

# AN EMPIRICAL STUDY OF DIRECT RELATIONSHIP OF SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER TRUST ON CUSTOMER LOYALTY IN MALAYSIAN RURAL TOURISM

**Zahir Osman**

*Faculty of Business Management & Globalization  
Limkokwing University of Creative Technology  
MALAYSIA*

*Corresponding email: zahirpg@gmail.com*

## ABSTRACT

*The purpose of this study is to develop a direct effect understanding of service quality, customer satisfaction and trust on customer loyalty in Malaysia rural tourism. The Structural Equation Model (SEM) used to analyze the casual relationships between independent variables and dependent variable. The model was developed and later tested by adopting the Partial Least Square (PLS) procedure on data collected from a survey that yielded 295 usable questionnaires. The findings showed that service quality, customer satisfaction and trust have significant and positive influence on customer loyalty in Malaysia rural tourism. It is important to do the study utilizing experimental design by capturing longitudinal data in Malaysia rural tourism industry using robust measures. The findings imply that the relationship of service quality, satisfaction and trust on customer loyalty will lead to rural tourism operators' profitability. This research is one of the first known attempts to use PLS to test a direct effect.*

**Keywords:** *rural tourism, service quality, customer satisfaction, customer trust, customer loyalty*

# INTRODUCTION

## Background

Tourism is one of the top and fastest growing sectors and deserves to be given a serious attention. A strong growth catalyst that can generate higher multiplier effect, tourism plays a very important role in the economy and stimulated the growth of other economy. In Malaysia, tourism is the third largest industry in term of foreign exchange earnings after manufacturing and palm oil sector. Tourism sector contributes about 7.9% to the GDP of Malaysia suggesting that the industry which is consider still new but yet offer so much good potential for further and future growth. In 2011, the global tourism and travel sector has generated USD 7 trillion in economic activities and this will offer more than 260 million jobs opportunity (Goeldner & Ritchie, 2003). In 2011, Malaysia had been visited by more than 24.7 million tourists which an increase of 0.4% from 2010 which was about 24.6 million tourists. (Tourism Malaysia Annual Report 2011). As at May, 2012, the number of foreign tourists visiting Malaysia already hit 9,438,592 tourists. By the year 2020, Malaysia expects to attract 36 million tourists contributing a total of RM168 billion in spending compared to the 24.6 million arrivals last year (2011) with revenues of RM58.3 billion. In tourism industry, tourist's is very important to ensure the customer will visit again the tourism attraction after they experience it the first time. The concept of loyalty can be defined that a customer would come back or continuously to utilize the same product or service from the same organization, make business referrals, and directly or even indirectly offering strong word-of-mouth references and publicity (Bowen & Shoemaker, 1998). Customers who are loyal not easily influenced or swayed by price enticement from their competitors, and they often buy more compared to those who are not so loyal customers (Baldinger & Rubinson, 1996). Conversely, service providers must not feel comfortable because not all retained customers are satisfied ones and similarly not all of them can be always retained. The purpose of this paper to show the link of service quality, customer satisfaction and trust on customer loyalty in Malaysia rural tourism market and to test the conceptual research model that connect, service quality, customer satisfaction, trust to customer loyalty.

## **Rural Tourism in Malaysia**

Rural tourism comprises various activities in different countries with different environment and culture. Rural tourism allows tourists to come together with the destinations' nature and culture. It also plays important role in economic and social recovery of rural areas. In Malaysia rural tourism covers all activities that can be carried out in rural environment and draws visitors because of their traditional features and because they are different from their usual lifestyle. Tourists may get involve with nature practicing various activities, such as, sightseeing, fishing, hunting, mountaineering, agri-tourism, cultural tourism, home-stay, health tourism, etc. Those activities happen in a context of respect for the environment and local culture. In Malaysia, rural tourism has impact on the economy. It is an additional activity, besides from the traditional rural labors, rural tourism generates income and creates job and business opportunities for the rural folks. It is a valuable tool for encouraging the development of rural economies in crisis.

## **LITERATURE REVIEW**

### **Service Quality**

Since Parasuraman, Zeithaml, & Berry (1988) initiate the using of SERVQUAL with 22 item scale to measure service quality, the model has been frequently use in across industries. Gowan et al. (2001), Prabhakaran and Satya (2003), Straughan and Cooper (2002) and Zhao et al. (2002) applied the SERVQUAL model as a measurement to gauge the service quality provided by the service provider. However, there are many researchers opposed the use of SERVQUAL to measure service quality due to the industry characteristics differences. Service quality as defined by Ducker (1991) as "what the customer gets out and is willing to pay for" rather than "what the supplier puts in. Therefore service quality frequently has been conceptualized as the difference between the perceived services expected performance and perceived service actual performance (Bloemer et al. 1999; Kara et al. 2005). This view also has been concurred by other researchers with regards to the definition of ser-

vice quality (Grönroos, 2001; Parasuraman et al., 1988). In some earlier studies, service quality has been defined to the extent where the service fulfills the needs or expectation of the customers (Lewis & Mitchell, 1990; Dotchin & Oakland, 1994). Zeithaml et al. (1996) has conceptualized service quality as the overall impression of customers towards the service weakness or supremacy. Service quality frequently relies on SERVQUAL instrument to gauge the service quality provided to the customers. The SERVQUAL scale was developed in the marketing context and this was supported by the Marketing Science Institute (Parasuraman, Zeithaml et al. 1986). Previous research confirms that SERVQUAL instruments is applicable in tourism industry (Yuan et. al, 2005; Sohail et al, 2007). Parasuraman et. al (1988) stated the five dimensions of service quality are reliability, responsiveness, tangible, assurance and empathy. These dimensions have specific service characteristic link to the expectation of customers

## **Customer Satisfaction**

Customer satisfaction is one the most areas being researched in many tourism studies due to its importance in determining the success and the continued existence of the tourism business (Gursoy, Mc Cleary and Lepisto, 2007). Customer satisfaction conceptually has been defined as feeling of the post utilization that the consumers experience from their purchase (Westbrook and Oliver, 1991; Um et al., 2006). Opposite to cognitive focus of perceptions, customer satisfaction is deemed as affective response to a products or services (Yuan and Jang, 2008). In tourism studies, customer satisfaction is the visitor's state of emotion after they experiencing their tour (Baker and Crompton, 2000; Sanchez et al., 2006). Destination holiday's customer satisfaction is the extent of overall enjoyment that the tourists feel, the result that the tour experience able to fulfill the tourists' desires, expectation, needs and wants from the tour (Chen and Tsai, 2007). Kotler, (2008) describes customer satisfaction is the feeling of happiness or unhappiness as a result of comparing the perceived performance of services or products with the expected performance. If the perceived performance does not meet the expected performance, then the customer will feel disappointed or dissatisfied. Homburg et al. (2008) suggested that customer satisfaction has been

a crucial issue in marketing field in the past decades since satisfied customers are able to offer to the company such as customer loyalty and continuous profitability.

## **Trust**

In the current study, trust has been defined as a tourists' willingness to rely on tourist attraction operator's ability to deliver what has been promised and meet or exceed the expectation of the tourists which has been built around of the knowledge about the tourist attraction. A trusted tourist attraction has a strong advantage over the other tourist attraction which is an alternative in the tourist's decision making process. In tourism studies, Loureiro and Gonzalez (2008) showed empirical evidence that tourists' trust has a strong influence on their loyalty toward rural lodging.

According to Lau & Lee, (1999) if one party has trust in another party, it will produce positive behavioral intentions towards the other party. Trust has influence on credibility and credibility will eventually has impact on the customer's long-term orientation by decreasing the risk perception linked to the opportunistic behavior of the business (Erdem et al., 2002; Ganesan, 1994). To be specific, trust minimizes customer's uncertainty feelings where customer feels at risk because they know that they can rely on the service provider (Chaudhuri and Holbrook, 2001). San Martin Gutierrez (2000) describes trust the emotional security that made one party to think that another party is responsible and concern about it. This gives the understanding that the former is ready to be at risk to the actions of the second party regardless its ability to control the later.

## **Customer Loyalty**

The concept of customer loyalty has been researched for the past decades in business industries. Loyalty is a commitment of current customer in respect to a particular store, brand and service provider, when there are other alternatives that the current customer can choose for (Shankar, Smith & Rangaswamy, 2003). It forms positive attitudes by producing repetitive purchasing behavior from time to time. There is a strong connection customer loyalty and firm's profit.

Zeithaml, (2000), states that previous researches look at customer loyalty as being either attitudinal or behavioral. The behavioral perspective the customer is loyal as long as they continue to purchase and use the goods or services (Woodside et al., 1989; Parasuraman et al., 1988; Zeithaml et al., 1996). Reicheld (2003) suggested that the most superior evidence of the customer loyalty is the proportion amount in percentage of current customers who are having lots of enthusiasm to recommend a specific good or service to their friends. Whereas the attitudinal perspective, the current customers have a feeling of belonging to a specific product or service or commitment of the current customers towards a specific good or service. Baumann, Burton & Elliot, (2005) found that Day (1969) had introduced the concept of customer loyalty covering both behavioral and attitudinal dimensions forty years ago.

## **RESEARCH MODEL AND HYPOTHESES**

### **Research Model**

Tourist attraction operators are keen to know how customer satisfaction can lead to customer trust and eventually create customer loyalty for the tourists. The research applies the research model by a few authors mostly Parasuraman et. al (1985), Bitner & Zeithaml (2003) and Morgan & Hunt (1994). The conceptual model of this study is illustrated in Figure 1.

### **Hypothesis**

#### **Relationship between Service Quality and Customer Loyalty**

Many researchers in various studies have studied the relationship between service quality and customer loyalty. Rousan, Ramzi & Mohamed, (2010) in their study on 322 hotel guests of hotel industry in Jordon, they found that empathy, reliability, responsiveness, tangible and assurance significantly predict customer loyalty. The similar result also found in Chen & Lee (2008) study when the revealed that service quality has strong and significant relationship with cus-

customer loyalty in their International Logistic provider industry. Liang (2008) study on 308 hotel guests of hotel industry in United States revealed that service quality has a positive influence and significant relationship with customer loyalty. Clotey, Collier & Collier, (2008) in their study of 972 retail customers of United States retail industry have found the strong statistical evidence that service quality has a great influence where it positively and significantly correlated with customer loyalty. Jamal & Anatassiadou (2007) besides studying the relationship between service quality and customer satisfaction in banking industry in Greece, they also study the relationship between service quality and customer loyalty and they found their study that service quality has a strong impact and positively and significantly related to customer loyalty in banking industry in Greece. Rizan (2010) has conducted a study on 160 airline passengers of airline industry in Indonesia and has found that service quality has a strong impact and positively and significantly related to service quality. Kheng, Mahamad, Ramayah & Mosahab, (2010) in their study on 238 bank customers in Malaysia have found that among the five dimensions used in service quality, tangible has no significant impact on loyalty. Reliability is found to have positive relationship with customer loyalty. Relationship between responsiveness and customer loyalty is insignificant. Empathy has significant positive relationship with customer loyalty. There is significant relationship between assurance and customer loyalty.. In view of that we hypothesize:

***H1:** There is a positive relationship between service quality and customer loyalty*

## **Relationship between Customer Satisfaction and Customer Loyalty**

The survival and sustainability of any business organization is largely depends on the customer satisfaction and customer loyalty. Faullant, Matzler, & Ller (2008) in their study on 6172 ski resort customers in Australia have found that customer satisfaction is positively and significantly correlated to customer loyalty. Pantouvakis & Lympelopoulos (2008) have done the study on 388 ferry passengers in Greece and revealed that customer satisfaction has great im-

impact on customer loyalty and positively and significantly correlated with customer loyalty. Akhbar & Parvez (2009) in their study on 302 Telecommunication customers in Bangladesh have found that customer satisfaction is significantly and positively related to customer loyalty. Hume & Mort (2010) conducted a study on 250 performing arts members and audience and have found that customer satisfaction very much has impact on customer loyalty and positively and significantly related. Chen & Lee (2008) in their study on 261 non Vessel Owners and shippers in Taiwan's International Logistic Provider industry has revealed that customer satisfaction is very critical to customer loyalty and both are positively and significant correlated. Rizan (2010) studied on customer satisfaction and customer loyalty relationship on 160 passengers in airline industry in Indonesia and have found that customer satisfaction has a great impact on customer loyalty and positively and significantly influence customer loyalty. The same result found by Liang (2008) in her study on 308 Hotel guests in United States where she found that customer satisfaction is the determining factor and positively and significant correlated to customer loyalty. Therefore, we hypothesize:

**H2:** *There is a positive relationship between customer satisfaction and customer loyalty*

## **Relationship between Trust and Customer Loyalty**

There are quite a number of researches have been done and found the importance of trust as an antecedent to customer loyalty. Akhbar & Parvez (2009) in their study on 302 Telecommunication customers in Bangladesh telecommunication industry have revealed that trust has a strong impact and significantly and positively correlated with customer loyalty. Liang (2008) has done a research on 308 Hotel guests in hotel industry in United States has revealed the importance of trust in determining customer loyalty in hotel industry. She found there is a strong impact of trust on customer loyalty where trust is significantly and positively correlated. Luarn & Lin (2003) has revealed the importance of trust as an antecedent to customer loyalty in their study on 180 Tourists in Taiwan tourism industry. They found that trust has a stronger relationship after commitment and customer satisfaction. The relationship is also positively and



significantly correlated. Horppu et. al (2008) in their study on 867 Website magazine consumer in Finland have found that trust on the web site level are determinant of web site loyalty where the relationship is positively and significantly correlated. Kassim & Abdullah (2010) in their study on 357 E-services customer in Malaysia and Qatar e-commerce industry have revealed that trust has a strong influence on customer loyalty where it is positively and significantly correlated. Ribbink Riel, Veronica Liljander and Streukens, (2004) in their study on 350 Online customers in Europe e-commerce industry have also found the importance and strong impact of trust on customer loyalty. The relationship also shows the positive and significant relationship of both. Therefore, we hypothesize:

*H3: There is a positive relationship between trust and customer loyalty*

## **METHODOLOGY**

### **Survey Instrument**

A total of 46 observed variables constitute the measurement of exogenous independent variable of service quality dimensions of responsiveness (8 items), tangible (7 items), empathy (6 items), assurance (5 items) and reliability (5 items) adapted and altered from Parasuraman et al. (1985), customer satisfaction (5 items) and trust (5 items). The endogenous variable of customer loyalty consists of 5 items. The scaling applied in this study is the 5-point Likert scale of 1-strongly agree, 2-agree, 3-neutral, 4-disagree and 5-strongly disagree. The demographics variables questioned are gender, age, status, place of origin, race, occupation, annual income, and education background of the respondents.

### **Sample**

Local and foreign tourists who have visited the rural tourism spot in Malaysia at least once were the main respondents. A total of 410 rural tourism spot tourists were requested to complete a questionnaire that contained measures of the construct. The questionnaires

were distributed to the respondents in Klang Valley through email and on the spot by using convenient sampling technique. Out of the 410 distributed questionnaires, 329 were returned. This made up the response rate of 80.24%. In view of that, the rate of response is sufficient for SEM analysis. The Mahalanobis distance was determined based on a total of 31 observed variables. The criterion of  $p < 0.01$  and critical value of  $\chi^2 = 86.40$  is applied. The test conducted identified 34 cases with Mahalanobis value (D2) above 86.40. The Mahalanobis analysis successfully in identifying the multivariate outliers which were deleted permanently, leaving 295 datasets to be used for further analysis

## **Data Analysis**

Partial Least Squares (PLS) (Chin, 1998a, b, 2001) was adopted to assess the models. PLS is a second generation structural equation modeling (SEM) technique developed by Wold (1982). It works fine with structural equation models that have latent variables and a series of cause-and-effect relationships (Gustafsson and Johnson, 2004). PLS has three main advantages over other SEM techniques that make it suitable to this study. First, in PLS, constructs may be gauged by only one item whereas in covariance-based techniques, minimum of four questions per construct are required. Second, in many marketing studies, data tend to be distributed non-normally (it is noted that mostly ten-item scales were employed to reduce a negative impact of non-normality), and PLS does not need any normality assumptions and handles non-normal distributions relatively well.

The partial least square (PLS) technique was utilized to study the results in order to evaluate the influence of all constructs in the framework at the same time, inclusive the second order construct (service quality). Gudergan et al. (2008) depict PLS as being a sustainable technique to evaluate cause and effect relationships in intricate business research. Hwang et al. (2007) describe that the PLS technique is specifically applicable in the context where there is insufficiently robust and well structured theories. The PLS approach is capable to assist in obtaining values for latent variables for predictive reasons. PLS never attempt to use the model to explain the co-

variance of all indicators, but it reduces the variance of all dependent variables, based on the obtained estimated parameters which are based on the ability to reduce the dependent variables residual variance (Chin, 1988). Lastly, the software utilized was the SmartPLS 2.0 (Ringle et al., 2005).

## **RESULTS**

### **Model Measurement**

Partial least squares (PLS), SmartPLS to be précised, were adopted to evaluate the measurement sufficiency models and the inner model predictive relevance, and thus test the three hypotheses. PLS emphasizes on the variance explanation using ordinal least squares, a technique appropriate for relationship such as mentioned in this study (Gudergan et al., 2008). The sufficiency and reflective outer-measurement models significance for the other constructs were evaluated through a range of indices test comprising of individual indicator weights and loadings, composite reliability, average variance explained (AVE), bootstrap t-statistic (critical ratio), discriminant validity and convergent validity. In addition to that, the significance of reflective outer-measurement model was evaluated by calculating bootstrapped critical ratio of t-values. The sampling with replacement bootstrapping technique was utilized to gauge the reflective outer-measurement models accuracy. For this study purpose, bootstrap t-values were calculated on the basis of 500 bootstrapping runs, with sub-samples set at 70 per cent of the number of cases in each data set. As revealed in Table I, the reflective outer-measurement models established acceptable bootstrap critical ratios complying with the recommended benchmarks of 1.96.

### **Convergent validity**

The adequacy of outer-measurement models convergent validity was evaluated by computing composite reliability (Hulland, 1999). The analysis for convergent validity results confirmed that the outer-measurement models and their first-order factors in line with Nunnally's (1978) reliability criteria, 0.70. As shown in Table 1, the

composite reliabilities of all constructs composite reliabilities and their first-order factors range from 0.85 to 0.91. Hence, the constructs connected with outer-measurement models revealed satisfactory convergent validity.

### **Discriminant validity**

The constructs discriminant validity was assessed in three ways. Fornell and Larcker (1981) propose the utilization of AVE, which signifies that discriminant validity is existed if the square root of the AVE is larger than all corresponding correlations. As revealed in Table 5, the square roots of the AVE values are steadily larger than the off-diagonal correlations, suggesting discriminant validity at the construct level. An examination of Table 3 shows that no single correlations (ranged from 0.665 to 0.785) were higher than their respective AVE (ranged from 0.82 to 0.97), thus indicating satisfactory discriminant validity of all constructs. Finally, all constructs demonstrate discriminant validity if every correlation is less than 1 by an amount greater than twice its respective standard error (Bagozzi and Warshaw, 1990). An examination of the standard error in PLS bootstrap outputs reveals that all constructs pass this third test. Thus, sufficient discriminant validity is exhibited for all constructs. The results shown in Tables 1 and 3 signify the outer model sufficient psychometric properties to move to the structural model assessment to test the hypotheses.

### **Hypothesis testing and results**

Loadings which shown in table 1 were acceptable. The hypotheses adequacy evaluation as represented in the model was carried out via  $R^2$ ,  $Q^2$ , regression weights, bootstrap critical ratios (t-values) and path variance (Table 4). In  $H_1$ , bank service quality is predicted to have positive impact on customer loyalty. Results in Table 4 concurred this hypothesis with path coefficient of 0.278 and t-value of 2.208. Meanwhile, in  $H_2$ , customer satisfaction is predicted to have positive influence on customer loyalty. From Table 4, the results give evidence to support  $H_2$  with the path coefficient of 0.260 and the t-value of 1.977. In  $H_3$ , it is predicted that customer trust has a

positive impact on customer loyalty. The results in Table 4 supported H3 with the path coefficient of 0.325 and the t-value of 2.827.

The paths were analyzed in order to assess the effect size ( $f^2$ ) to differentiate the path that contributes in explaining the dependent variable to which they are attached. Chin (1998b) explains that the  $R^2$  for each latent variable (LV) can be a opening point when evaluating PLS for the structured model, since explanation of the PLS is similar to that of a traditional regression. The author also suggests that the change in the  $R^2$  can be investigated to see whether the impact of a specific independent LV on a dependent LV is extensive. Following Chin's (1998b) recommendation, effect size can be calculated as:

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

where  $R^2$  included and  $R^2$  excluded are the  $R^2$  provided on the dependent LV, when the predictor LV is used or omitted from the structural equation, respectively. The  $f^2$  of 0.02, 0.15 and 0.35 can be translated as a predictor LV having a small, medium, or large effect at the structural level. The  $f^2$  of service quality to customer loyalty, customer satisfaction to customer loyalty and customer trust to customer loyalty are 0.03, 0.03 and 1.25 respectively (Table 4).

The Q-square ( $Q^2$ ) for the structural model which imply the predictive relevance of the model is acceptable which is 0.734 (Table 4). Q-square for the structural model is to gauge how fit the observations produced by the model and to assess its parameters. If the value of  $Q^2 > 0$ , it signifies that the model has predictive relevance; on the other hand, if the value of  $Q^2 < 0$ , it signifies that the model is having predictive relevance deficiency. The  $Q^2$  of service quality to customer loyalty, customer satisfaction to customer loyalty and customer trust to customer loyalty are 0.74, 0.75 and 0.73 (Table 4). Therefore it can be concluded that the model can be used appropriately. The predictive measure for the block becomes:

$$Q^2 = 1 - (\sum_D SSE_D) / (\sum_D SSO_D)$$

On the whole, the generated results, as exhibited in Table 6, showed that all the three hypotheses are well supported. This signifies that

the positive impact of bank service quality, customer satisfaction and customer trust on customer loyalty.

The measure of the goodness-of-fit index (GoF) was also computed as suggested by Amato et al. (2004) to evaluate the fit of the outer-measurement and inner-structural models at the same time to the data. The GoF operates as a global fit index for the PLS model verification. The GoF is calculated by obtaining the square root of the product of the average communality of all constructs and the average  $R^2$  value of the endogenous constructs as:

$$\text{GOF} = \sqrt{\text{Communality} \times \overline{R^2}}$$

Based on the classification of  $R^2$  effect sizes by Cohen (1988) and using the cut-off value of 0.5 for commonality (Fornell and Larcker, 1981), GoF criteria for small, medium, and large effect sizes are 0.1, 0.25 and 0.36 respectively (Schepers et al., 2005). The calculated GoF for model was 0.35 signifying that good fit to the data.

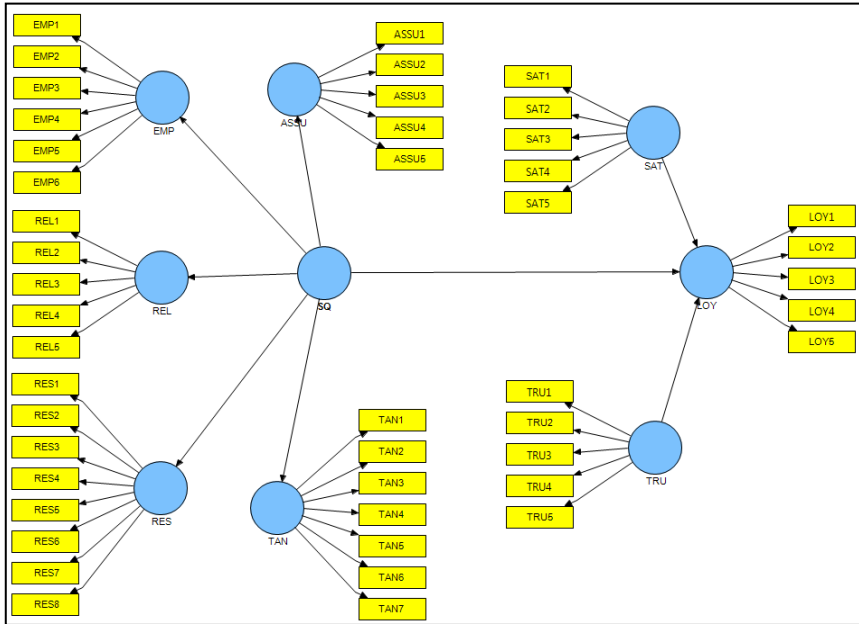
## **DISCUSSION & CONCLUSION**

The main purpose of this research is to establish an understanding of the direct effect of service quality on customer loyalty, customer satisfaction on customer loyalty and customer trust on customer loyalty relationship in Malaysia rural tourism industry. This research is to develop probable causal relationship among the variables which are service quality, customer satisfaction, customer trust and customer loyalty. Based on this, a review from the previous study in the area of service quality, customer satisfaction, customer trust and customer loyalty was performed. From the initial findings of academic studies, the model was constructed and it's found that service quality, customer satisfaction and customer trust have a positive and significant direct effect on customer loyalty. Theoretically, it is not easy to justify the superiority of any model, so empirical testing was performed. This study proposed model to empirically test and to confirm that are positive direct relationship among service quality, customer satisfaction, customer trust on customer loyalty. In order to achieve this objective, the PLS technique data analysis was adopted.

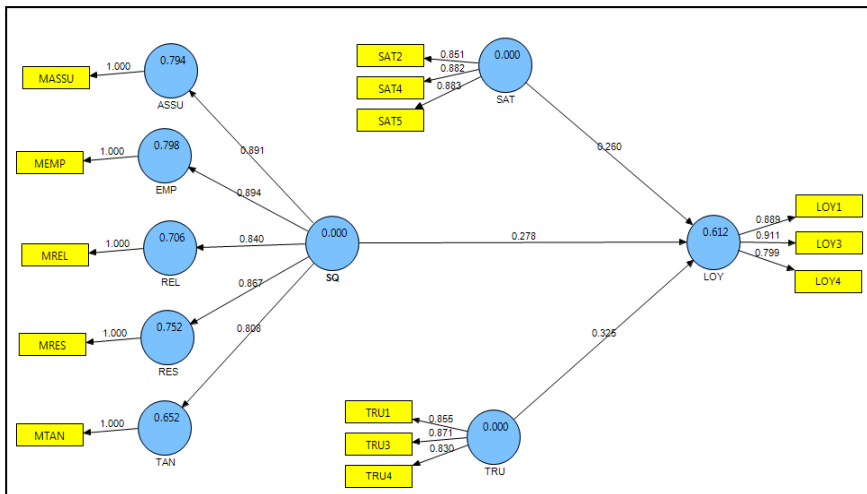
Firstly the most accepted relationship between service quality and customer loyalty is authenticated. The path coefficient of direct relationship between the service quality and customer loyalty is 0.278 and the critical ratio t-value is 2.208 which is significant. Secondly, the most accepted theory that link customer satisfaction and customer loyalty also well supported with the path coefficient of direct relationship between customer satisfaction and customer loyalty is 0.260 and the critical ratio t-value is 1.977 which is significant. Lastly, relationship between customer trust and customer loyalty is authenticated. The path coefficient of direct relationship between the customer trust and customer loyalty is 0.325 and the critical ratio t-value is 2.827 which is significant. In view of that, it is concluded that service quality, customer satisfaction and customer trust have positive influence and impact on customer loyalty in Malaysia rural tourism industry.

The research findings suggest that customer loyalty among rural tourism tourists can be improved and enhanced by focusing on factors that can enhance service quality, customer satisfaction and customer trust. On the other hand, rural tourism tourists' loyalty can be strengthened and enhanced by raising the level of service quality, satisfaction and trust among rural tourism tourists. Eventually, customer loyalty among rural tourism tourists should play an important element to raise rural tourism operators' profit. This research highlights the belief that customer loyalty plays a crucial role in Malaysia rural tourism industry. It puts forward one probable the elusive link causal explanation between customer loyalty and profitability of the business.

**Figure 1: Theoretical Framework**



**Figure 2: Model Path Coefficient**





**Table 1: Outer Measurement Model**

<b>Content Performance</b>	<b>AVE</b>	<b>Reliability</b>	<b>Loading</b>	<b>t-value</b>
<b>Assurance</b>	<b>0.663</b>	<b>0.907</b>		
You feel Safe & Secure at the attraction			0.87	29.44
There is sufficient places to sit and relax			0.79	17.03
Attraction is easily accessible for everyone (roads, transport & signage)			0.70	9.89
You feel Safe & Secure at the attraction			0.88	36.75
Employees' behavior instill confidence in us			0.79	16.89
<b>Empathy</b>	<b>0.601</b>	<b>0.900</b>		
Personal attention is provided to visitors when needed			0.77	14.44
The facilities and equipment offered are at convenient location			0.81	17.05
There is a good viewing and comfortable facilities available			0.80	19.63
The site considers needs for elderly visitors			0.75	14.22
Staff concern with the customer's needs			0.79	15.60
The site considers needs for disable visitors			0.70	9.96
<b>Reliability</b>	<b>0.550</b>	<b>0.859</b>		
The front-desk employee accurately verified the reservation requests			0.72	11.67
The time it took to check in or check out is not too long			0.72	10.58
The reservation system (e.g., telephone or internet reservation) is easy to use			0.80	20.08
Transport facilities are available			0.74	12.22
The employees provide error-free records			0.71	11.42
<b>Responsiveness</b>	<b>0.655</b>	<b>0.919</b>		
Staff are always helpful and courteous			0.84	23.62
Staff are quick to react to customers' requests			0.79	16.80
Staff are willing to take time with visitors			0.81	17.93
Staff are well informed to answer customers' requests			0.82	19.22

Visitors are made to feel welcome	0.83	23.17
Visitors are free to explore, there is no restriction	0.73	12.26
<b>Tangible</b>	<b>0.514</b>	<b>0.880</b>
The site is well kept and restored	0.75	13.83
The attraction environment is attractive	0.64	8.73
Direction signs to show around the attraction are clear and helpful	0.69	9.75
The attraction is uncrowded and unspoiled	0.67	8.53
Staff are presentable and easily identified	0.69	10.65
The physical facilities offered are well maintained and good condition	0.79	18.87
The attraction is clean	0.76	17.71
<b>Satisfaction</b>	<b>0.760</b>	<b>0.905</b>
I satisfied with the time I spent there	0.85	20.82
I talk about this rural tourism spot positively with my friends and family	0.87	25.25
Overall I satisfied with the service provided by this rural tourism spot	0.88	31.01
<b>Trust</b>	<b>0.627</b>	<b>0.888</b>
This rural tourism spot puts the customer's interests first	0.85	29.55
This rural tourism spot can be relied upon to keep its promises	0.87	28.55
I believe that this rural tourism spot will not try to cheat me.	0.82	20.42
<b>Loyalty</b>	<b>0.753</b>	<b>0.901</b>
I would recommend this rural tourism spot to other people	0.88	31.33
I would encourage friends and relatives to visit this rural tourism spot	0.91	43.69
I would consider this rural tourism spot as my first choice when I need hotel service	0.79	16.96

**Table 2: Construct Reliability & Validity**

	AVE	Square Root AVE	Composite Reliability	R Square	Cronbach Alpha	Communality
<b>LOY</b>	0.753	0.945	0.901	0.6005	0.834	0.753
<b>SAT</b>	0.760	0.947	0.905	0	0.842	0.760
<b>SQ</b>	0.740	0.942	0.934	0	0.912	0.740
<b>TRU</b>	0.813	0.960	0.897	0	0.771	0.813

**Table 3: Variable Correlation Matrix based on AVE Square Root.**

	LOY	SAT	SQ	TRU
<b>LOY</b>	0.945			
<b>SAT</b>	0.700	0.947		
<b>SQ</b>	0.720	0.785	0.942	
<b>TRU</b>	0.679	0.665	0.724	0.960

**Table 4: Path Coefficient, t-value,  $f^2$  and  $Q^2$**

Path	Beta	t-value	$f^2$	$Q^2$
<b>SQ =&gt; LOY</b>	0.278	2.208	0.030	0.740
<b>SAT =&gt; LOY</b>	0.260	1.977	0.030	0.754
<b>TRU =&gt; LOY</b>	0.325	2.827	1.253	0.726

t-values are significant at  $p < 0.000$

**Table 5: Hypotheses Result**

Hypothesizes	Relationship	Path Coefficient	p-value	Conclusion
<b>H1</b>	There is a positive relationship between service quality and customer loyalty	0.278	0.00*	Supported
<b>H2</b>	There is a positive relationship between customer satisfaction and customer loyalty	0.260	0.00*	Supported
<b>H3</b>	There is a positive relationship between customer trust and customer loyalty	0.325	0.00*	Supported

\* Significant at  $p < 0.000$

## REFERENCES

- Akbar, M. M., & Parvez, N. (2009). Impact of service quality, trust, and customer satisfaction on customers loyalty. *ABAC Journal*, 29(1), 24-38.
- Al-Rousan, M. Ramzi, & Mohamed, B. (2010). Customer loyalty and the impacts of service quality: The case of five star hotels in Jordan. *International Journal of Business, Economics, Finance and Management Sciences*, 2(3), 202-208.
- Bagozzi, R. P., & Warshaw, P. R. (1990). Trying to consume. *Journal of consumer research*, 17, 127-140.
- Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, 27(3), 785-804.
- Baldinger, A. L., & Rubinson, J. (1996). Brand loyalty: the link between attitude and behavior. *Journal of Advertising Research*, 36, 22-36.
- Baumann, C., Burton, S., & Elliott, G. (2005). Determinants of customer loyalty and share of wallet in retail banking. *Journal of Financial Services Marketing*, 9(3), 231-248.
- Bloemer, J., De Ruyter, K., & Wetzels, M. (1999). Linking perceived service quality and service loyalty: a multi-dimensional perspective. *European Journal of Marketing*, 33(11/12), 1082-1106.
- Bowen, J. T., & Shoemaker, S. (1998). Loyalty: A strategic commitment. *Cornell Hotel and Restaurant Administration Quarterly*, 39(1), 12-25.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *The Journal of Marketing*, 65, 81-93.

- Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism management*, 28(4), 1115-1122.
- Chen, C.-H., & Lee, H.-Y. (2008). Empirical analysis of the customer loyalty problem in the international logistics market. *WSEAS Transactions on business and economics*, 5(4), 107-117.
- Chin, W. W. (1998). The partial least squares approach for structural equation modeling In G. A. E. Marcoulides (Ed.), *Modern methods for business research, Methodology for business and management* (pp. 295-336). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Chin, W. W. (2001). PLS-Graph user's guide version 3.0, from <http://carma.wayne.edu/documents/oct1405/plsgraph3.0manual.hubona.pdf>
- Clottey, T. A., Collier, D. A., & Stodnick, M. (2011). Drivers of customer loyalty in a retail store environment. *Journal of Service Science (JSS)*, 1(1), 35-48.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. New York, NY: Lawrence Erlbaum Associates.
- Day, G. (1969). A two-dimensional concept of brand loyalty. *Journal of Advertising Research*, 9(3), 29-35.
- Dotchin, J. A., & Oakland, J. S. (1994). Total quality management in services: Part 2: Service quality. *International Journal of Quality & Reliability Management*, 11(3), 27-42.
- Erdem, T., Swait, J., & Louviere, J. (2002). The impact of brand credibility on consumer price sensitivity. *International Journal of Research in Marketing*, 19(1), 1-19.
- Faullant, R., Matzler, K., & Füller, J. (2008). The impact of satisfaction and image on loyalty: the case of Alpine ski resorts. *Managing Service Quality*, 18(2), 163-178.

- Fornell, C., & Bookstein, F. L. (1982) *A comparative analysis of two structural equation models: LISREL and PLS applied to market data* (pp. 289-384). in Fornell, C. (Ed.): *A Second Generation of Multivariate Analysis*, Praeger, New York, NY.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *The Journal of Marketing*, 58, 1-19.
- Goeldner, C. R., & Ritchie, J. R. B. (2003). *Tourism principles, practices, philosophies*
- Gowan, M., Seymour, J., Ibarreche, S., & Lackey, C. (2001). Service quality in a public agency: same expectations but different perceptions by employees, managers, and customers. *Journal of Quality Management*, 6(2), 275-291.
- Grönroos, C. (2001). The perceived service quality concept—a mistake? *Managing Service Quality*, 11(3), 150-152.
- Gudergan, S. P., Ringle, C. M., Wende, S., & Will, A. (2008). Confirmatory tetrad analysis in PLS path modeling. *Journal of Business Research*, 61(12), 1238-1249.
- Gursoy, D., McCleary, K. W., & Lepsito, L. R. (2007). Propensity to complain: effects of personality and behavioral factors. *Journal of Hospitality & Tourism Research*, 31(3), 358-386.
- Gustafsson, A., & Johnson, M. D. (2004). Determining attribute importance in a service satisfaction model. *Journal of Service Research*, 7(2), 124-141.
- Homburg, C., Jensen, O., & Krohmer, H. (2008). Configurations of marketing and sales: a taxonomy. *Journal of Marketing*, 72(2), 133-154.
- Horppu, M., Kuivalainen, O., Tarkiainen, A., & Ellonen, H.-K. (2008). Online satisfaction, trust and loyalty, and the impact of the offline parent brand. *Journal of Product & Brand Management*, 17(6), 403-413.

- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic management journal*, 20(2), 195-204.
- Hume, M., & Mort, G. S. (2010). The consequence of appraisal emotion, service quality, perceived value and customer satisfaction on repurchase intent in the performing arts. *Journal of Services Marketing*, 24(2), 170-182.
- Hwang, H., Malhotra, N. K., Kim, Y., Tomiuk, M. A., & Hong, S. (2010). A comparative study on parameter recovery of three approaches to structural equation modeling. *Journal of Marketing research*, 47(4), 699-712.
- Jamal, A., & Anastasiadou, K. (2009). Investigating the effects of service quality dimensions and expertise on loyalty. *European Journal of Marketing*, 43(3/4), 398-420.
- Kara, A., Lonial, S., Tarim, M., & Zaim, S. (2005). A paradox of service quality in Turkey: The seemingly contradictory relative importance of tangible and intangible determinants of service quality. *European Business Review*, 17(1), 5-20.
- Kassim, N., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: a cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics*, 22(3), 351-371.
- Kheng, L. L., Mahamad, O., Ramayah, T., & Mosahab, R. (2010). The impact of service quality on customer loyalty: A study of banks in Penang, Malaysia. *International Journal of Marketing Studies*, 2(2), 57-66.
- Kotler, P. (2008). *Marketing Management*. (13th edition ed.). Upper Saddle River, NJ.: Prentice-Hall.
- Lau, G. T., & Lee, S. H. (1999). Consumers' trust in a brand and the link to brand loyalty. *Journal of Market-Focused Management*, 4(4), 341-370.

- Lewis, B. R., & Mitchell, V. W. (1990). Defining and measuring the quality of customer service. *Marketing Intelligence & Planning*, 8(6), 11-17.
- Liang, D. (2008). The determining factors of customer loyalty for luxury hotels in US. *The Journal of International Management Studies*, 3, 167-175.
- Loureiro, S. M. C., & González, F. J. M. (2008). The importance of quality, satisfaction, trust, and image in relation to rural tourist loyalty. *Journal of Travel & Tourism Marketing*, 25(2), 117-136.
- Luarn, P., & Lin, H.-H. (2003). A Customer Loyalty Model for E-Service Context. *Journal of Electronic Commerce Research*, 4(4), 156-167.
- Morgan, R. M., & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58, 20-38.
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill
- Pantouvakis, A., & Lympelopoulos, K. (2008). Customer satisfaction and loyalty in the eyes of new and repeat customers: Evidence from the transport sector. *Managing Service Quality*, 18(6), 623-643.
- Parasuraman, A., Zeithaml, V., & Berry, L. (1986). Servqual: a multiple-item scale for measuring customer perceptions of service quality. *Working paper/Marketing Science Institute*(86-108).
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer



- perceptions of service quality. *Journal of retailing*, 64(1), 12-40.
- Prabhakaran, S., & Satya, S. (2003). An insight into service attributes in banking sector. *Journal of Services Research*, 3(1), 157-169.
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard business review*, 81(12), 46-55.
- Ribbink, D., Van Riel, A. C., Liljander, V., & Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the internet. *Managing Service Quality*, 14(6), 446-456.
- Ringle, C., Wende, S., & Will, A. (2005). *SmartPLS–Version 2.0*. University of Hamburg, Hamburg.
- Rizan, M. (2010). *Analysis of service quality and customer satisfaction and its influence on customer loyalty*. Paper presented at the Oxford Business & Economics Conference.
- San Martín Gutiérrez, S. (2000). La relacion confianza-compromiso. Propuesta de un modelo explicativo. *Unpublished thesis*, University of Burgos.
- Sanchez, J., Callarisa, L., Rodriguez, R. M., & Moliner, M. A. (2006). Perceived value of the purchase of a tourism product. *Tourism management*, 27(3), 394-409.
- Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2), 153-175.
- Sohail, M., Roy, M., Saeed, M., & Ahmed, Z. (2007). Determinants of service quality in the hospitality industry: The case of Malaysian hotels. *Journal of Accounting, Business & Management*, 14, 64-74.

- Straughan, R. D., & Cooper, M. J. (2001). Managing internal markets: a conceptual framework adapted from SERVQUAL. *The marketing review*, 2(3), 253-265.
- Tourism Malaysia. (2011). *Annual report*. Retrieved from [http://corporate.tourism.gov.my/trade.asp?page=marketing\\_raining&subpage=annual\\_report](http://corporate.tourism.gov.my/trade.asp?page=marketing_raining&subpage=annual_report).
- Um, S., Chon, K., & Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research*, 33(4), 1141-1158.
- Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of consumer research*, 18, 84-91.
- Wold, H. (1982). Soft modelling: the basic design and some extensions. *Systems Under Indirect Observation, PartII*, 36-37.
- Yuan, J. J., Cai, L. A., Morrison, A. M., & Linton, S. (2005). An analysis of wine festival attendees' motivations: a synergy of wine, travel and special events? *Journal of Vacation Marketing*, 11(1), 41-58.
- Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *The Journal of Marketing*, 60, 31-46.
- Zhao, X., Bai, C., & Hui, Y. (2002). An empirical assessment and application of SERVQUAL in a mainland Chinese department store. *Total Quality Management*, 13(2), 241-254.