The mediation effect of customer satisfaction in the relationship between service quality and customer loyalty in the banking industry in Malaysia

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Abstract

This paper aims to examine the factors affecting the adoption of internet banking services by commercial banks in Malaysia. This study applies a SEM model to measure service quality in line with recent advances in the general-marketing and consumer-behavior literature. A total of 402 valid samples were obtained from customers of Malaysian banking sectors. Evidence from survey studies and from banks' web sites indicated that a significant relationship between service quality, customer satisfaction and loyalty. The results also reveal that customer satisfaction mediates the relationship between service quality and loyalty.

Keywords: *Banking, services quality, customer satisfaction, loyalty, SEM*

1.0   INTRODUCTION

In recent years, the criticisms and complaints, such as long queue, low efficiency and overall poor service quality in bank service outlets are often reported in the public media. Being represented by queuing phenomenon, the service issues have increasingly attracted wide concerns from the social public and bank system (ABM, 2017). Currently, from the overall situation of many Malaysian banks, unsuitability of service capability and service level have become the critical problem which dented the social image of commercial banks, and service has become one of the weaknesses in the management of commercial banks (Narteh and Kuada, 2014).

On the other hand, with the adjustment of Malaysia national macroeconomic and financial policy, the government regulator has strengthened its supervision for banks in capital rationing and risk management. A new business development mode has become an important choice for banks to reform their management by improving service management, promoting

service level, increasing contribution of service value, building up core competitiveness of service, paying attention to connotative growth and speeding up the formation of capital saving business development model (Sawant, 2016).

In the global perspective, customer satisfaction is an important factor, since one might not get an opportunity to redo the service, if the experience is identified by the consumers as unsatisfactory (Gatari, 2016). Narteh and Kuada (2014) argued that banks can only provide satisfactory consumer service, if standards, procedures, and policies for service quality exist in the business. This is because the quality of service plays a great role in achieving and improving customer satisfaction. According to Munari et al., (2013) the banking industry considers customer satisfaction as the one of most critical and crucial criteria for assessing and evaluating the relationship that the bank has with the marketplace. As the result, the customer satisfaction is regarded as a fatal driver in banks performance strategies.

Drawing on the issue of declining trend of loyalty and the problem of poor service performance of Malaysian banks as the service provider in which may jeopardize their sustainability in the Malaysian banking industry, this study attempts to examine how the high quality of customer service provider plays a role in the long-term relationship which resulted in higher loyalty towards the Malaysian banks. Besides, the important role of satisfaction has also motivated this study to investigate how the satisfaction may influence the association between service quality and customer loyalty. In order to accomplish this objective, therefore this study developed the following framework.
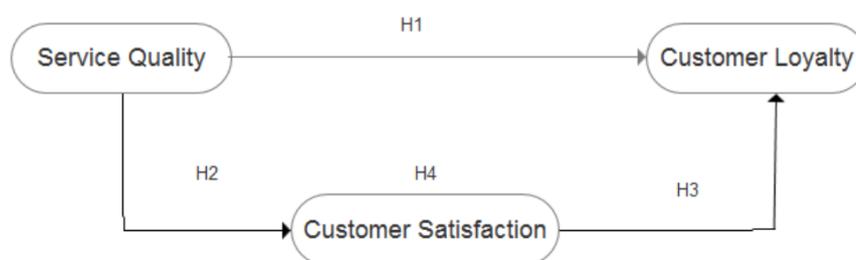

Figure 1. The framework

2.0   LITERATURE REVIEW
2.1   Service quality
Service quality refers to the customer's perception of the service expected with the service received (Parasuraman, Berry and Zeithaml, 1988). Some authors have linked the service quality with customer satisfaction (Dauda and Lee 2016; Ali and Filieri, 2015; Jun, Yang, and Kim, 2004); linkage between corporate image, loyalty, trust, and customer satisfaction (Beneke et al. 2011; Pasha and Razashah, 2018; Reza & Bita, 2019; Lee and Moghavveni, 2015)

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

H₂: There is positive relationship between service quality and customer satisfaction.

2.2   Customer satisfaction

Customer satisfaction is the contentment of the customer that the quality of products and services has met the standard of expectation (Hameedah, 2015). Customer satisfaction is the desired and valued outcome that a business offering products and services require for a measure of the performance of products and services (Krishna Moorthy et.al, 2018). In summary, customer service quality is the antecedent of customer value. The value to the customer of any service is its quality, which generates customer satisfaction through the ability of the service quality to meet or exceed customers' expectation. Customer satisfaction centered on the value generated for the customer thereby creating customer centricity (Khan & Rizwan, 2014).

H₃: There is positive relationship between customer satisfaction and customer loyalty.

2.3   The mediating effect of customer satisfaction

Liao and Hsieh (2011) identify that customers associate with brand image because of service quality that affects customer satisfaction and loyalty, thereby, creating a link between brand image and service quality. Klimontowicz (2014) argues that customer satisfaction strategies need to deal with most important customer need attributes; price, service quality, service personalization, and brand integrity. The understanding of the most important customer needs attributes through the gauging of customers' perceptions of service quality enables the creation of customer loyalty strategies. The personalization of products and services is a strategy that creates customer satisfaction; customizing products and services to be suitable for the needs of the customer (Rahaman, et al., 2011; Subrahmanyam & Raja 2016). Banks ought to be able to make adjustments to standard products and services to accomplish the customer loyalty

H₄: Customer satisfaction mediate the relationship between service quality and customer loyalty.

3.0   METHODOLOGY

3.1   Study settings

The population of this study is 500 samples and the questionnaires is distributed using online platform. Using convenience sampling, the researcher received 402 feedbacks. The survey questionnaire in Appendix 1 consists of two sections, namely demographic information in Section A and variables measure in Section B. The customers are requested to rate the quality of banking services and product that they experienced at Malaysian banks. The responses given by customers are rated on a five-point Likert scale.

Table1. Demographics Information

Demographics variables	Frequency	Percentage
Gender		
Female	187	46.5
Male	215	53.5
Age		
< 20 years	49	12.2
20-29 years old	140	34.8
30-39 years old	88	21.9
40-49 years old	77	19.2
50-59 years old	38	9.5
> 60 years	10	2.5
Bank Customer		
Local	255	63.4
Foreign	147	36.6
Duration of using the bank's service		
Less than one year	78	19.4
1-4 years	158	39.3
5-10 years	99	24.6
More than 10 years	67	16.7
Monthly household income		
< RM 2,000	74	18.4
RM 2,001 – RM4,000	29	7.2
RM 4,001 – RM6,000	133	33.1
RM 6,001 – RM8,000	90	22.4
RM 8,001 – RM10,000	60	14.9
RM 10,001 or above	16	4
Most preferred way of transaction		
ATM	110	27.4
Teller at bank branches	126	31.3
Internet banking	100	24.9
Phone banking	66	16.4
Types of customers		
Business	68	16.9
Housewife	0	0
Students	70	17.4
Employee	251	62.4
Others	13	3.2

3.2   Data analysis

The validity and reliability analysis and hypothesis testing can be deployed using structural equation modeling (SEM) (Williams et al., 2009). Besides good for theory testing, this statistical method under the second generation technique emphasized more on exploration in which it predicts and explains the variance of endogenous variable. Since the objective of this study is to explore how the service quality relationship and the satisfaction, loyalty variable, thereby, SEM is employed. In addition, the SEM possesses high efficacy in parameter estimation, which allows it to have superior statistical power (Fornell et al., 1996).

SEM is concerned with two elements to examine the model of the study. Firstly, the measurement model which tests the validity and reliability while the second concern is the structural model in which is used to test the hypotheses of the study (Sargeant et al., 2006).

4.0   RESULTS

4.1   Measurement model

The measurement model of SEM allows for the assessment of the construct's reliability and validity as these confirm the quality of the model of the study (Hair et.al, 2014). The main reason for assessing the validity in measurement model of SEM is to ensure that the measured items efficiently reflect their corresponding factor. Validity is achieved when the degree to which a factor positively correlates with another factor of the same construct (Hair et.al, 2014). The convergent validity is examined by the items loading, composite reliability, and average variance extracted (AVE) of each construct in the model. Most importantly, to confirm that all constructs possess adequate convergent validity, all the items loaded to the respective constructs are able to explain more than 50% of the variance of the related constructs (Hair et.al, 2014). In other words, the loadings of the items must be at least 0.5.

Moreover, the composite reliability value must not below 0.70 in order to be considered as satisfactory and confirms that the constructs possess an adequate level of internal consistency, therefore, considered a valid measure of the constructs. For this study, the composite reliability values for all constructs are from 0.982 to 0.988 (Table 2). On an additional note, even though the values are above 0.90, it is not related to the possibility of constructs measuring the same phenomenon (Hair et.al, 2014) because further checking on AVE shows that the AVE values are all not below 0.5 which is not a major problem according to (Hair et.al, 2014).

On top of that, the average variance extracted (AVE) for each construct is all above the cut-off value of 0.50. To achieve desired loadings, composite reliability, and AVE, any item or indicator that is loaded below the recommended threshold of 0.5, 0.7, and 0.5 respectively, the items will be deleted. Table 2 depicts the loadings, composite reliability, and AVE that exceeded the threshold. Therefore, this signifies that the convergent validity of the model has been established.

Table 2. Reliability and Convergent and Discriminant Validity

Items	Standardized Loadings	t-Statistic (C.R.)	Composite Reliability	AVE
Service Quality			0.982	0.682
s1	.84	N/A^2		
s2	.82	19.793***		
s3	.83	19.967***		
s4	.82	19.731***		
s5	.82	19.662***		
Customer			0.988	0.692
c1	.86	N/A^2		
c2	.83	21.230		
c3	.81	20.255		
c4	.83	21.351		
c5	.81	20.368		
c6	.85	21.734		
Customer Loyalty			0.983	0.696
L1	.84	N/A^2		
L2	.80	18.862		
L3	.84	20.550		
L4	.84	20.404		
L5	.85	20.627		

*** Significant at the 0.01 level; AVE=average variance extracted

4.2   Structural model

Having established the validity and reliability of the construct, the hypotheses testing by running bootstrapping procedure in the structural model (inner model) is required. Theoretical model in the conceptual framework of research is said to be fit if supported by empirical data. The test results of Goodness of Fit Overall based on Figure 2, it can be seen that all criteria indicate the model has met the cut-off value; therefore, the model can be categorized suitable and suitable for use, so that interpretation can be carried out for further discussion.
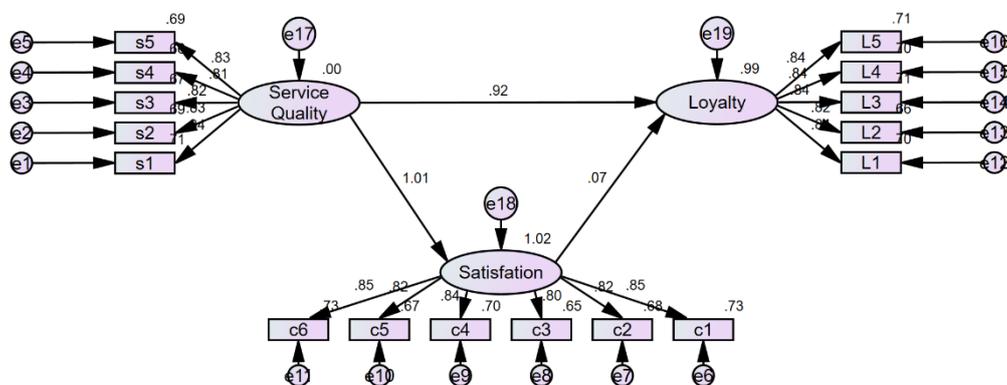

Figure 2. The structural model

4.3   Hypothesis testing

Table 3. Hypothesis tests

Bank Hypotheses	β	S.E.	C.R.	p	Result
H$_1$: Service quality → customer loyalty	0.917	0.506	1.796	*	Supported
H$_2$: Service quality → customer satisfaction	1.009	0.046	22.301	***	Supported
H$_3$: Customer satisfaction → customer loyalty	0.075	0.494	0.147	0.884	Not Supported

Notes: β, standardized regression weight; SE, standardized error; CR, critical ratio.

*Significant at the 0.10 level.   **Significant at the 0.05 level.   ***Significant at the 0.01 level.

The results in Table 3 shows that the three hypotheses proposed in this study are supported. First, H1 shows a direct effect of SQ on CL (β = 0.917, t = 1.796, p=0.072). The β-value 0.917 indicates that SQ influences the dependent variable CL by about 91.7 percent. The t-value (t = 1.796) and p-value (p<0.1) show that there is a positive and direct relationship between SQ and CL. Second, H2 shows a direct effect of SQ on CS (β = 1.009, t = 22.301, p<0.001), which was partially supported. Next, we examine H3, The negative effect coefficient of the link between CS and CL (path coefficient = 0.075, t = 0.147, p=0.884) indicates that the customers can be not more loyalty if the customer satisfaction is perceived in the service process without the good service quality.

4.4   Mediation effect of satisfaction

Mediation variables are variables that become intermediaries (mediation) of the relationship of explanatory variables to dependent variables. This research involves mediating variables, namely customer's satisfaction. To find out whether customer's satisfaction are able to play a role as a mediating variable the effect of service quality on customer's loyalty will be tested. Mediation testing is used to find out whether the mediating variable is a full mediation or partial mediation (Baron & Kenny, 1986). Mediation testing in this study is as follows:

This section tests the mediating effects of satisfaction between both the service quality and loyalty. Service quality significantly predicted customer loyalty in the first regression analysis (β = 0.917, t = 1.796, p=0.072). In addition, Service quality predicted customer satisfaction in the second regression (β = 1.009, t = 22.301, p<0.001). Also, when adding job satisfaction, the β weight of customer loyalty decreased from 0.993 to 0.917. The mediating effect based on the AMOS test was significant, and the indirect effect is 1.036*0.072=0.076.

Figure 3. Mediation effect of CS between SQ and CL

5.0   DISCUSSIONS, IMPLICATIONS AND CONCLUSION

The primary objective of this study is to empirically evaluate how the quality of customer service provider relationship influences the level of customer loyalty towards Malaysian banks. On top of that, this study also critically examines the role of satisfaction in the association between the relationship quality and customer loyalty.

The finding from this study reveals that the direct relationship between relationship service quality and customer loyalty was supported. Hence, H_1 and H_2, which estimated a positive and significant relationship between relationship service quality and satisfaction, customer loyalty, confirms the findings of other studies (Prasad & Aryasri, 2008; Doaei et.al, 2011). This finding conceptualized that the high quality of customer-service provider relationship is an important intangible tool that can be utilized to capture a higher level of customer loyalty towards the Malaysian banks. Furthermore, the finding reemphasizes the fact that customer loyalty is the outcome of relationship marketing (Hennig-Thurau, et. al, 2002).

However, the hypothesis H_3 is not supported in this finding. The next hypothesis, H_4 detailed satisfaction as the mediator between relationship service quality and customer loyalty. It was found in this study that H_4 was supported. The H_4 indicates that the satisfaction is a significant factor to influence the association between the relationship of service quality and customer loyalty towards Malaysian banks.

5.1   Theoretical implications

This study has made an important contribution by empirically examined the effect of high-quality customer-service provider relationship on customer loyalty in Malaysian banks which was ignored by previous studies. By integrating the intangible element of service quality and the outcome of relationship marketing such as customer loyalty together with the mediating variable, namely, satisfaction in a single model, this study has been able to answer the call for more studies to be conducted. Additionally, the satisfaction as a mediator variable

that can be used to explain the association between relationship service quality and customer loyalty, which is regarded as a theoretical contribution in the field of bank industry (Subrahmanyam & Raja, 2016). This study is among the pioneer studies that examined the effect of satisfaction on the link between service quality and customer loyalty (Pasha and Razashah, 2018; Reza & Bita, 2019).

5.2   Managerial implication

Practically, the findings of this study may provide several useful insights to the related parties such as the managers and the marketers. The findings reveal that the high-quality customer-service provider relationship plays the most significant role in influencing the level of customer loyalty. Also, the high effect size of the construct towards customer loyalty suggests that the managers and the marketers should not prioritize their concern on the product, but rather give preference on strengthening the relationship with the existing customer as this will guarantee long-term highly loyal customers. This holds the arguments of previous studies that long-term relationship with the existing customers may generate more loyal customer and saves more as compared to acquiring new customers.

Therefore, the findings place greater responsibility on the Malaysian banks to strategize a progressive business plan that is capable to win the customer's heart as this will guarantee a long-term high quality relationship with the existing customers who spread positive word-of-mouth as publicity to generate more sales. Besides, the findings of this research are also beneficial to the Malaysian banks as they are offering similar product and services. The positive association between service quality and customer loyalty as revealed in this study requires the bank organizations to obtain customer's involvement in a program that may strengthen and lengthen the relationship such as customer loyalty program. Given the high level of involvement through activities, special treatment, rewards and high bank interest et cetera, the high-quality long term interaction between the organization and the existing customers may dominate the relationship and eventually increase the level of loyalty.

This study also revealed that the high service quality of the relationship is an important tool that surpassed competitors offers as it cannot be imitated by the competitors. In essence, the high-quality of customer-service provider relationship may differentiate the Malaysian banks from competitors and ensures the existing customer to return for further relationship development after the experience of bank service. In fact, quality service creates good publicity through the act of recommendation and positive word-of-mouth which indicates higher loyalty

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Appendices

Section A

Demographic information

Guideline: Please tick (✔) ONLY ONE of the most appropriate answer

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1 Gender

□ Male

□ Female

2 Marital Status

□ Single

□ Married

3 Age

□ <   20 years

□ 20-29 years old

□ 30-39 years old

□ 40-49 years old

□ 50-59 years old

□ >   60 years

4 Bank Customer

□ Local

□ Foreign

5 Duration of using the bank's service

□ Less than one year

□ 1-4 years

□ 5-10 years

□ More than 10 years

6 Monthly household income

□ < RM 2,000

□ RM 2,001 – RM4,000

□ RM 4,001 – RM6,000

□ RM 6,001 – RM8,000

□ RM 8,001 – RM10,000

□ RM 10,001 or above

7 Most preferred way of transaction

□ ATM

□ Teller at bank branches

□ Internet banking

□ Phone banking

8 Types of customers

□ Business

□ Housewife

□ Students

□ Employee

□ Others

Section B

Instruction: Rate your opinion

Service Quality	Strongly disagree ——— Strongly agree				
Please rate your opinion					
1 Bank X always delivers excellent overall service	1	2	3	4	5
2 The services offered by Bank X are high quality	1	2	3	4	5
3 Bank X delivers superior service in every way	1	2	3	4	5
4 The personnel provide a friendly atmosphere	1	2	3	4	5
5 Bank X insists on error-free records	1	2	3	4	5

Customer Satisfaction	Strongly disagree ——— Strongly agree				
Please rate your opinion					
1 The services of Bank X meet my expectations	1	2	3	4	5
2 I did the right thing when I chose this Bank X for its services	1	2	3	4	5
3 I am satisfied with the quality of the Bank X's services	1	2	3	4	5
4 I am satisfied with the various bonus link programmes of Bank X	1	2	3	4	5
5 I am satisfied with the interactions that I have had with the Bank X	1	2	3	4	5
6 Bank X satisfies my needs	1	2	3	4	5

Customer Loyalty	Strongly disagree ——— Strongly agree				
Please rate your opinion					
1 I would be willing to pay a higher price for Bank X's services over other banks	1	2	3	4	5
2 I prefer my Bank X to its competitors	1	2	3	4	5
3 Bank X is the best bank for me	1	2	3	4	5
4 I would be willing to defend Bank X in the face of any controversy	1	2	3	4	5
5 I would consider Bank X as my first choice for patronizing banking services	1	2	3	4	5

Bank X: refers to the bank you usually use in Malaysia