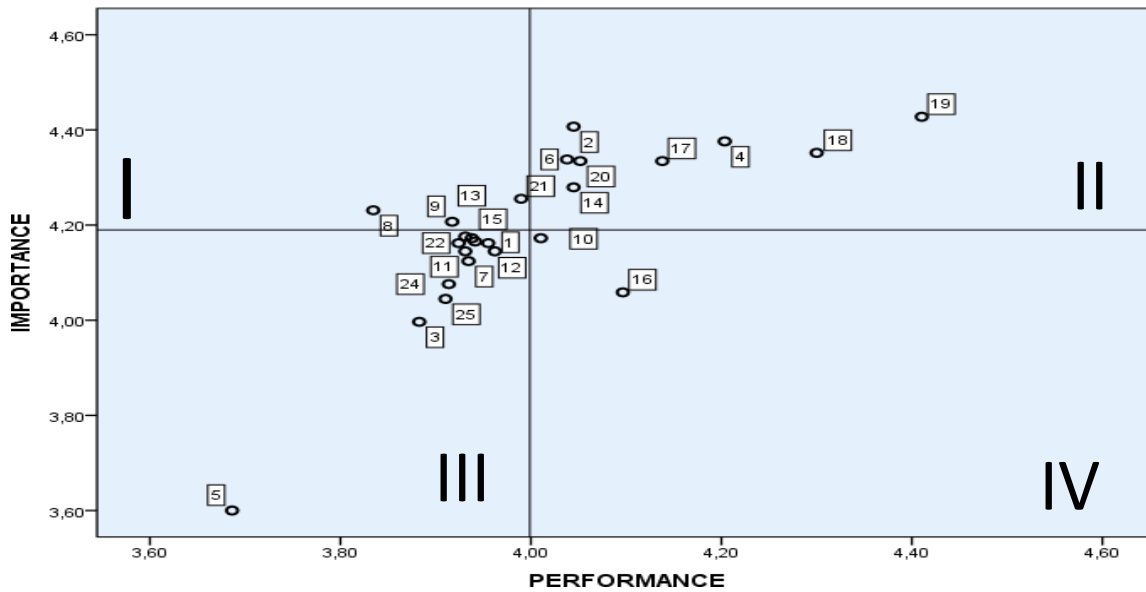


Figure 3. IPA for restaurant service quality  
Source: This Research

#### 4.2.5 Quadrant I (concentrate here)

This advocates that improvement service should be intense here. Items 8, 9 and 21 were entered to this quadrant that means the manager of the restaurant should focus on those items. In item 8 (waiters can provide the services customers need on time), item 9 (the exactness of the information provided by staff) that items include reliability dimensions and items 21 (Service staff will give priority to the needs and benefits of your meal). That founding suggests to the restaurant manager to make crucial focus on service quality provided by waiters. Therefore, according to Kanyana, A., et al., (2015) Stated that the foodservice industry is the essential one of Service operations management. The waiter becomes a critical and decisive role in many organizations. They deliver their meal to customers from a waiter. They obtain something almost all their sales from the efforts and means of the waiter sale services. The waiter usually does their duties of accompany the customers to their tables, service for customers seated at tables with the great attitude, serving customer seated, cleaning and preparing up tables (Anderson, 1995).

#### 4.2.6 Quadrant II (keep up the good work)

Among 25 attributes of service quality in Indonesian restaurant, these were attributes 2 (the restaurant is clean and comfortable). 4 (variety and availability of food menu). Attributes 6 (the ingredients in the restaurant are fresh). Attributes 14 (chef can modify the dishes and tastes at any time according to the needs of the customers). 17 (quality and nutritious of the restaurant meal). 18 (restaurant meals are delicious). 19 (available food is guaranteed halal for consumption). 20 (Friendly and courteous service from the service staff). Manager of the restaurant will get the customers satisfaction if they are consistently performing a good service, continuously better planning for the future, and also make an evaluation in every section of their various sectors of the service. Towards optimization of customers satisfaction, revisiting of customers, and get a good positive word of mouth from their customers.

4.2.7 Quadrant III (Low priority)

There are 12 or 48% of attributes were identified to quadrant III (low priority). The attributes that loaded in low priority are 1 “restaurant I is exquisite and attentive”. 3 “restaurant staff wears neat clothes”. 5 “the restaurant has a lot of parking area”. 7 “Staff provide fast service”. 11 “service providers accurately”. 12 “immediate response to consumers demand”. 13 “Service staff can patiently handle customer opinions”. 15 “restaurant staff does not need to ask the supervisor to be able to provide better services directly”. 22 “service staff have good communication with consumers”. 23 “waiter staff can understand consumer desires”. 24 “restaurants can really respond to your opinions about restaurants”. Service staff and food), and item 25 (restaurant staff gives consumer individual attention”. These items are considered and rated as having low importance value and low-performance value. In other case performing levels may be low in this cell and managers should not be highly focused and much attention here. The attributes that entered in this cell are not aware to be very important. The limited items should be released on this low priority cell. However, in general, the value of performance is 3.96 that means customers satisfy that indicated respondent as importance item is too extreme. In other indication that service quality makes respondent unhappy and make dissatisfaction. However, the manager should not bring down its determined attempt to improve on these aspects but must make a decision to reduce this problem.

4.2.8 Quadrant IV (Possible overkill quadrant)

The result shows two attributes that loaded into quadrant IV (possible overkill quadrant) represent that the value of attributes indicates lower than the average of importance and performance value was higher than importance. Those attribute that loaded to this quadrant is item 10 (The chef is professional and reliable) it is accordance to outcome from conscious of perceived service quality that the restaurant meal is delicious this result indicated that chef of the restaurant is professional. Item 16 (the image and reputation of the restaurant) that means the restaurant has a good image and reputation that consumers don’t consider anymore. Low, G. S., and Lamb, Jr, C. W. (2000) Asserted that a strong brand inspires trust in customers and leads to a positive perception of a product.

4.2.9 Customer Satisfaction Index

Table 3. Customer Satisfaction Index

No	Service Quality	Importance (I) Scale 1 – 5	Performance (P) Scale 1-5	Score (S)
1	Restaurant décor is exquisite and attentive	4.14	3.96	16.42
2	Restaurant is clean and comfortable	4.41	4.04	17.83
3	Restaurant staff wears neat clothes	4	3.88	15.52
4	variety and availability of food menu	4.41	4.04	18.39

Table 3. Customer Satisfaction Index (continue)

5	The restaurant has a lot of parking area	3.6	3.69	13.27
6	The ingredients in the restaurant are fresh	4.34	4.04	17.52
7	Staff provide fast service	4.12	3.93	16.23
8	Waiters can provide the services	4.23	3.83	16.22
9	The exactness of the information provided by staff	4.21	3.92	16.48
10	The chef is professional and reliable	4.17	4.01	16.73
11	Service providers accurately	4.14	3.93	16.29
12	Immediate response to customers demand	4.16	3.96	16.46
13	Service staff can patiently handle customer opinions	4.17	3.94	16.43
14	The chef can modify the dishes and tastes at any time according to the need of customers	4.28	4.04	17.31
15	Restaurant staff does not need to ask the supervisor to be able to provide better service directly	4.17	3.94	16.42
16	The image and reputation of the restaurant	4.06	4.1	16.63
17	The quality and nutritious of the restaurant meal	4.33	4.14	17.94
18	The restaurant meals are delicious	4.35	4.3	18.71
19	Available food is guaranteed halal for consumption	4.43	4.41	19.53
20	Friendly and courteous service staff	4.33	4.05	17.56
21	Service staff will give priority to the needs and benefits of your meal	4.26	3.99	16.98
22	Service staff have good communication with customers	4.16	3.92	16.33
23	Waiter staff can understand consumer desires	4.18	3.93	16.42

Table 3. Customer Satisfaction Index (continue)

24	The restaurant can really respond to your opinions about the restaurant, service staff and food.	4.08	3.91	15.95
25	Restaurant staff give consumer individual attention	4.04	3.91	15.82
Score total		(Y) 104.73		(T) 419.38

Source: This Research

The result can be calculated to the formula below:

$$SCI = \frac{T}{5Y} \times 100\% = \frac{419.3}{5 \times 104.73} \times 100\% = 80.07$$

From that value indicate that CSI for restaurant service quality is 80.7% that means customer satisfied. Pohandry, A, et. Al (2013) Asserted that maximum CSI result is 100%. The result of CSI 50% or lower show that has a low of service performance and the higher performant show if the result is higher than 80%. With this result that different customer's characteristic has a good customer index (H3).

## V. Conclusion and Suggestion

From the discussion in the previous chapter have been evaluated that the number of sampling is 290 of Indonesia customers there are different characteristic measured in this research. Finally, our founding of this research about Indonesian customers characteristic are female 55.5% and male 45.5%, most of the customers are > 30 years old it's meant they still in the productive area. The income of customers around 16,000 - 20,000 NTD. In occupation, 58% of customers are from employees and the level of education most of them are from high school or below. While most of them living in South Taiwan.

Based on the results that have been presented in this research, it can be concluded that all of the customers of Indonesian restaurant have a different perception on customer's satisfaction in gender, occupation, and education characteristic. The several points that lead to the purpose of this study state the factors that have the highest priority in the study are in quadrant 1 ( waiters can provide the services customers need on time, the exactness of the information provided by staff, Service staff will give priority to the needs and benefits of your meal). In other the item that excepted to quadrant two also become the priority items in service quality. In another quadrant 3 and 4 has low priority for the service quality but the manager should not ignore it.

According to the gap value of all dimensions indicated that reliability aspect has the highest gap between expectation with the perception of customers with value -1.34 which means

consumers are still not fully pleased with the service provided by Indonesian restaurants. Refer to the customer satisfaction index represent that overall dimensions of service quality providing by Indonesian restaurant are make customers satisfied with result 80.07 it's meant the manager still has the opportunity to fulfill their service performance.

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# 運用 IPA 和 CSI 評估印尼餐廳之服務品質 與顧客滿意度

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## 摘 要

考量顧客的需要是企業營運的主要因素，顧客的滿意度更是盈利增加及競爭優勢的基礎。本研究旨在確定影響顧客滿意度和衡量顧客滿意度指數的每項服務的優先順序。這項研究的受訪者包括 290 名印尼餐廳的實際顧客。使用重要性—表現程度分析法（IPA）模型和客戶滿意度指數（CSI）進行分析評估。

結果顯示，不同性別，職業和教育程度的受訪者對滿意度有不同的看法。服務品質中具有最高優先級的因素是象限 I（服務員可以按時提供客戶所需的服務，工作人員提供的資訊的準確性，服務人員會給出優先考慮用餐的需求和益處）。在其他項目中，除了象限 II 之外的項目也應成為服務品質的優先項目。在另一個象限 III 和 IV 中，服務質量的優先級較低，但管理者不應忽略它。根據所有構面的落差值表示，可靠性構面與客戶感知的期望值之間的差距最大，值為-1.34，這意味著消費者對餐廳提供的服務仍然不滿意。最後，顧客滿意度指數表示餐廳提供的服務品質的整體滿意度為 80.07%，這意味著管理者仍有空間提升服務品質的績效。

關鍵詞：服務品質、顧客滿意度、CSI、重要性—表現程度、IPA、印尼餐廳

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