# RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION DURING HALAL CERTIFICATE APPLICATION IN KELANTAN

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Abstract: In Malaysia, only JAKIM and JAIN are given full authority to grant and certify *halal* certification. Certain criteria have been set in order for business or individuals to be awarded a halal certification. Even though the process of applying for a halal certificate may take some time, it can be executed promptly if the applicant's documentation is ready beforehand as in it complies with the requirements provided. Nevertheless, some parties contended that strict governance in the process of obtaining the halal certificates preventing the smoothness of certification process. Thus, this paper intends to study customer satisfaction during halal certificate application and the respondents came from various backgrounds of business. The independent variables are assurance, empathy, communication and security taken from SERQUAL model, meanwhile the dependent variable is customer satisfaction. The population of this study was 100 respondents who have attended a course organised by JHEAIK, but only 77 (77%) respondents were returned the questionnaire. The data was analysed using SmartPLS 3.2.1 software. The analysis shows that only empathy determined the customer satisfaction during halal certificate application meanwhile the other three variables were not the factors in determining the satisfaction among customers. Thus, the hypothesis 2 was accepted and the rest were rejected.

Keywords: Assurance, Communication, Customer satisfaction, Empathy, Security

## 1. Introduction

There is a trend emerging around the globe that it has seen an increase in demand for *halal* products and services including foods, supplements, pharmaceuticals and cosmetic products. Consumers from all walks of life whether Muslims or non-Muslims begin to yearn for *halal* products and services due to their increased public awareness of Islam. Therefore, it is important for a product or service to comply with standards and requirements that will enable them to be recognized as *halal* and safe for consumption. *Halal* compliance includes every part of the activity or manufacturing process. Thus, the initiative to recognize *halal* compliance businesses is being done seriously and firmly by the Malaysian government as it is critical and crucial in an effort to put Malaysia as a leading and prominent *halal* hub in the Asian region. In order to ensure the target is on the right path, a

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comprehensive ecosystem in the *halal* industry, which should have been done with full government support, has been set up.

In Malaysia only JAKIM and JAIN are given full authority to grant and certify *halal* certification. According to the Director General of JAKIM, any corporate body found guilty of intentionally misleading consumers by exploiting *halal* status is likely to be fined up to a maximum of RM5 million. If the individual commits the same offense, the convicted person will be fined a maximum of RM1 million or imprisonment not exceeding three years or both when proved guilty (Bernama, 2019).

As mentioned earlier, certain criteria have been set before a business or individual is awarded a *halal* certification. Even though the process of applying for a *halal* certificate may take some time, it can be executed promptly if the applicant's documentation is ready beforehand by complying with the requirements provided. Nevertheless, some parties contended that strict governance in the process of obtaining the *halal* certificates prevent the smoothness of the certification process. JAKIM and JAIN, on the other hand, have assured that an application will be processed promptly if the applicant qualifies because they realize the fact that the business is in dire need of legal *halal* certification to continue its business (Majid et al., 2015).

Unfortunately, numerous issues have been raised regarding the *halal* certification process. For instance, the lack of competent staff in handling the halal certificate issuance process (Ahmad et al., 2017), unsystematic filing system which leads to the inefficiency of the operation (Yusuf et al., 2015) and the cost incurred in obtaining the halal certificate is quite high (Hamid et al., 2017). Therefore, this study was conducted to analyse the relationship between service quality (assurance, empathy, communication and security) and customer satisfaction during halal certificate application in Jabatan Hal Ehwal Agama Islam Kelantan (JHEAIK) which is one of the State Islamic Religious Department (JAIN) in Malaysia that is responsible to issue a halal certificate in Kelantan. It is hoped that this paper would facilitate the consumers during the *halal* certificate registration. The insights could in turn be used to minimize the cost, time and maximize customer satisfaction. The findings of this study are prevalent in *halal* industry as it promotes the efficient, effective and economical *halal* certification process to ensure the sustainability.

# 2. Literature Review and Development of Research Hypotheses

# 2.1. Customer Satisfaction

Customer satisfaction is one of the significant factors contributing to the success of business and organization. Generally, customer satisfaction has been noted as an overall evaluation by the customer based on the whole purchase and consumption experience with the good or service over time (Fornell et al., 1996). Customer satisfaction is vital for the business because failure to meet the needs and expectations is assumed to result in dissatisfaction of customers with the product or service (Zeithmal and Bitner, 2000). Prior research indicates that satisfied customers are the assets of the service provider as they will tend to repurchase from the same service provider (Eshghi et. al., 2008), in long run, they will not only increase the revenue but also bring new customers to the service provider (Nusrat, 2019).

However, previous studies have suggested that meeting customer satisfaction is more difficult in the public services sector. For instance, Gowan et al., (2001) observed that service provision is more complex in the public sector because it is not simply a matter of meeting the expressed needs, but of finding out unexpressed needs, setting priorities, allocating resources and publicly accountable. Furthermore, Agus et al., (2007) highlighted the need for the public services sector to learn from the experience of the private sector, especially concerning customer orientation to enhance the delivery of public service quality.

## 2.2. Service Quality

Quality is a measurement form expectation to the performance and Parasuraman et al., (1983) stated that consumers are probably never certain of these attributes, even the consumption of the service. A study by Babakus and Glynn (1992) in hospital service environment stated that a SERVQUAL is a standard instrument for measuring functional service quality. It is reliable and valid in the hospital environment and other service industries. Besides that, the result also shown that a SERVQUAL also provides hospital administrators with a tool for the measurement of functional quality in the organizations.

According to Zeithaml, and Berry (1988) service quality is the ability of an organization to meet or exceed customer expectations. Meanwhile, Parasuraman et al (1994) defined service quality as the degree of discrepancy between customer's expectations for service and their perceptions on the performance of the service. Fogli (2006) held the view that service quality is the customers' actual attitude towards specific services. Despite there is no consensus on a single definition of service quality among scholars and researchers, there is an agreement that service quality is very important for the success and survival of an organization in today's competitive environment.

The vast majority of the studies on service quality that have been conducted focus on the various service providers such as in the area of banking, hospital, tourism, restaurants, hotel and also public services. Nevertheless, there is a lack of studies on service quality concerning the services provided by certification bodies. Only a few of the studies have been identified (Badruldin et al., 2012; Liu et al., 2012; Sutawijaya et al., 2018).

There are various instruments have been developed to measure service quality. However, the most commonly used instrument is the SERVQUAL, which originally developed and refined by Parasuraman et al., (1988). It is a well-accepted instrument and is widely used in various industries (Pratminingsih et al., 2018). This measuring instrument focused on identifying "gaps" between expectations and actual delivery. The example of study done by Agus et al., (2007) has carried out a study to identify management and customer perceptions of service quality practices in the Malaysian public sector. Their model focused only on perceptions of actual service delivery. In relation with this, this paper focuses on four dimensions which are assurance, empathy, communication and security.

# 2.3. Dimension of Service Quality

This present study focuses only on perceptions of customers towards actual service delivered by JHEAIK as a halal certification provider in Kelantan. In particular, this study considers four dimensions of service quality namely assurance, empathy, communication and security. A brief explanation of these dimensions is given below.

## 2.3.1. Assurance

Assurance is commonly linked with the employees' knowledge and courtesy and their ability to gain customers' trust. A study by Arsanam and Yousapronpaiboon (2014) noted that assurance relates to a firm's ability to reassure clients' trust and confidence through their skills, knowledge and academic abilities. Meanwhile, Kashif et al., (2015) stated that assurance refers to a firm's ability to respond to customer inquiries. Jayaraman et al., (2010) of the opinion that assurance means customers feel that the firm has provided enough safety. Thus, to gain the customers' confidence, a service provider needs to show to their customers that they are competent, knowledgeable, transparent, and able to deliver the information required. The previous studies reveal a significant relationship between service quality and customer satisfaction (Kashif et al., 2015; Arsanam & Yousapronpaiboon, 2014; Jayaraman et al., 2010). For example, research by Jayaraman et al. (2010) on customer satisfaction observed that assurance has a positive relationship with customer satisfaction but had no significant impact. Thus, the authors propose that:

*H1:* Assurance is positively significant with the customer satisfaction.

## 2.3.2. *Empathy*

Empathy defined by entrepreneur is the feeling that we understand and share another person's experiences. Empathy should be incorporated into the whole organisation. According to Parasuraman et al., (1985), empathy was described as the willingness of the organisation to provide proper customer service in terms of having efficient staff and facilitating customers' needs. In the study of customer satisfaction and service quality by Murad et al., (2019) it was reported that empathy is the best predictor for service quality in transportation. The findings support the customer satisfaction managers and planners who put service policy in place.

Meanwhile, Ennew et al., (2013) revealed that the empathy component of the service quality includes being attentive in communicative circumstances, knowing customer needs and taking individual care of customer needs. Besides, other studies showed that a positive effect on customer satisfaction is achieved through flexible working hours, individualised attention, a deeper understanding of the specific needs of customers in the banking sector and empathy dimension (Ananth et al., 2010). Empathy play an important role in customer satisfaction as stated in (Selvakumar, 2016; Shanka, 2012; Navaratnaseel and Periyathampy, 2014). Based on the above literature, it leads to the development of the following hypothesis:

H2: Empathy is positively significant with the customer satisfaction.

## 2.3.3. Communication

Communication is about listening to customers and acknowledge their comments and keep customers informed in a language they understand (Parasuraman et al., 1985). Effective communication is vital for organization's long term survival (Lahap et al., 2016) and contributes to the company's performance (Alsharari et al., 2017). Besides that, a study conducted by Agus et al., (2007) agreed that communication has strong correlation with customer satisfaction. Moreover, Widijanto and Rachmat (2019) agreed that high customer satisfaction can also be supported by good communication between service providers and their customers. Hence, it is very important for an organization to provide good service delivery by enhancing the communication skill to meet the demands from the public. Accordingly, the authors propose that:

*H3:* Communication is positively significant with the customer satisfaction.

## 2.3.4. Security

Security will make customer feel free from danger, risk and doubt toward any organization. Customer feel relieved and feel safe with the transaction made as they have trust in the organization. So that, security is one of the important elements in service quality to measure the customer satisfaction. Security enables the customer to feel free from danger, risk or doubt including physical safety, financial security and confidentiality (Parasuraman, et al., 1985). Recently, a research done by Getachew (2019) agreed that security is one of the main components in effecting customer satisfaction among transportation users in Amhara Region, Ethiopia. This is in line with the findings from Liu et al., (2008) which stated that security or privacy strongly affect online shopping customer satisfaction in China. Based on findings from Getachew (2019) and Liu et al., (2008), both agreed that security is one of the main components in effecting customer satisfaction and strongly affect online shopping customer satisfaction in China. Accordingly, the authors propose that:

*H4:* Security is positively significant with the customer satisfaction.

The proposed conceptual framework was modified from Parasuraman et al., (1985). In their original framework, they were illustrated ten (10) dimensions of service quality. However, since this paper only focused on four (4) dimensions, the framework of this study has shown in Figure 1. Certain modifications have been made to align the conceptual framework with the research hypotheses. Based on a thorough review on earlier research, a conceptual framework using hypotheses H1 - H4 is proposed to recognise the relationships as presented in Figure 1.

Independent variables Dependent variable Service Quality Dimensions Η1 Assurance H2 Empathy **Customer Satisfaction** Н3 Communication H4 Security

Figure 1: A Conceptual Framework with Hypotheses Development between Service Quality Dimensions and Customer Satisfaction

Research methodology is a mandatory component of any study in answering three basic questions; (1) how the study will be implemented, (2) how the questions will be answered and (3) how the answers from respondents will be analysed.

(Adapted from Armstrong et al., 2012)

#### *3.1*. Population and Sample

(modified from Zeithaml & Bitner, 2003)

The units of analysis in this study come from various backgrounds such as hotel industry, food industry and cosmetic industry. Considering knowledge of the topic of interest, the owners or representatives of the firms are the respondents who are directly dealing with the halal certificate application process. Hence, the sampling units of this study are halal certificate applicants. The target population of this study includes all halal certificate applicants who have attended a course organized by Jabatan Hal Ehwal Agama Islam Kelantan (JHEAIK). Thus, the number of population of this study is also 100 respondents. Based on the minimum sample size required, the population of this study which is 100 and the minimum required sample size is 79 (5% error). The questionnaires were distributed to all 100 respondents. However, the response rate was only 77 (77 percent). The questionnaire was adopted from previous research to collect information about the service quality and customer satisfaction. The questionnaire was designed such that the respondents can answer exact questions relevant to the study. In this research paper, Structural Equation Modelling Partial Least Squares algorithm (SEM-PLS) analysis method using the SmartPLS 3.2.1 was employed to examine the relationship between service quality and customer satisfaction.

#### 4. Result

#### 4.1. Measurement Model Evaluation

The measurement model evaluation consists of internal consistency reliability, convergent validity and discriminant validity.

## 4.1.1. Internal Consistency Reliability

The first criterion to be determined in the measurement model is internal consistency reliability which includes Cronbach's alpha and composite reliability. Specifically, the composite reliability values should be higher than 0.70 (Hair et al., 2014) to show the modest reliability applicable in the research.

Table 1: Internal Consistency Reliability

Construct	Item	Loading range	Composite Reliability	Cronbach's Alpha (α)
Assurance	6 items	0.811 - 0.910	0.948	0.934
Empathy	6 items	0.816 - 0.930	0.950	0.936
Communication	6 items	0.808 - 0.875	0.937	0.919
Security	4 items	0.721 - 0.846	0.872	0.824
Customer Satisfaction	6 items	0.837 - 0.922	0.955	0.943

Table 1 reports the SEM-PLS analysis that shows the composite reliability and Cronbach's Alpha values for the assurance, empathy, communication, security and customer satisfaction respectively. From the table, the composite reliability value for assurance was 0.948, empathy was 0.950, communication was 0.937, security was 0.872 and customer satisfaction was 0.955. All of the constructs had strong composite reliability where values between 0.70 and 0.90 are considered strong and satisfactory (Nunnally & Bernstein, 1994).

The Cronbach's alpha values for the constructs were strong with the assurance reported as 0.934, empathy as 0.936, communication as 0.919, security as 0.824 and customer satisfaction as 0.943. The internal consistency of 0.60 is minimally acceptable and all these values were well above that (Nunnally & Bernstein, 1994). Therefore, this indicates that all the constructs had composite reliability greater than 0.70 and the Cronbach's alpha values were above 0.60, suggesting the acceptable reliability.

## 4.1.2. Convergent Validity

Convergent validity of the measurement model is usually ascertained by examining the loadings, average variance extracted (AVE) and also the composite reliability (Gholami et al., 2013). As suggested by Hair et al., (2010), the authors used the factor loading value more than 0.50 (Hair et al., 2010). The loadings were all higher than 0.5 which means all items are accepted. Besides the loading values, other considerations in determining the convergence validity is the composite reliability and average variance extracted (AVE). The loading values are shown in Table 2. The loadings for all items exceeded the recommended value of 0.5 (Hair et al., 2010). The composite reliability values which depict the degree to which the construct indicators indicate the latent, construct ranged from 0.872 to 0.955 which exceeded the recommended value of 0.7 (Hair et al., 2010). The AVE of the construct should be greater than 0.50 because it is believed to explain more than half of the variance. Meanwhile the AVE values of less than 0.50 implied that there are more remaining errors in the items that are not yet explained by the construct. Therefore, all the AVE values at the construct level that are shown in Table 2 indicate the convergent validity of the measurement model. The AVE was in the range of 0.631 and 0.779.

 Table 2: Convergent Validity of Measurement Model

Construct	Loading Range	CR	AVE (>0.50)	Cronbach Alpha (α)
Assurance	0.811 - 0.910	0.948	0.752	0.934
Empathy	0.816 - 0.930	0.950	0.760	0.936
Communication	0.808 - 0.875	0.937	0.712	0.919
Security	0.721 - 0.846	0.872	0.631	0.824
Customer Satisfaction	0.837 - 0.922	0.955	0.779	0.943

## 4.1.3. Discriminant Validity

The common methods to assess discriminant validity are cross-loading and Fornell-Larcker (1981) criterion of comparing the correlations between constructs and the square root of the AVE for that construct. Table 3 shows the results of loadings and cross-loading of constructs.

Table 3. Loadings and Cross-Loading of Each Item

Table 3: Loadings and Cross-Loading of Each Item							
BAssurance1	Assurance 0.811	<b>Empathy</b> 0.608	Communication 0.643	<b>Security</b> 0.511	Customer Satisfaction 0.607		
BAssurance2	0.811	0.657	0.625	0.567	0.654		
BAssurance3	0.910	0.702	0.554	0.569	0.697		
BAssurance4	0.870	0.688	0.566	0.535	0.646		
BAssurance5	0.883	0.749	0.557	0.508	0.680		
BAssurance6	0.840	0.779	0.571	0.545	0.600		
BEmpathy1	0.703	0.888	0.743	0.661	0.747		
BEmpathy2	0.659	0.871	0.704	0.592	0.688		
BEmpathy3	0.654	0.839	0.679	0.563	0.654		
BEmpathy4	0.792	0.930	0.692	0.652	0.748		
BEmpathy5	0.712	0.816	0.618	0.528	0.659		
BEmpathy6	0.676	0.880	0.699	0.621	0.700		
BCommunication1	0.559	0.604	0.824	0.524	0.534		
BCommunication2	0.582	0.632	0.875	0.549	0.444		
BCommunication3	0.495	0.632	0.814	0.526	0.487		
BCommunication4	0.489	0.648	0.808	0.515	0.548		
BCommunication5	0.633	0.748	0.865	0.596	0.545		
BCommunication6	0.642	0.726	0.875	0.628	0.582		
BSecurity1	0.661	0.682	0.631	0.783	0.682		
BSecurity2	0.395	0.510	0.464	0.822	0.376		
BSecurity3	0.356	0.341	0.413	0.721	0.262		
BSecurity4	0.392	0.509	0.479	0.846	0.383		
BCS1	0.623	0.719	0.575	0.528	0.837		
BCS2	0.664	0.733	0.565	0.574	0.899		
BCS3	0.648	0.745	0.591	0.573	0.903		
BCS4	0.706	0.709	0.542	0.533	0.922		
BCS5	0.650	0.671	0.500	0.437	0.855		
BCS6	0.670	0.679	0.535	0.559	0.879		

According to this method, discriminant validity is determined when the loading of an item on a construct is higher than all of its cross-loading with other constructs. The result shows that the first construct which is assurance consists of six (6) items and they were found to have significant loadings in this construct. For the empathy, six (6) items were found to have significant loadings while the communication comprises of six (6) items was found to have significant loadings. In addition, the security comprises of four (4) items was found to have significant loadings. Also, the customer satisfaction consists of six (6) items was found to have significant loadings.

The next method is the Fornell-Larcker criterion that compares the square root of the AVE values with the latent variables correlations. This method requires that the square root of each construct of AVE should be greater than its highest correlation with any other constructs.

Table 4: Fornell-Larcker Criterion

Constructs	1	2	3	4	5
1. Assurance	0.867				
2. Communication	0.674	0.844			
3. Customer Satisfaction	0.748	0.625	0.883		
4. Empathy	0.803	0.791	0.804	0.872	
5. Security	0.621	0.661	0.606	0.694	0.794

Note: Diagonals (in bold) represent the average variance extracted while the others entries represent the squared correlation.

Table 4 shows the results of the Fornell-Larcker criterion assessment with the square root of the AVE on the diagonal and the correlations between the variables in the lower left triangle. Overall, the square roots of the AVEs for the construct assurance (0.867), communication (0.844), customer satisfaction (0.883), empathy (0.872) and security (0.794). Thus, this research paper fulfils those criterions on both of cross-loadings method and the Fornell-Larcker criterion, providing evidence for the discriminant validity of the constructs. In sum, both convergent and discriminant validity of the measures in this research were established.

### 4.2. Structural Model Evaluation

The structural model involves the analysis of the relationship between the latent variables or constructs. This includes the collinearity assessment, path coefficient, coefficient of determination  $(R^2)$ , effect size  $(f^2)$  and predictive relevance  $(Q^2)$  and blindfolding (Hair, 2014).

## 4.2.1. Assessment of Collinearity among the Constructs

The first step in evaluating the structural model is to examine collinearity issues between each set of constructs separately for each subpart of the structural model. Table 5 shows the Variance Inflation Factor (VIF) values of the analyses. It can be seen that all the VIF outputs are clearly below the threshold of 5. Therefore, collinearity among the constructs is not an issue in the structural model. Thus, the author can continue examining the default report such as path coefficient,  $R^2$ ,  $f^2$ , and  $Q^2$ .

**Table 5:** Collinearity Assessment of the Constructs

Construct	VIF
Assurance	2.898
Empathy	4.418
Communication	2.877
Security	2.096

## 4.2.2. Assessment of Path Coefficients

Path coefficients indicate that the strengths of the relationships and hypotheses are empirically supported. As seen in Table 6, it is confirmed that only one path relationship is significant. The exogenous constructs such as the empathy is significantly contribute in explaining the variation in the endogenous latent variable namely the customer satisfaction with the  $\beta$  value 0.588 (60%). Meanwhile the relationships between assurance, communication and security with customer satisfaction are not significant with the  $\beta$  value 0.283 (30 %), -0.081, and 0.075 (0.8%) respectively. The t-values of the parameter indicate the strength of the relationship represented by the parameter where the higher the t-value, the stronger the relationship. The bootstrapping procedure using 5000 sample was used to obtain the t-values of each coefficient (Chin, 2010; Efron and Tibshirani, 1993).

**Table 6:** Significant Testing Results of the Structural Model Path Coefficients

Structural Path	Path coefficient (β)	t- value	P value
Assurance → Customer Satisfaction	0.283	1.566	0.118
Empathy → Customer Satisfaction	0.588	3.296	0.001**
Communication → Customer Satisfaction	-0.081	0.471	0.638
Security → Customer Satisfaction	0.075	0.540	0.589

## 4.2.3. Assessment of Coefficient of Determination $(R^2)$

The R² value refers to a measure of the model predictive accuracy and is calculated as the squared correlation between a specific endogenous construct's actual and predicted values. There is no specific rule of thumb for R² value. The threshold values that were suggested by Chin (1998) to measure R² value are 0.67 (substantial), 0.33 (moderate) and 0.19 (weak). Table 7 shows the R² value for the endogenous construct that achieves the acceptable value of R². Overall, the model explains 'substantial' portion as suggested by Chin (1998). For the research model of this research, the R² values for the endogenous variable indicate that the proposed theoretical model explains 68% or 0.680 of the variance in the customer satisfaction, which is a very satisfactory level of model predictability. Thus, this model is meaningful with strong predictive capacity.

**Table 7:** Determination Coefficient (R<sup>2</sup>)

Endogenous variable	R <sup>2</sup> value	Threshold
Customer Satisfaction	0.680	≥0.67 (substantial)

# 4.2.4. Assessment of Effect Size $(f^2)$

The effect size  $(f^2)$  is a measure used to assess the relative impact of a predictor (exogenous) construct on an endogenous construct (Hair, 2014). By following the guidelines from Cohen (1988), to measure the relative effect size of exogenous construct on the endogenous construct, the  $f^2$  values of 0.02 may be considered as small effect, 0.15 is considered as medium effect and above 0.35 as large effects. The result is presented in Table 8. The exogenous constructs namely assurance, empathy, communication and security in explaining the predictive value on endogenous latent variable, namely customer satisfaction has an  $f^2$  effect size of 0.086, 0.245, 0.007 and 0.008 respectively. In summary, most of constructs had a small effect size in producing the  $R^2$  for customer satisfaction.

**Table 8:** Effect Size (f<sup>2</sup>) of the Latent Variable

Structural Path	Effect size (f <sup>2</sup> )	Rating
Assurance → Customer Satisfaction	0.086	Small
Empathy → Customer Satisfaction	0.245	Medium
Communication → Customer Satisfaction	0.007	Small
Security → Customer Satisfaction	0.008	Small

Note: The values of  $f^2$ ; 0.02=small, 0.15=medium, 0.35=large

## 4.2.5. Assessment of Predictive Relevance $(Q^2)$ and Blindfolding

The  $Q^2$  value is a measure of predictive relevance based on the *blindfolding* technique in PLS-SEM (Hair, 2014). In the structural model, the  $Q^2$  value that is larger than zero for a certain reflective endogenous latent variable indicates the path models predictive relevance for this particular construct. By running the blindfolding technique in SmartPLS3.2.1, the  $Q^2$  values were obtained as shown in Table 9. All  $Q^2$  values are considerably above zero, thus providing support for the model predictive relevance regarding the reflective endogenous latent variables.

**Table 9:** Predictive Relevance (Q<sup>2</sup>) of Endogenous (Omission distance=7)

Relationship	$Q^2 > 0$
Assurance → Customer Satisfaction	0.619
Empathy → Customer Satisfaction	0.625
Communication → Customer Satisfaction	0.572
Security → Customer Satisfaction	0.378

## 4.2.6. Overall Results of Structural Model Analysis

The results of the hypotheses testing are summarized in Table 10. Overall, only one hypothesis was accepted and significant at p<0.01. It can be concluded that empathy has strong direct relationship with the customer satisfaction (H1;  $\beta$ =0.588, t=3.296\*\*). In conclusion, one hypothesis was accepted in this research.

**Table 10:** Results of the Structural Model Analysis (Hypotheses Testing)

Hypotheses	Relationship	Standard Beta	Standard Error	t-value	$\mathbf{f}^2$	Q <sup>2</sup> >0	Decision
H1	Assurance → Customer Satisfaction	0.283	0.181	1.566	0.086	0.619	Not Supported
Н2	Empathy → Customer Satisfaction	0.588	0.179	3.296**	0.245	0.625	Supported
Н3	Communication → Customer Satisfaction	-0.081	0.172	0.471	0.007	0.572	Not Supported
H4	Security → Customer Satisfaction	0.075	0.140	0.540	0.008	0.378	Not Supported

## 5. Discussion and Conclusion

This study is to examine the relationship of service quality towards customer satisfaction. From the finding, only empathy has a relationship toward customer satisfaction. It shows empathy is a most important factor for customer satisfaction. It was supported by other studied by Flick (2015) and Al-Azzam (2015) validated that empathy positively affects customer satisfaction and service quality in building a loyal base. As for assurance, communication and securities dimensions, they do not support the hypothesis. To keep client's confident toward their services, JHEAIK needs to conduct workshops to equip their staff with knowledge and develop self-confidence when dealing with their clients. Effective communication is important to ensure the customer satisfy with service and responsive action needed to fulfil client's need.

Finally, the paper can be used as guideline for policy maker and government to improvise the service quality provided by them. Those who relevant from this study also would take any possible action in order to ensure their service always proud by the customer, and finally could achieve the successful of all parties involved.

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## 7. References

Agus, A., Barker, S., and Kandampully, J. (2007). An exploratory study of service quality in the Malaysian public sector. *International Journal of Quality & Reliability Management*, 24, (2), 177-190.

- Ahmad, A. N., Rahman, R. A., Othman, M., and Abidin, U. F. U. Z. (2017). Critical success factors affecting the implementation of halal food management systems: Perspective of halal executives, consultants and auditors". *Food Control*, 74, pp. 70-78. https://doi.org/10.1016/j.foodcont.2016.11.031
- Al-Azzam, D.A. F. M. (2015). The impact of service quality dimensions on customer satisfaction: A field study of Arab Bank in Irbid City, Jordan. *European Journal of Business and Management*, 7(15), 45-53.
- Alsharari, Y.S., Al-Rwaily, F.M., and Alsharari, A. (2017). The moderating effect of commitment to service quality on the relationship between communications, customer relation management and organizational performance: Evidence from the Kingdom Saudi Arabian hospitals. *International Journal of Academic Research in Business and Social Sciences*, 7(10), 366-382.
- Ananth, A., Ramesh, R., and Prabaharan, B. (2010). Service quality gap analysis in private sector bank-a customer perspective. *Indian J. Commer. Manag. Stud.* 2, 245–252.
- Arsanam. P., and Yousapronpaiboon, K. (2014). The relationship between service quality and customer satisfaction of pharmacy department in public hospitals. *International Journal of Innovation*, *Management and Technology*, 5(4), 261-275.
- Babakus, E., and Glynn, W. M. (1992). Adapting the SERVQUAL scale to hospital services: An empirical investigation, HSR. *Health Services Research*, 26(6).
- Bernama. (2019). Jakim: Firms face RM5m fine for misleading consumers on halal status. Retrieved from https://www.nst.com.my/news/nation/2019/01/449791/jakim-firms-face-rm5m-fine-misleading-consumers-halal-status
- Ennew, C., Waite, N., and Waite, R. (2013). Financial Services Marketing: An International Guide to Principles and Practice. Routledge: London, UK. ISBN 978-0-415-52167-3.
- Flick, U. (2015). *Introducing Research Methodology: A Beginner's Guide to Doing a Research Project.* United Kingdom: Sage.
- Hamid, N. A. A., Shahwahid, F. M., Othman, N., and Saidpudin, W. (2017). Challenges and ways improving Malaysia halal food industry. *Sci.Int.(Lahore)*, 29(2), 149-153.
- Jayaraman, M., Shankar, C., and Hor, W. M. (2010). Service quality and its impact on customer satisfaction in banking sector in Malaysia. *International Journal of Innovation, Management and Technology*, 4(1), 398-404.
- Kashif, M., Suzana, S., Shukran, W., and Rehman, M. A. (2015). Customer satisfaction and loyalty in Malaysian Islamicbanks: A PAKSERV investigation: *International Journal of Bank Marketing*, 33(1), 23-40.
- Lahap, J., O'mahony, B., and Dalrymple, J. (2016). The importance of communication in improving service delivery and service quality in the Malaysian hotel industry. *Procedia-Social and Behavioral Sciences*, 224, 213-220.
- Majid, M. A., Abidin, I. H. Z., Majid, H. A. M., and Chik, T. C. (2015). Issues of halal food implementation in Malaysia. *Journal of Applied Environmental and Biological Sciences*, 5(6), 50-56.
- Murad, S., Al-Kayem, A., Manasrah, A., Halemah, N. A., and Qusef, A. (2019). The correlation between customer satisfaction and service quality in Jordanian Uber and Careem. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 5186–5192. https://doi.org/10.35940/ijitee.L2777.1081219
- Navaratnaseel, J., and Periyathampy, E. (2014). Impact of service quality on customer satisfaction: A Study on customers of commercial bank of Ceylon PLC Trincomalee District. In reshaping management and economic thinking through integrating eco-friendly and ethical practices, *Proceedings of the 3rd International Conference on Management and Economics*, 26–27 February 2014; Faculty of Management and Finance, University of Ruhuna: Ruhuna, Sri Lanka, 359–364.
- Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1988). SERVQUAL: A multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 14-40.
- Parasuraman, A., Zeithaml, V.A., and Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 120-36.
- Selvakumar, J. J. (2016). Impact of service quality on customer satisfaction in public sector and private sector banks. *Purushartha J. Manag. Ethics Spirit*, 8, 1–12.
- Shanka, M.S. (2012). Bank service quality, customer satisfaction and loyalty in Ethiopian banking sector. *J. Business Admin. Manag. Sci. Res.*1, 1–9.
- Widijanto, R. S. R., and Rachmat, B. (2019). Effect of bank commitment, bank communication and handling customer complaint on customer loyalty through customer satisfaction at PT Bank Central Asia Tbk of Mojopahit Mojokerto Sub-Branch Office. *International Journal of Multicultural and Multireligious Understanding*, 6(3), 49-60.
- Yusuf, A. H., Abdul Shukor, S., and Ahmad Bustamam, U. S. (2015). Issues and challenges of halal implementation in food industry in Malaysia. *International Journal of Business and Management Study*, 2(2), 173-177. DOI: 10.15224/978-1-63248-058-3-53