

The Measurement of Service Quality using SERVQUAL: The Case Study of *Peladang Setiu Agro Resort*, Terengganu, Malaysia.

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Abstract

This article examines the measurement in the context of the previous instrument (SERVQUAL) in measuring the service quality. SERVQUAL is an instrument developed by Parasuraman, Zeithaml and Berry (1985), is currently the most popular measurement of service quality. In this article, SERVQUAL was used to measure the service quality at Peladang Setiu Agro Resort which is located at Terengganu, Malaysia. The main objective of this study is to determine whether there is a gap exists between the perception and the expectation of visitors on selected dimensions such as tangibility, reliability, responsiveness, assurance and empathy. The data was collected using self-administrated questionnaires and the findings shows that there is a significant gap between the perceptions and expectations of the service quality among the respondents. As a result, this paper also provides some recommendation that aim to assist the service provider in minimizing the gap between the perception and expectation; and hence fulfill the expectation of the tourists that stay at Peladang Setiu Agro Resort.

Keyword: SERVQUAL, service quality, service encounter, Agro tourism

1. Introduction to Peladang Setiu Agro Resort

Peladang Setiu Agro Resort is resulted from the establishment of *Pertubuhan Peladang Kawasan Setiu* (Farmer's Association of Setiu) on 5 August 1974. The association is comprised of 2910 members and had come out with its own subsidiary named *Peladang Setiu Agrotourism & Resort Sdn. Bhd.* The resort has seven boards of directors and had possessed RM 333,833.50 shares with other 37 farmers. During the early days of the establishment, the resort has only 57 workers. Today it has 114 workers including the permanent staff, contract workers and foreign workers. The resort is located approximately 89 km from Kuala Terengganu and 13 km from Bandar Permaisuri which is the center district of the town of Setiu. The resort was operating based on the agro tourism concept; several agriculture elements was implemented such as the landscape, fishing pond, herbal garden, palm oil estate, fruit orchard, Agro Theme Park, oyster mushroom project and goat livestock project. These agriculture elements are recognized as part of the tourism product and suggested to provide a new tourism attraction in Malaysia particularly in Setiu. It is believed that the beauty and tranquility of the landscape that include the man-made lakes will attract more tourists to continue to visit the resort in the future. Despite the unbeatable landscape that the resort can offer, the service provided also need to be outstanding in order to make sure the continuity of the tourists. The services that have been offered at Peladang Setiu Agro Resort are including the accommodation, recreation activities such as jungle tracking and summer camping. As for the accommodation, the resort has 58 unit chalets with Malay traditional concept that face the lake for a breathtaking view.

2. Literature Review

2.1 *Customer Satisfaction and Service Quality*

Satisfaction is the customers' evaluation of a product or services in terms of whether they met their needs and expectation. Failure to meet the needs and expectations is assumed to result in dissatisfaction with the product or service (Zeithaml and Bitner, 2000). Several slogans based on customer satisfaction are created such as "Customer First, Customer is King, Customer is our Top Priority, and Customer is Always Right" to indicate the importance of customer satisfaction which is vital for the business.

In a case like resorts, hotels or inns, Keung (1998) suggested that "the 'What' and 'How' customers think are vital for hoteliers if they want to gratify their customers". Since the initial study of customer effort, expectations and satisfaction, the body of work in this field also has been greatly expanded. Customer satisfaction is conceptualized as an attitude judgment about purchase (Jayawardhena et al, 2007). In addition, customer satisfaction presumably leads to repeat purchases and favorable word-of-mouth publicity (Zeithaml and Bitner, 2000). Hartline et al. (1996) who has conducted a study on employee performance indicator for the hotels found that the performance of front office has a significant effect on the overall service. Thus it is also able to indirectly affect the perceived quality and word-of-mouth intention. Practitioners and authors tend to use the terms satisfaction and quality interchangeably, but researchers have attempted to be more precise about the meaning and measurement of the two concepts. Although they shared some similar traits, satisfaction is generally viewed as a broader concept while service quality assessments focus specifically on the dimension of service. Also service quality is perceived as an overall construct of the perceptions about a firm's service provision and satisfaction which is based on the specific service encounter (Jayawardhena et al, 2007). Based on this view, perceived service quality is a component of customers' satisfaction.

The previous discussion establishes the assumptions that customer's expectations prior to service encounter is very important. If the expectation does not meet, the chances of dissatisfaction are higher. It is suggested that the quality of service or customer satisfaction are evolving according to time. Zeithaml and Bitner (2000) also argued that, the entire discussion of the quality of service and customer satisfaction is based on customers' perception of the service, is not predetermined the objective criteria of what service is or should be. Next section will discuss on the service encounter and the importance of it.

2.1.1 *Service Encounter*

From the customer's point of view, the most vivid impression of service occurs during the service encounter, or the "moment of truth", when the customer interacts with the service provider. For instance, among the service encounters a hotel customer experiences including checking-in process, the bell boy service, dining at the hotel's restaurant, requesting a wake-up call and checking-out process. This experience also faces by the tourists who stay at Peladang Setiu Agro Resort. The guest's first impression is generally considered to be of the utmost importance (Thomas 1997). The impact that the receptionist has on customer service can best be explained in terms of behavior. During these encounters, the customer received a snapshot of the organization's service quality, and each encounter contributes to the customer's overall satisfaction and the willingness to experience such services again. Each encounter thus represents an opportunity to demonstrate its potential as a quality service provider which can increase the customer loyalty (Zeithaml and Bitner, 2000).

2.1.2 *The Importance of Service Encounters*

Earlier discussion posits those service encounter cascades are very important and any encounter is critical in determining customer satisfaction and loyalty. According to Zeithaml et al. (2000), "if a customer is interacting with a firm for the first time, that initial encounter will create a first impression of the organization". During the first encounter experience, the customer has no basis for judging the organization; therefore the initial phone contact or first face-to-face experience with the

representative of the service provider can take on excessive perceptions. These perceptions can be good or bad depends on the experience with the service provider. However, although several encounters have been experienced by the customer, next encounter should be pleasant as well in creating a composite image of the organization in the customer's retention.

In addition, service encounter also can act as a feature in assessing the service quality. Services are often comprised of a number of component parts, and it is the sum of these, or the overall experience of the service encounter, which the customer will use to form judgment (H. Woodruffe, 1995). Some author added, from the service encounter perspective; the tourism customer shared the same public business environment among other groups of the customers in the service context (C. His-Jui Wu, 2007). Also, service encounter focuses on the interactions between customers and employees in the service firm. Both the customer's and employee's expectation and perceptions of the service encounter play an important role in determining the customers' evaluation of the service encounter (Gundersen, Heideand Olsson, 1996). Next section will discuss on the service quality and SERVQUAL as an instrument in measuring the service quality.

2.2 *Service Quality and SERVQUAL*

Service quality refers to the highest possible delivery of service standard based on the elements of tangibility, reliability, responsiveness, assurance and empathy of service provider. In recent years, numerous studies have focused on customers' satisfaction and service quality in the hospitality industry. Several contributions have been made in relation to various mechanisms for improving customer satisfaction (Fitsmmons, 2006). The most extensive research into service quality is user-oriented. Zeithaml and Bitner (2000) initially identified that service quality is a focused evaluation that reflects the customer's perception of specific dimensions of service: reliability, responsiveness, assurance, empathy, tangibles. Lori et al. (2003) stated that, the objective of the instrument is to provide a tool for assessing customer perception of service quality in service and retailing organization. Lori added that the perceived quality is the degree and direction of discrepancy between customer's perceptions and expectations. Customer perceptions are subjective assessments of actual service experiences. The instrument was based on the principle that service quality is different between the customers' expectations and the service they received (Kurtz and Clow, 1998).

It was found that customer evaluate service quality on five dimensions such as tangibles, reliability, responsiveness, assurance and empathy. The dimensions represent service quality or SERVQUAL. These dimensions are representing the items during the service encounter.

- Tangibles: appearance of physical facilities, equipment, and appearance of personnel.
- Reliability: ability to perform the promised service dependably and accurately.
- Responsiveness: willingness and to help customers and provide prompt service.
- Assurance: knowledge and courtesy of employees and their ability to convey trust and confidence.
- Empathy: caring, individualized attention the firm provides its customers.

SERVQUAL also highlights the difficulties in ensuring high quality in service for all customers in every situation (Palmer, 1998). More specifically, it identifies five gaps where there may be a shortfall between expectation of service level and perception of actual service delivery. SERVQUAL has been widely used in a variety of industrial, commercial and non-profit setting. The studies include retailing, dental services, hotels, travel and tourism, car servicing, business school, higher education, hospitality, business to business channel partners, accounting firms, architectural services, recreational services, hospitals, airline catering, banking and local government. As mention by Britney and Hubert (1994), SERVQUAL dimensions are viewed as good predictors of service quality. In addition, SERVQUAL dimensions are also good predictors of overall quality and may also be highly correlated with overall satisfaction. Therefore, SERVQUAL will be used in this research.

2.3 Research Framework

Services are often invisible and thus difficult to define the quality. Gundersen et al. (1996) has conducted a study on customer satisfaction among the hotel guests by measuring satisfaction from the three main department of service encounter. They are the front office department, the housekeeping department and the food and beverage department. The study found that the majority of variation can be explained by the tangible and intangible dimension of those departments.

In this study, the service quality at Peladang Setiu Agro Resort is measured. The main objective of the study is to know whether the services provided at the resort meet the visitor's expectation and to provide some suggestion on maintaining the service quality. It is suggested that customer today is aware about service quality and exercised their right as a customer. Therefore it is important for the service provider to provide a good and relevant service to every customer.

According to some studies, service quality is functioning as an antecedent to customer satisfaction (Reicheld and Sasser, 1990; Lacobucci et al, 1996; Shemwell et al, 1998; Ding, 2004). This study has adopted the original instrument, SERVQUAL by Parasuraman, Zeithaml and Berry (1990). The original 22 items of SERVQUAL scale is used to assess five specific dimensions of SERVQUAL i.e. tangibles, reliability, responsiveness, assurance, and empathy. The main purpose of SERVQUAL instrument is to utilize a "gap (or difference) score" analysis while the user's expectation, the service quality are assessed at the same time as the user's perception of the actual system performance. The difference between these two scores which perception minus expectation (P-E=0) is used as the basis of analysis. Therefore, this study has focused on the dimension before and after customer experienced the service.

Figure 1 shows the SERVQUAL dimensions adopted from Parasuraman et al (1998).

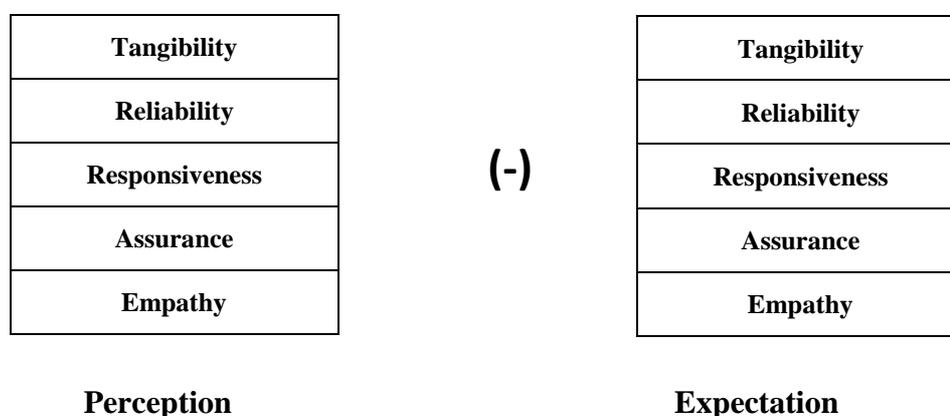


Figure 1: SERVQUAL Dimensions

Source: Adopted from Parasuraman et al (1998)

Tangibles

Parasuraman et al. (1998) described the term *tangibles* or physical quality when referring to the tangible element of service including the appearance of physical facilities, tools and equipment, personnel, communication materials and other physical features.

The SERQUAL model was introduced by Parasuraman et al. as one of the “solid” dimensions used to assess service quality including the tangible elements. The tangible elements had been divided into physical product which means goods consumed during the service production process and physical support which explain the framework that enables or facilitates the production of service (Lehtinen and Lehtinen, 1991). In addition, Marshall and Murdoch (2003) described tangible elements as the physical representations or images of service to be provided.

Contrast with Parasuraman et al. (1998), the Taiwanese expresses tangible elements as a preference for highly structured service delivery systems. The Taiwanese also were depicted as strongly associating with technology efficiency or reliability and timeless between the tangible elements and the reliability concept (Hshiang and Yi, 2004). While Parasuraman and other researchers had found that people tend to consider tangible elements as the least important of SERVQUAL dimensions, there is some evidence that is worth to be given credit for. For instance, Gummesson (1992) has primarily focused on the importance of tangible elements in her work on the physical facilities where service is delivered. The surroundings in which services were delivered can impact the way people perceived the organization and their feelings towards the organization. Based on consumer surveys in three leisure service settings, Wakefield and Blodgett (1999) found that *“tangible physical environment plays an important role in generating excitement in leisure settings; excitement, in turn, plays a significant role in determining customer’s intentions and willingness to recommend”*.

However, Chowdhary et al. (1995) suggested that, Zeithaml et al. (1990) report using the SERVQUAL instrument were a proved that tangible elements were consistently unimportant. However in the case of Peladang Setiu Agro Resort, it is observed that the tangible elements of its services and the appearance of employees are important. The other equally important dimension of SERVQUAL is reliability as discussed in the next section.

Reliability

Referring to Parasuraman et al. (1998), reliability means the ability to perform the promised service independently and accurately. Reliability has been posits as the most important dimension in assessing the quality of service. It is a fundamental requirement for businesses to compete in the marketplace (Cook et al., 2002; Lovelock et al. 1999). In other words, the service has to be accomplished accurately and without error during every encounter. Marshall and Murdoch (2003) mentioned that reliability is the ability to provide a resolution during the service encounter and as part of delivering the promise from the service provider. Moreover Gronroos (2001) has suggested that reliability is important for customers so that they can rely on the service provider, its employees and the systems created by the service provider.

Despite that, reliability also can lead to significant challenges for service firms like Peladang Setiu Agro Resort. According to Peladang Setiu Agro Resort, many services are labor intensive; the employees attach a large degree of validity to the service production process that is not easily maintained by the service provider. It is also normal for employees to have different personalities in skills and attitudes, and the same employee can provides radically different service from one customer to another, depending on situational factors like customer attitude task complexity. Lovelock et al. (1999) also stressed that reliability is an outcome measured when the customer judged the service after the experienced the service encounter.

Responsiveness

Responsiveness is defined as one person's behavior during an interaction with a target person; a person is responsive if their behavior is adapted to the behavior of the target (Lorna, 1998). Fitzsimmons (2006) suggested that responsiveness is the ability to help customer at the moment of time. In the case of Peladang Setiu Agro Resort, it is argued that even the expression of emotions by the front line employees is meaningful for customers and regards as part of the good service (Rafaeli and Sutton, 1989). Lorna (1998) in her research was investigating the relationship between responsiveness of the service representative and the service quality. Although the relationship is not

significant, the present study on Peladang Setiu Agro Resort is still adopting the dimension of responsiveness. Other study by Miguel et al. (1998) applied the dimension of responsiveness to a chain of car repair shops, through the perspectives of managers and customers. Contradict with the study by Lorna (1998), the study by Miguel et al. (1998) shows that responsiveness is the highest score for the managers.

Keeping customers waiting, particularly for no apparent reason will create unnecessary negative perceptions of quality. However, if a services failure occurs but the ability to recover quickly and with professionalism can create very positive perceptions of quality. On the other hands, Carman (2000) indicated that the principal method of handling complaint and customer retention is by quick response. *“If you receive the complaint or query you continue to own it until it is resolve – even if you escalate it or delegate it – which means that you must always follow-up and check on progress and eventually resolution and satisfaction”* (Carman, 2000). When an organization is responsive to customer, the customer will feel that their needs and wants being fulfill. Thus, it will lead to positive customer’s satisfaction on the quality of service that they received. Concentrating on the five identified service quality factors, a study by Festus et al (2004) regarding the responsiveness dimensions appear to be slightly more important than the tangible elements and the recovery dimensions. In summary the frontline service providers in a hotel need to give their customers special attentions (e.g. addressing a customer by their first name when he/she checks in; adopting a “listening to customers” orientation) and handle the hotel guests’ requests promptly.

Assurance

As Marshall et al.(2003) described assurance as the competence and courtesy extended to customers. Assurance is a dimension described by Parasuraman et al. (1988)as the employees’ knowledge, courtesy, and liability to inspire trust and confidence. This dimension is important for service provider. Customer perceives high risk when they feel uncertain about the outcomes. Trust and confidence of the employees embodies the organization that they work for. In the early stage of the relationship, customer may use tangible evidence to assess the assurance dimension. Visible evidence such as degrees, honors and awards or special certifications may give a new customer the confidence in the service provider. Most organizations often experienced difficulty in assessing the capabilities of service personnel. This is particularly apparent to professional services, which does not have the required knowledge in the service given. Given this difficulty in evaluating services, customers focused their assessment of the competence of a service provider upon how efficient or confident in performing the required services.

Empathy

Empathy is defined as a degree of caring and individualize the attention that is provided to the customers (Parasuraman et al, 1988: Marshal et al. 2003). Empathy includes the following features: approachability, sensitivity, an effort to understand the customers’ needs. Due to this situation, Peladang Setiu Agro Resort takes a serious action to the sensitivity of their customers. It is instructed that employees need to show that they are sensitive to their customerswho visit the resort.

Moreover, Carman (2000) pointed out that empathy and trust should be the platform for effective understanding, communication and relationships. Empathy and trust are essential to develop solutions, win and retain business and avoiding conflict. Empathy and trust also are important for handling complaints and retaining customers. Most modern gurus in the areas of communications, management and self-development refer in one way or another to the importance of empathy, which means to really understand the other person’s position and feelings. Being able to ‘step back’, and achieve a detachment from our own emotions, is essential for effective and constructive relations. Gupta et al. (1995) had discovered empathy as the critical variable for the quasi-manufacturing services, implying that caring and individualized attention is affected the customer’s perceived satisfaction.

In contrast, Parasuraman et al (1993) report that empathy dimension is least important across seemingly wide array in service type. In order to continuously retain the customer, Peladang Setiu Agro Resort goes for upgrading their quality of service that point out the sensitivity issue. The sensitivity issues are important since the tourist at Peladang Setiu Agro Resort come from different background and ethnicity. Effective understandings, communication and relationship will make customers feel appreciated. Thus, this will lead to the positive customers' expectations on the service quality that been implemented by the organization.

From the discussion on all of the dimensions, this study comes with a few hypotheses that conceptualized as a gap between the expectation and perception from the service provider and the customer.

Gap 1: Gap between customer's expectations and management's perception

The management may think that they know what their customers want and attempt to deliver the service while in fact the customer may expect something quite different.

Gap2: Gap between management perception and service quality specification

Management may not set quality specifications or may not set them clearly. Alternatively, management may set clear quality specifications but never realized that it may not achievable.

Gap 3: Gap between service specification and service delivery

Unforeseen problems or poor management can lead to the service provider failing to meet service quality specifications. This may be due to human error but also mechanical breakdown of facilitating or support group.

Gap 4: Gap between service delivery and external communications

There may be dissatisfaction with the service due to excessively heightened expectations developed through the service provider's communications efforts. Dissatisfaction occurs where actual delivery does not meet up to expectations held out in company's communications.

Gap 5: Gap between perceived service and expected service

The way in which customers perceived actual service delivery does not match up with their initial expectations.

2.4 Methodology

As for this study, the researchers have decided to use both primary and secondary data. The data collection methods are discussed as below.

2.4.1 Primary Data

According to Zikmund(2003), primary data are the data gathered and assembled specifically for the research project at hand. As for this study, primary data were gathered through questionnaire. The primary data collected have become the main resource for this research.

2.4.2 Secondary Data

Secondary data refers to information gathered by someone than the researcher conducting the current study. Zikmund (2003) also defined that secondary data as the data that have been previously collected for some project other than the one at hand. Secondary data can be used in different situations. Secondary data also is easily assessable, inexpensive, quickly and not need much time to

research for them. For the purpose of this research, secondary data is the written information that gathered from Peladang Setiu Agro Resort.

2.4.3 Sampling Technique

Population

The population of this study consists of the tourists and customers of Peladang Setiu Agro Resort. There are 16,783 tourists who had visited this resort in 2009 as illustrated in Table 1.

Table 1: Tourist Arrivals at Peladang Setiu Agro Resort in 2009

PACKAGE /MONTH	RESORT	TRAINING CENTRE	CAMP SITE	TOTAL (JAN-DEC)
JAN	948	142	0	1,090
FEB	839	84	110	1,033
MAR	2,730	-	-	2,730
APR	1,003	480	60	1,543
MAY	2,253	100	50	2,403
JUN	3,012	154	70	3,236
JUL	3,119	200	-	3,319
AUG	1,113	226	90	1,429
TOTAL				16,783

Source: Tourist Arrivals at Peladang Setiu Agro Resort in 2009, Resident Department.

Sampling Frame

Sampling frame consist of comprehensive list of the elements from which sample is drawn. The sample is based on a convenience sampling and the data was collected through the structured questionnaire. Sample frame refer to the list of tourists which have been selected from the population. Table 2 shows the sampling size for the month of August which has been picked up as the sampling frame.

Table 2: Number of Tourists on August 2009

PACKAGE/MONTH	AUGUST
RESORT	1,113
TRAINING CENTRE	226
CAMPSITE	90
TOTAL	1,429

Sample Size

Krejcie and Morgan (1970) have provided a table in order to simplify the size decision. On the other hand, Roscoe (1975) states that sample size larger than 30 and less than 500 are appropriate for the most research. Based on rule of thumb, the sample size should be taken for this study is 377 respondents based on the Krejcie and Morgan's table. However, out of 377, the researchers were able to choose only 103 respondents which is 27.32 percent of the actual sample size.

2.4.4 Data Analysis

In interpreting the primary data, researchers have used computer software, Statistical Programmes for Social Science (SPSS) version 14. The use of computer software has helped the researchers in reducing time taken to calculate data and facilitate quantitative analysis faster and easier. The detail methods of data interpretation are as follow.

Frequencies

The frequencies procedure provides statistics and graphical displays that are useful for describing many types of variables. In this study, frequencies distributions were used for interpreting demographic data.

Reliability Test

The researchers have conducted reliability test to measure the quality of questions of the five dimensions of service quality. The Cronbach's alpha coefficients helped in identifying the consistency of items in independent variables and dependent variable for this study.

Paired Sample T-Test

In order to measure the gap between perception and expectation of the customer, paired sample t-test has been used. In this analysis, mean scores for the same respondent has been compared. This is to answer first research question and research objective.

3. Findings and Discussions

3.1 Respondent's Demographic

In this analysis, researcher computes the frequency distributions for all of the respondents involved. The results of the demographic profile are shown in the table below.

Table 3: The Frequency Table of Total Respondents' Demographic Profile

No.	Item	Frequency	Percent (%)	Cumulative (%)
1.	Gender			
	Female	43	41.7	41.7
	Male	60	58.3	100.0
2.	Age			
	18-25	51	49.5	49.5
	26-30	16	15.5	65.0
	31-35	7	6.8	71.8
	36-40	14	13.6	85.4
	41-50	12	11.7	97.1

	50 and above	3	2.9	100.0
3.	Marital status			
	Single	59	57.3	57.3
	Married	44	42.7	100.0
4.	Race			
	Malay	93	90.3	90.3
	China	9	8.7	99.0
	India	1	1.0	100
5.	Education level			
	Secondary	33	32.0	32.0
	Vocational institute	12	11.7	43.7
	University	58	56.3	100

Out of the 103 respondents for this study, 41.7 percent were female and the 59.3 percent were male. Most of the respondents aged between 18-25 years, contributed to 49.5 percent. Followed by the 26-30 and 36-40 years old: both of them have contributed 15.5 percent and of 13.6 percent respectively. Then, aged 41-50 years (11.7 percent), 31-35 years old (6.8 percent) and the least were 51 years old and above which is only 2.9 percent. There are about 57.3 percent respondents who are single and 42.7 percent respondents who were married. In term of race, most of the respondents were Malay which contributed 90.3 percent followed by Chinese, 8.7 percent and 1 percent of the respondents were Indian. Lastly, for the education level, the highest respondents were at university level with 56.3 percent followed by secondary and vocational level which indicates 32.0 percent and 11.7 percent respectively.

3.2 Reliability Test

According to Malhotra (1999), reliability is the extent to which a scale produces consistent result if repeated measurements are made on the characteristics. This is done by determining the association between scores obtained from administration of the scale. The coefficient alpha or known as Cronbach's alpha is used to access reliability. This first analysis is used to check the first hypothesis. The strength of the figure stated in table below.

Table 4: Rules of Thumb on Cronbach's Alpha Coefficient Size

Alpha Coefficient Range	Strength of Association
< .6	Poor
.6 to < .7	Moderate
.7 to < .8	Good
.8 to < .9	Very Good
> .9	Excellent

Source: Hair et al. (2003), Essential of Business Research Method

Table 5: The Cronbach's Alpha for Each Construct

Construct	No. of item	Cronbach's Alpha
Overall dimensions (Expectation)	20	0.947
Overall dimensions (Perception)	20	0.894
Service Quality	5	0.760
Service Quality Dimensions (Expectation)		
Tangible	4	0.913
Reliability	4	0.910
Empathy	4	0.898
Assurance	4	0.919
Responsibility	4	0.925
Service Quality Dimensions (Perception)		
Tangible	4	0.587
Reliability	4	0.799
Empathy	4	0.721
Assurance	4	0.766
Responsibility	4	0.729

From Table 5, it shows that most constructs have Cronbach's alpha coefficient value greater than 0.8 for all of the dimensions and it is a very good strength of reliability.

In addition, reliability test for every dimension in expectation and perception shows the coefficient value above 0.7, therefore the scale can be considered reliable with researchers' sample except for perception on service quality in terms of tangible dimension which have less than 0.6 that indicates poor reliability.

3.3 Gap Analysis: Paired Sample t-Test

According to L.Christopher and L.Wright (1999), service gap is the different between what customers expect to receive and their perception of the service that is actually delivered or received by the customer. In this section of analysis the gap is being compute in order to evaluate the service quality. Quality being compute using formula; Quality = Perception – Expectation. (Q=P-E). The paired sample statistics indicated that for all types of services and for all service dimensions, if the Mean Perception is less than the Mean Expectation, indicated that the service providers have not been able to meet the expectation of tourist, vice versa. However, if the Mean Perception minus Mean Expectation equal to zero, indicated that service provided is equal to the tourist's expectation. The results are in the tables below.

Table 6: Dimensions of SERVQUAL

CONSTRUCT/ ELEMENTS	QUESTIONS
Tangibles	<ul style="list-style-type: none"> - modern looking equipment - physical facilities provided - personnel are neat in their appearance - material are visually appealing
Reliability	<ul style="list-style-type: none"> - provide services at promised time - promises to do something by a certain time, they do so - perform the service right the first time when customer has a problem
Responsiveness	<ul style="list-style-type: none"> - should always willing to help - should give prompt service to customers - never too busy to respond to customer's request - brief the customers exactly when service will be performed.
Assurance	<ul style="list-style-type: none"> - customers feel safe in dealing - consistently courtesy with customers - have the knowledge to fulfill customer's inquiries - behavior of personnel inspiring confidence in customers
Empathy	<ul style="list-style-type: none"> - gives the individual attention to customer - gives the convenient operating hours - understand the specific needs of customers - gives personal attention to customer

Table 7: Paired Samples Statistics by Question

Tangibility	Criteria	Mean	Gap
Pair 1	Mean Perception	3.5931	-1.2224
	Mean Expectation	4.8155	
Pair 2	Mean Perception	3.7476	-1.0485
	Mean Expectation	4.7961	
Pair 3	Mean Perception	4.0291	-0.7088
	Mean Expectation	4.7379	
Pair 4	Mean Perception	3.5534	-1.1456
	Mean Expectation	4.6990	
Reliability			
Pair 1	Mean Perception	3.7767	-0.8544
	Mean Expectation	4.6311	
Pair 2	Mean Perception	3.7670	-0.8155
	Mean Expectation	4.5825	
Pair 3	Mean Perception	3.4466	-1.1262
	Mean Expectation	4.5728	
Pair 4	Mean Perception	3.5825	-0.9709
	Mean Expectation	4.5534	
Responsiveness			
Pair 1	Mean Perception	3.7864	-0.7864
	Mean Expectation	4.5728	
Pair 2	Mean Perception	3.6893	-0.8447
	Mean Expectation	4.5340	
Pair 3	Mean Perception	3.3884	-1.1165
	Mean Expectation	4.5049	

Pair 4	Mean Perception	3.4951	-1.1457
	Mean Expectation	4.6408	
Assurance			
Pair 1	Mean Perception	4.0194	-0.6214
	Mean Expectation	4.6408	
Pair 2	Mean Perception	3.9030	-0.6892
	Mean Expectation	4.5922	
Pair 3	Mean Perception	3.6600	-0.9614
	Mean Expectation	4.6214	
Pair 4	Mean Perception	4.5728	0
	Mean Expectation	4.5728	
Empathy			
Pair 1	Mean Perception	3.4369	-1.0194
	Mean Expectation	4.4563	
Pair 2	Mean Perception	3.6990	-0.8156
	Mean Expectation	4.5146	
Pair 3	Mean Perception	3.4854	-1.0777
	Mean Expectation	4.5631	
Pair 4	Mean Perception	3.1456	-1.3593
	Mean Expectation	4.5049	

Table 8: Paired Samples Statistics by Dimension

Dimension	Criteria	Mean
Tangibility	Mean Expectation	4.7621
	Mean Perception	3.7233
Reliability	Mean Expectation	4.5850
	Mean Perception	3.6432
Empathy	Mean Expectation	4.5631
	Mean Perception	3.5898
Assurance	Mean Expectation	4.6068
	Mean Perception	3.7524
Responsiveness	Mean Expectation	4.5097
	Mean Perception	3.4417

Table 9: Paired Sample t-Test

Dimension	Paired Different (mean)	Sig. (2-tailed)
Tangibility	-1.0388	0.000
Reliability	-0.9418	0.000
Responsiveness	-0.9733	0.000
Assurance	-0.8544	0.000
Empathy	-1.0680	0.000

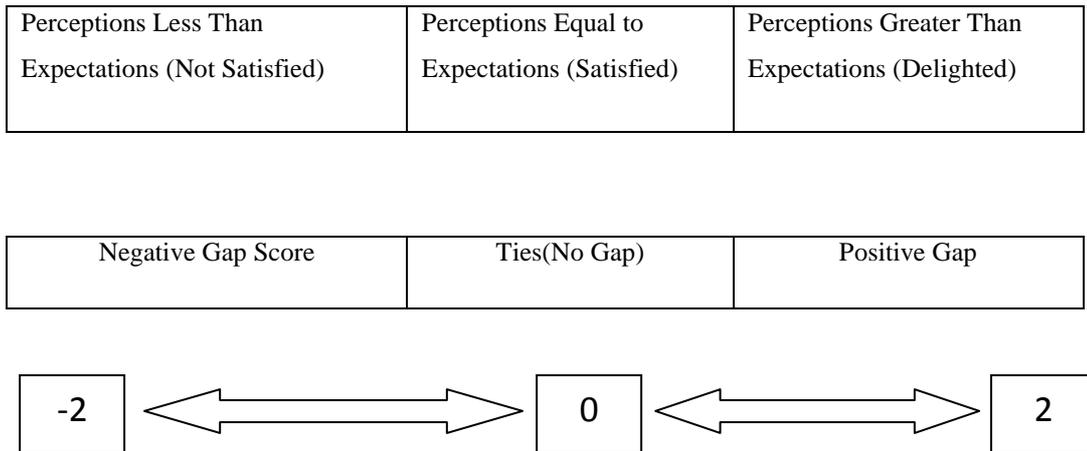


Figure 2: Scale of Gap Score Analysis

Source: Adopted from AzemiChe Hamid et. al. (2005).

Table 7 and table 8 have shown mean scores of dimensions by questions and by dimensions. Both of the tables showed the Mean Perception is less than Mean Expectation. This indicated that the service provider have not been able to meet the expectations of tourist, except under assurance for fourth pair which is about employee’s ability to instill confident to customer, the gap is 0, therefore it meet the customer expectation. For the rest, it can be concluded that there was a decrease in service quality; statistic test scores from expectation to perception and there is gap exist between tourist perception and expectation.

The addition to find the mean perception and expectation, the gap for all dimensions were also calculated. Furthermore, the Paired Sample t-Test was used where the mean different between expectations and perceptions were tested to discover whether the difference in mean was significant or otherwise. Table 8 showed that all the mean differences are significant as shown by the significant value of 0.000, which is less than 0.0500. As can be seen in the table gap score (mean difference) all variables have negative scores where the highest is empathy followed by tangibility, responsiveness, reliability and the lowest score is assurance. Therefore, critical factor that whereby need to be focused by the resort in order to provide high quality service Figure 2 shows how the value of gap can be considered as negative or positive gap.

In conclusion, first objective of this study has been achieved and first and second research questions, has been answered.

4. Discussions and Recommendations

Regarding to these matters, the researchers will offer some recommendations and solution that hopefully help the service provider and relevant authorities to minimize the gaps between expectations of tourists and their actual service experiences.

4.1 Empathy

The highest gap under empathy is gap for pair 4, which is about personalized attention by the employee toward the customer. In order to reduce this gap, employees should establish a good eye contact, maintain alert postures, give a warm smile, and respond promptly, confidently, and efficiently to their customers. By improving the approach use to attain the customer, it will make customer feel more comfortable in dealing with the resort. Then, for third pair which is about specific

need of the customer, employee at the resort should be knowledgeable and able to communicate wisely with the customer for any different situation. After that, the employee should be trained on how to respond to the customer even the employee do not have the answer requested by the particular customer, for this reason the resort should provide more training for the employee especially for those involve directly to the customer. For first pair which is about individualized attention, same approach as mentioned for pair 4 should be used in order to reduce the gap for pair one. Then, for the last pair which is about convenient operating time, the resort should extend working operating hour in order to assist walk-in customers whose come after daily operating hour.

4.2 Tangibility

Tangible aspect is one of the most important parts for service provider. There should be more fascinating modern looking equipment and make sure it is one of comfortable place for tourists while they are having transaction with employees. Besides focusing more on landscape to attract visitors, there are still lacking in modern looking equipment and as suggestion for first pair gap under tangible dimension shows where the management need to provides more modern looking equipment, updating the outdated equipment and so on in order to attract visitor. In addition, the second pair under tangible which about physical facilities also need to be considered. The management of the resort needs to add more facilities in order to make guests comfortable as well as appropriate for them. Therefore, researchers' suggest that they have to provide playground for children since they do not have it and it is convenient to guests. The forth pair also needs management attention since it involve materials associated with the service such as pamphlets or statement, should be appealing at the resort. Thus, the researchers' recommended that all information that they provides in pamphlets have to be amended, which means, it must provide latest and relevant information. Information is crucial for guests because they are able to access information easily and they are able to know what kind of services provided by Peladang Setiu Agro Resort.

4.3 Responsiveness

Responsiveness is the ability of service providers to willingly to help customers and provide prompt service. In order to achieve a high level of responsiveness, some action should be taken. After analyze the data, there are two of question that have a highest gap. The first question is "the employees are never too busy to respond to you" and the second is "Employees were able to tell you exactly when services would be performed". In order to achieve a high level of reliability, some action should be taken. Therefore, the resort should schedule their time management properly. Scheduling is the process of deciding how to commit resources between varieties of possible tasks. Scheduling is the process by which you plan your use of time. By scheduling effectively, employees can reduce stress and maximize their effectiveness. This makes it one of the most important time management skills they can use. Before you can schedule efficiently, you need an effective scheduling system. So, by scheduling their tasks, the employees able to manage their time and will fulfill with the customer need. Any exercise or operation needs proper planning and extra thought to allow the service members to perform at optimum capacity. The resort should provide customers with relevant information regarding all the services available at the resort and the duration it will be performed such as pamphlet or itinerary during their stay in resort. The resort should provide customers with relevant information regarding all the services available at the resort and the duration it will be performed. This will ensure that customers do not have false expectations on the services provided by the resort.

4.4 Reliability

Reliability can be defined as ability of service provider to perform the service promised dependably and accurately Kurtz et. al.(1998). After analyze the data for reliability, the question is "the employees insisting on error-free service" have a highest gap rather than other which is -1.1262. In order to achieve a high level of reliability, some action should be taken. Therefore, the resort should invest in Human capital development. For example; Customer Service Training Programs which is it provide ongoing training that focuses on customer service. Ideally, the method chosen will motivate

employees to learn, help employees prepare themselves for learning, enable the trainees to apply and practice what they've been taught, help trainees retain and transfer what they have learned, and integrate performance with other skills and knowledge. There are many different ways and methods to train. Firstly, On-the-job training, this is the most common method of training. The trainee is placed on the job and the manager or mentor shows the trainee how to do the job. To be successful, the training should be done according to a structured program that uses task lists, job breakdowns, and performance standards as a lesson plan. Secondly, role playing, customer service training should include role play scenarios of all types of customer interactions. During a role play, the trainees assume roles and act out situations connected to the learning concepts. It is good for customer service and sales training. Through this method, trainees can learn possible results of certain behaviors in a classroom situation. They get an opportunity to practice people skills. It is possible to experiment with many different approaches to a situation without alienating any actual customers. Lastly, movies, videos, computer-based training, demonstration is very effective for basic skills training. The trainer shows trainees how to do something. The trainer may provide an opportunity for trainees to perform the task being demonstrated. Content for the training experience comes primarily from a videotape or computer-based program. This method emphasizes the trainee involvement and it is easy to provide this training and the trainer can follow-up with questions and discussion. It is also easy to assure that the same information is presented to each trainee.

McClelland (2002) stated that the training is an activity that changes people's behavior. Increased productivity is often said to be the most important reason for training. But it is only one of the benefits. Training is essential not only to increase productivity but also to motivate and inspire workers by letting them know how important their jobs are and giving them all the information they need to perform those jobs whereby it will help the employees insist on error-free service.

4.5 Assurance

Under assurance, the fourth pair which is about employee's ability to instill confidence to the customer has meets the customer's expectation. Then, for third pair which is about knowledge of the employee in answering customer's question, it score highest gap among the pairs. In order to reduce the gap, the resort can ensure it by organizing a class or course for the employee then followed by test in order to evaluate the employee's level of knowledge and skill. The second highest gap is second pair which is about the courteousness of the employee. To reduce this gap, the resort can organize course about ethic and protocol in dealing with customer despite of provide course the resort also can provide training during the orientation session of the employee. Besides that, to promote courteousness the resort can provide worker of the month's award regarding the courteousness where it will be judged by the customer itself. As a result, it will motivate the employee to be courteous and promote high performance for the employee. The least gap score is pair number one which is about the customer feel safe in dealing with the resort. In order to reduce the gap, the resort should ensure level of responsibility of the employee towards the customer. It can be done by having a measurement instrument such as key performance index (KPI) for the employee. For this implementation, human resource or personnel department should play the role wisely because this kind of measurement can make employee become more responsible toward the job.

5. Conclusions

Due to the limited knowledge and experience this study only concentrated on five dimensions of service quality which are tangible, reliability, empathy, assurance and responsiveness. Therefore for future research, it should focus on the other dimensions available in order to get better result of service gap. In conclusion, Peladang Setiu Agro resort needs to improve their service in order to get better customer satisfaction and thus creating loyal customer. This matter is very important in order to make sure the survival of the business in the future.

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