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E-SERVQUAL and Its Impact on the Performance of Islamic Banks in Malaysia from the Customer's Perspective

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Abstract

Service quality has been a point of discussion from the decades as it is important for customer satisfaction, loyalty and retention. Various models have been proposed to measure the quality in the service sector. Models are modified in accordance with context and geography to assess the quality of service better. This study aims to investigate the impact of the modified e-SERVQUAL model on the customer perception about the existing relation and potential scope of doing business with a bank which in-turn will decide the performance of the bank. Statistical data was analyzed through various tests like reliability analysis, correlation and regression analysis using SPSS 25.0. The primary data of e-SQ and performance was gathered from 721 internet banking users using 32 item questionnaire, representing 72% response rates, of four selected Islamic banks of Malaysia. E-SERVQUAL was modified by adding Shariah Compliance information about banks and products for Islamic banking customers. The finding specified that efficient & reliable services, fulfillment, security/trust, and Shariah compliance information have a significant association with the performance of Islamic banks. The research is original and its implications will be helpful for Islamic banks across the world to enhance the online experience of customers, which will help them to retain the customers in the rapid changing virtual environment.

Keywords: Internet banking, Islamic Banking, e-SERVQUAL, performance, Banking, customer retention.

JEL Classifications: G4, P2, P43.

1. Introduction

Internet has become a pillar for every business enterprise. Now providing quality information and technology services to the customer is one of the major objectives of the business. As customer reaches to the website of a company must leave satisfied with the quality of information and service required by the customer (Zeithaml, Parasuraman, & Malhorta, 2002). Electronic service quality (e-SQ) has now gained importance as it is one of the factors which determine the satisfaction of customers from the services of a business. SERVQUAL model is known model for measuring service quality but there is still lack of scales which can measure the service quality in web-based applications and many existing e-SERVQUAL scales has limited or different dimensions (Zeithaml, 2002). Measuring e-service quality with use of known scales like e-SERVQUAL (Parasuraman, Zeithaml, & Malhotra, 2005), eTailQ (Wolfenbarger & Gilly, 2003), eSQ (Zeithaml et al.,

2002), WebQual 4.0 (Barnes & Vidgen, 2002), Site-Qual (Yoo & Donthu, 2001) and IS-SERVQUAL (Kettinger & Lee, 1997) need to analysis the context of research and the nature of service. However, given that the theories of e-SQ are based on consumer perceptions, do these perceptions translate well to Islamic banks?

As it is not certain whether the experience of internet website service has an impact on performance or both have no relation. Khalifa and Shen (2005) found in their study that web-based services have a positive impact on the performance and make customers loyal to the company. The objective of the present study is to check the relation and impact of e-SERVQUAL on the performance of Malaysian Islamic banks to grow their business and retain customers.

2. Literature Review

Various scales and instruments have been proposed to measure the e-SERVQUAL. It depends on the context of services provided and the country in which those services are offered. Table 1. Summarize the models and variable

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proposed by various authors to measure service quality in the online experience of the customer.

The whole model of Islamic Banking originates from Islam itself and it's all about moral and ethical values derived from principles of Islamic, Qur'an, and Sharia principles (Baber, 2018). In other words, Islamic Banking can be demarcated not only as banking that prohibits interests (known as *riba*) but also specifies how ethics and finance can be linked together as a notion to serve and lead society for the good purposes. In 2012, Director Mahmoud Mohieldin, then-World Bank Managing said "Islamic finance has the potential to cater more people's banking and investment needs, magnify its reach, and add to greater financial inclusion and stability in the developing world" (Mohieldin, 2012). Islamic banking is likely to grow to US\$296.29 billion by 2019. According to Islamic finance outlook report 2019, the global Islamic finance industry will grow slowly in 2018-2019 and in 2017 the industry has grown by 5%. Islamic finance stands for the well-being of society and mankind rather than being motivated exclusively for profit (Baber & Chinar, 2018). London is now a major center for international bonds and therefore is an important center for issuance and trading of sukuk (Islamic Bond) (Azma, Aisyah, Izzah, & Rahman, 2018). Usman (2015) in his study on Islamic banks in Indonesia found that Information technology infrastructure in Islamic banks needs to be developed in order to gain trust and retain customers.

There is an established relationship between service quality and customer satisfaction (Sureshchandar, Rajendran, & Anantharaman, 2002; Ladhari, 2009; Ilias & Panagiotis, 2010; Dahiyat, Akroush, & Abu-Lail, 2011; Samen, Akroush, & Abu-Lail, 2013; Baber, 2018). Customer satisfaction at an instance may not necessarily lead to future association with the company, so the intention to stay with company and spread word-of-mouth is really important. Services have high customer interaction with the employees of the company so they have a chance to satisfy their needs. In the online environment, company website or online application is the only means to interact with the customer and satisfy their needs (Hazlina, Reza, & Nasim, 2011). In a service sector like banking, there is a need for high customer interaction as a bank can win customer trust only by satisfying their needs. Now, this moment of truth is replaced by online interaction and while surfing banks application or website, the company has to satisfy the customer by providing the highest level of service quality (Schaupp & Belanger, 2005; Dai & Lee, 2018; Salehi, Khaksar, & Torabi, 2014). Osman, Cole, and Vessell (2006) examine service quality and customer satisfaction in Malaysia and has concluded that there is a significant relationship between the two. This study is based on traditional e-SERVQUAL model and adding one more dimension of Shariah Compliance for Islamic banks.

Table 1: E-Service Quality Models

Model	Study	No. of items	Dimensions proposed	Context of study
IS-SERVQUAL	Kettinger and Lee (1997)	4	Assurance, Empathy, Reliability, and Responsiveness	Information Systems
	Liu and Arnett (2000)	5	Design, Playfulness, Quality of Information, Security, and Service	Website
	Van Riel et al. (2001)	3	Core Services, Supporting Services, and User Interface	Medical Web Portal
Site-Qual	Yoo & Donthu (2001)	4	Aesthetic Design, Ease of Use, Processing Speed, and Security	Online Shopping Sites
WebQual	Loiacono et al. (2002)	12	Business Process, Design Appeal, Fit to Task, Flow, Innovativeness, Integrated Communication, Interactivity, Intuitiveness, Response Time, Substitutability, Trust, and Visual Appeal	e-Commerce
WebQual 4.0	Barnes & Vidgen (2002)	5	Design, Empathy, Information Quality, Trust, and Usability	Online Book Stores
	Madu & Madu (2002)	15	Aesthetics, Assurance, Differentiation and Customisation, Empathy, Features, Performance, Reliability, Reputation, Responsiveness, Security and Integrity, Serviceability, Storage Capacity, Structure, Trust, and Web Policies	Online Shopping Sites
eSQ	Zeithaml et al. (2002)	11	Access, Aesthetics, Assurance/ Trust, Customisation/ Personalisation, Ease of Navigation, Efficiency, Flexibility, Price Knowledge, Reliability, Responsibility, and Security	Online Shopping Sites
eTailQ	Wolfenbarger & Gilly (2003)	4	Customer Service, Design, Privacy/Security, and Reliability/Fulfilment	Online Shopping Sites
	Yang et al. (2005)	5	Accessibility, Adequacy of Information, Content Usefulness, Interaction, and Usability(include Security/ Privacy)	Web Portals
E-S-Qual	Parasuraman et al. (2005)	4	Efficiency, Fulfilment, Privacy, and System Availability	Online Shopping Sites

3. Research Design

3.1. Conceptual Framework

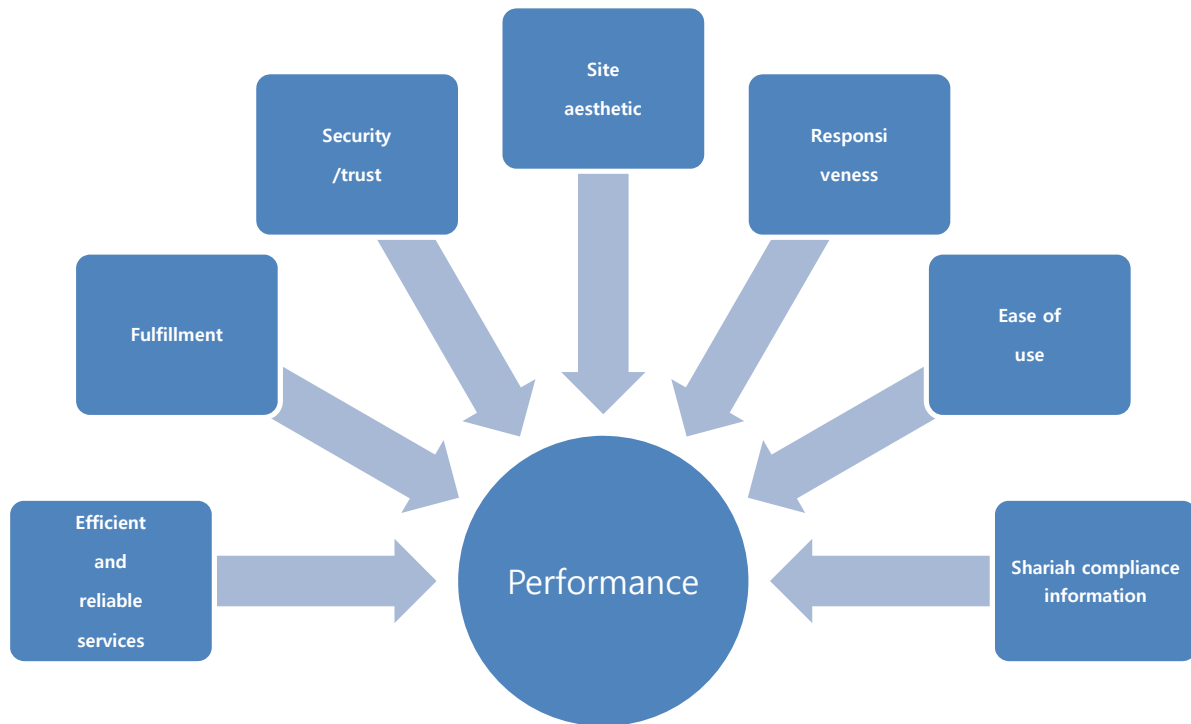


Figure 1: Model

3.2. Instrumentation

The survey instrument was a written questionnaire consisting of eight sections:

(a) Demographic profile (b) Efficient and reliable (c) Security-trust (d) Site aesthetic (e) Responsiveness (f) Ease of use (g) Fulfillment (h) Shariah compliance information (i) Customers Recommendations. All the questions used a 5-point Likert scale in which 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, or 5 = strongly agree.

4. Estimations

The demographic profile of this study is presented in Table 2. This table provides the overall account of 721 respondents. In this profile, the majority of the respondents were male, that is, 88% and 12% of the respondents were female. Also, 64% of respondents were married, whereas 36% of participants were single. As per the data, most of the respondents were between 31–40 years of age (44%),

followed by 41–50 (34%), 20–30 (10%) and 50 and above (10%). Most of the respondents use the internet and do banking transactions online rather than going to the bank in-person.

Table 2: Profile of Respondents.

Demographic items	Frequency	Per cent (%)
Gender		
Male	634	87.9
Female	87	12.1
Marital status		
Single	257	35.6
Married	464	64.4
Age		
20–30	85	11.8
31–40	319	44.2
41–50	245	34.0
50 and above	72	10.0
Use of internet		
Rarely	38	5.3
Sometimes	119	16.5
Often	233	32.3
Mostly	331	45.9

5. Validity and Reliability

The dimensions for this research are adapted and modified based on e-SERVQUAL developed by Parasuraman et al. (2005). For internet banking website, variables Efficient and reliable, Security-trust, Site aesthetic, Responsiveness, Ease of use and Fulfillment with 20 items are used in this study which are taken from various studies. Grounded on the review of Islamic banking, this study will add one new dimension –Shariah compliance information with 3 items to study how Shariah information about the products and services offered by banks have an impact on the performance of the bank. The construct of performance was developed with 9 items based on the customer perception about existing services and potential association with Islamic banks.

5.1. Reliability Analysis

The reliability test was assessed by measuring the internal consistency of the items representing each construct of e-SQ and performance using Cronbach's alpha in table 3. The reliability of each construct of e-SQ and performance is more than 0.7 which is acceptable (Cronbach, 1951). Thus, the e-SQ and performance data in this research are reliable and valid for further analyses.

Table 3: Reliability Analysis

Dimension	Items	Cronbach's alpha
Efficient and reliable	4	.892
Security-trust	3	.722
Site aesthetic	3	.889
Responsiveness	3	.800
Ease of use	3	.822
Shariah compliance	3	.883
Fulfillment	4	.865
Performance	9	.826
Combined scale	32	.953

Table 4: Pearson's correlation of coefficient

		Efficient and reliable services	Security /trust	Site aesthetic	Responsiveness	Ease of use	Shariah compliance information	Fulfillment
Performance	Pearson Correlation	.719**	.589**	.477**	.464**	.140**	.667**	.701**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	721	721	721	721	721	721	721

6. Results and Analysis

The Pearson's correlation of coefficient analysis performed revealed that a strong positive relationship exists between Efficient and reliable services, Shariah compliance information and Fulfillment with the performance of Islamic banks as shown in Table 4. The three dimensions, Security, site aesthetics, and responsiveness, have a nearly similar moderate correlation with performance. Ease of use of website has a low and loose correlation with the performance of Islamic banks.

The result of the multiple regression analysis indicated that all variance inflation factor (VIF) values for the seven independent variables are less than 10 which indicated the threat of multicollinearity problem is insignificant with this model as each independent variable has a loose correlation as shown in Table 5.

Table 5: Correlations between independent variables.

Independent variables	Collinearity Statistics	
	Tolerance	VIF
Efficient and reliable	.216	4.623
Security-trust	.362	2.764
Site aesthetic	.173	5.780
Responsiveness	.176	5.675
Ease of use	.771	1.297
Shariah compliance	.323	3.098
Fulfillment	.176	5.679

Table 6. shows the results of regression analysis in which efficient and reliable services, security/trust, Shariah compliance information and fulfillment of promises and transaction has a significant impact on the customer recommendations and in turn on the performance of the banks. Independent variables like site aesthetic, responsiveness and ease of use have no significant role in determining the performance of banks through internet banking. The analysis shows that 56.3% of data fits in the model and thus the inclusion of Shariah compliance information variable in e-SERVQUAL Model in case of Islamic banks can be justified.

Table 6: Regression Analysis

Independent variables	β	t-value	p-value
Efficient and reliable	.372	6.993	.000*
Security-trust	.106	2.579	.010**
Site aesthetic	-.034	-.567	.571
Responsiveness	.043	.723	.470
Ease of use	.015	.516	.606
Shariah compliance	.206	4.731	.000*
Fulfillment	.128	2.161	.031**

Notes: Significance at: * $p < 0.01$, ** $p < 0.05$ $R^2 = 0.563$, adjusted $R^2 = 0.559$.

Dependent variable: Performance

7. Discussions

The results of correlation analyses proved that there is a positive correlation between e-SQ and performance for Malaysian Islamic banks. The R-square value of the multiple regression results shows that 56.3 percent of the variation in performance can be explained by the variation in the independent variables of efficient and reliable services, fulfillment, security/trust, and Shariah compliance information. Future researches should consider dimensions of reward points, FinTech, mobile application availability and convenience. Islamic banks which are efficient and reliable in banking transactions will retain customers. Online money transactions are always under threat of hacking and fraud so the security of the system will increase the customer base for banks. Site aesthetic may not hold importance as Islamic bank customers don't choose banks based on ambiance and aesthetics. Shariah Compliance information helps customers to know about the product and they feel a sense of belonging towards their religion if they avail such products and services. Also providing such information on the website shows the commitment of the bank towards Shariah regulations. Fulfillment of transactions and other services makes the relationship better between customers and banks and also doesn't leave any scope of the complaint and opportunity of switching to another bank.

8. Conclusions

This research was conducted to study the impact of modified e-service quality dimensions on the

performance of Islamic banks in Malaysia. It is important to know the customer perception about the existing relation and potential scope of doing business with a bank which in-turn will decide the performance of bank. Modified e-SERVQUAL was adopted by adding Shariah dimension in this scale to determine the impact on performance of bank. All the dimensions are positively correlated with performance and factors like Reliability, ease of use, fulfillment and Shariah compliance information has a significant association with the performance of Islamic banks in Malaysia.

9. Limitations

Only four Islamic banks were studied in this research. More banks may be included in future research to get a better conclusion.

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Questionnaire

E-SERVQUAL and its impact on the performance of Islamic banks in Malaysia

	Item no	Items	Strongly Disagree	Disagree	Neutral	Agree	Agree Strongly
Efficient and reliable services	ER1	The service delivered through the Internet banking pages is quick					
	ER2	The Internet banking part of website is always available for business					
	ER3	When the Internet banking section promises to do something by a certain time, it does so					
	ER4	Complete quickly a transaction through the bank's website					
Fulfillment	FUL1	Organization and structure of Internet banking pages easy to follow					
	FUL2	Accurate promises about the services being delivered					
	FUL3	The Internet banking part of website launches and runs right away					
	FUL4	Internet banking transactions are always accurate					
Security /trust	ST1	No misuse of customers personal Information					
	ST2	Feel safe in internet banking transactions					
	ST3	Confidence in the internet banking service					
Site aesthetic	SA1	The Internet banking webpage is attractive					
	SA2	The Internet banking webpage is visually pleasing.					
	SA3	I spend time trying to grow in understanding of my religion					
Responsiveness	RES1	Prompt response to customer request					
	RES2	Quickly resolves online transaction problems					
	RES3	The Internet banking customer services are easily accessible by telephone/ other means.					
Ease of use	EOU1	Easily find what customers need on the website					
	EOU2	Graphic representation of banks' websites help customers to use internet banking services					
	EOU3	Able to use the Internet banking utilities of website without a lot of effort					
Shariah compliance information	SC1	The Internet banking webpage provides all information of Shariah regulations about banking and investments					
	SC2	The Internet banking webpage provides information about compliance of products with Shariah Regulations.					
	SC3	The bank website helps to understand the Islamic finance and banking with proper references from Quran and Hadith (Muslim religious books)					
Customers Recommendations	CR1	Say positive things about the company to other people.					
	CR2	Recommend the company who seeks my advice.					
	CR3	Encourage friends and relatives to buy products from the company.					
	CR4	Do more business with the company in next few years.					
	CR5	Consider the company as first choice to buy various services.					
	CR6	Do business with the company in the next few years.					
	CR7	Take some of my business to a competitor that offers better products at more attractive prices.					
	CR8	Continue to do business with the company even if its prices increases somewhat.					
	CR9	I am ready to pay higher price than the competitors charge for the benefits I currently enjoy from the					