

THE INFLUENCE OF E-SERVICE QUALITY AND TRUST ON CUSTOMER SATISFACTION AND ITS IMPACT ON CUSTOMER LOYALTY (AN EMPIRICAL STUDY ON ONLINE SYARIAH BANKING IN INDONESIA)

Muh. Fauzan Saputra, Ferdi Antonio

Universitas Pelita Harapan

ARTICLE INFO

Keywords: *Internet banking service quality, customer satisfaction, customer loyalty, Sharia online banking*

Kata Kunci: *Kualitas layanan internet banking, kepuasan pelanggan, loyalitas pelanggan, Sharia online banking*

Corresponding author:

Muh Fauzan Saputra
01618190012@student.uph.edu

Abstract: Regardless of the rise in the number of online banking users in Indonesia, its adoption and customers satisfaction on online banking services are still below the anticipated levels. The aim of this study is to analyze the influence of e-servicequality through its dimensions and trust on online banking toward customer satisfaction and its impact on customer loyalty. This study applied quantitative method with survey study design approach. Data are collected from Bank Syariah Indonesia (BSI) online banking customers. BSI is a result of merger between state-owned subsidiaries banks. Sample were taken purposively by online questionnaires with 1-5 Likert Scale in April 2021. The conceptual framework is tested empirically with SmartPLS™ 3.3. The result found that there are four dimensions that significantly influence customer satisfaction. Efficiency has the most significant influence on customer satisfaction. Trust has direct influence on customer satisfaction and impact toward customer loyalty. However, satisfaction demonstrated the biggest impact on customer loyalty. This study is fruitful for further academic research, as it describes the way Sharia online banking e-servicequality determinants predict customer satisfaction that is also impacting customer loyalty. The result of this study will be helpful to assist banking sector in building effective service marketing strategies.

Abstrak: *Terlepas dari peningkatan jumlah pengguna perbankan online, adopsi dan kepuasan pelanggan terhadap layanan perbankan online masih di bawah tingkat yang diantisipasi. Tujuan dari penelitian ini untuk meng-analisa hubungan antara dimensi kualitas layanan dan kepercayaan salam online banking terhadap kepuasan pelanggan dan dampaknya terhadap loyalitas pelanggan. Penelitian ini menggunakan kuantitatif survey. Data dikumpulkan dari nasabah BSI online banking. Bank Syariah Indonesia (BSI) merupakan hasil penggabungan dari tiga anak usaha Bank BUMN. Sampel diambil secara sengaja dengan online kuisisioner dengan skala Likert 1-5 dibulan April 2021. Kerangka konseptual diuji menggunakan SmartPLS™ 3.3. Hasil dari penelitian menemukan bahwa terdapat empat dimensi yang sangat mempengaruhi kepuasan pelanggan. Efisiensi merupakan pengaruh terkuat terhadap kepuasan pelanggan. Kepercayaan memiliki pengaruh langsung kepada kepuasan pelanggan dan dampak kepada loyalitas pelanggan. Penelitian ini bermanfaat kepada penelitian akademis lebih lanjut, karena penelitian ini menjelaskan bagaimana penentu kepuasan pelanggan bank Syariah memprediksi kepuasan pelanggan dan juga mempengaruhi loyalitas pelanggan. Hasil penelitian ini akan membantu sector perbankan dalam membangun strategi marketing yang efektif.*

INTRODUCTION

Bank is one of the pillars in economic prosperity that connect those who have capital with those that need capital. Banks collect savings from individuals as well as institutions and turn it into available investment, for instance providing finance to businesses and manufactures according to their need. Other business models in banking sector have been introduced and implemented in various ways to ensure productivity and production capabilities in every sector of economy, for instance digital banking. In Indonesia, Financial Services Authorities advance the transformation and development of the digital ecosystem through various policies in banking sector. These policies allow the advancement of digitalization to increase online banking transaction, especially in Sharia banking business group (Indonesian Financial Services Authority, 2021).

According to Khatoon and Zhengliang (2020) digital banking business, such online banking allow customer to transact quickly than the traditional banking processes, as a result transaction is becoming faster and reliable. Online banking service also allows customers to interact with banking services through network technology. Online banking provides various electronic banking activities at any time and place with low handling cost (Amin, 2016). With the use of technology, internet banking in particular, customers are able do self-service transactions.

Due to COVID-19 pandemic in 2021, Jain (2021) mentioned that many banks in Asia-Pacific are experiencing financial challenges. Many small and medium enterprises that runs in various sectors are being heavily impacted by the pandemic and struggle to repay their loan obligations. So, banks are forecasted to have an increased in credit losses and weaker earnings. On the other hand, EY research paper found that in the first half of 2020 there is a change in customer behavior in terms of cash usage and payment methods, namely the increasing usage of digital banking transactions in Hong Kong, Thailand and Singapore (Gilder, 2020; Walker, 2020; DBS, 2020). Thus, digital banking is becoming one of bank strategies to grow their number of customers as well as income generated from online banking business.

In February 2021, the government of Indonesia through the Ministry of State-owned enterprise announced a corporate action, which is a merger of three state-owned banks' subsidiaries. This corporate action created the biggest Sharia bank in the country. The three state-owned banks subsidiaries are including Bank Syariah Mandiri (BSM), BNI Syariah (BNIS), and publicly listed BRI Syariah (BRIS) (Rahman R. , 2020). After the integration of three state-owned bank subsidiaries, the company is then known as PT. Bank Syariah Indonesia, Tbk (BSI). Since Indonesia have the largest Muslim population in the world, government are encouraging Islamic financial institutions to be highly competitive. Many strategies have been implemented to strengthen Sharia financial institutions by prioritizing product excellence, differentiation, strengthen capital, cutting-edge IT and increasing digital banking businesses.

As the digital banking market develops, McKinsey & Company (2019) through its survey of financial services customers elaborates that there is evidence on the growing adoption of internet and mobile banking use, this indicates digital channels will become increasingly crucial in building loyalty and generating growth for financial institutions. According to We Are Social (2018) report in PwC (2018) there are 50 million smartphone users in Indonesia, which require Indonesian banks to construct a smartphone based specific strategy to assist end customers. This indicates digital channels will become increasingly crucial in building loyalty and generating growth for financial institutions.

Regardless of the rise in the number of online banking users, its adoption and customers satisfaction on online banking services are still below the anticipated levels. For instance, in BSI Mobile Online banking shows that there are numbers of users indicated that they were dissatisfied and provided negative reviews on both Appstore and Google store. As a result, Bank Syariah Mobile Banking, as one of the competitors showed a higher rating on Appstore & Google store. The second practical gap in BSI online banking service is the number of active Internet Banking (Cash Management) users as of March 2021 that are still below the target. The number of non-active internet banking (cash management) users reached 53% as of March 2021 (BSI, 2021). Furthermore, there are only 24% of the total customers that sign up for Internet Banking (Cash Management).

Thus, the element of electronic service quality in Islamic banking sector needs to be explored further (Kaura, Durga Prasar, & Sharma, 2015; George & Kumar, 2014). It is also necessary to explore the key factors of the quality on Online banking services and understanding how customers judge Online banking services provided by Islamic banks (Raza, Umer, Qureshi, & Dhari, 2020).

To provide best electronic customer satisfaction and electronic customer loyalty, this research paper will explore the service quality dimensions based on separate construct. This research suggests a model that enhances loyalty towards internet banking service quality through customer satisfaction in Indonesia. This model is relevant with the theory purposed by Parasuraman, Zeithaml, and Berry (1985) earlier about service quality, in which service quality has positive effect on customer satisfaction (Raza et al., 2020).

This paper refers to research study conducted by Raza et al., (2020) and modify the E-SERVQUAL model by Raza et al., 2020 (Site organization, reliability, responsiveness, user friendliness, personal needs, efficiency) by adding trust as a variable in conceptual framework. Trust was introduced by Morgan and Hunt (1994) as one of the service quality dimensions and has been tested earlier on customer satisfaction in Malaysia (Baber, 2019; Ariff, Yun, Zakuan, & Jusoh, 2012). Yet, there is a little evidence where e-customer satisfaction and e-customer loyalty is assessed by the taking Internet banking service quality dimension in the context of Indonesian Islamic bank.

The result of the test will be useful for BSI managers to gain knowledge on providing excellent electronic service quality on BSI online banking service, which should affect in the increasing of customer satisfaction and impacting customer loyalty, since it demonstrates the way internet banking service quality determinants predict e-customer satisfaction of customer which will ultimately impact e-customer loyalty. Thus, this study should help BSI managers to build effective marketing strategies and gain competitive edge on the market.

LITERATURE REVIEW

Electronic service quality

The theory of service quality has been found in the 1980s through measuring company's actual service delivery to customers' wants and needs beyond their aspirations Gronroos (1982, 1984). Later Parasuraman et al., (1985) proposed the theory of service quality that function as the differences between client's expectations, and the actual performance being delivered to the customers. The theory of SERVQUAL was originally identified by ten service quality dimensions which include access, communication, competence, courtesy, credibility, reliability,

responsiveness, security, tangibles and understanding/knowing the customer. Parasuraman et al., (1988) developed further the SERVQUAL into twenty-two dimensions, such as tangibles, empathy, responsiveness, reliability, and assurance. Next, Taylor and Cronin, (1994) proposed service quality performance measurements known as SERVPERF. SERVPERF is focus on maintaining performance and evaluating by perceptions only rather than performance-expectation that demonstrate service quality.

Al-dweeri, Obeidat, Al-dwiry, Alshurideh, and Alhorani (2017) in his research paper mentioned that E-services later defined by Zaeithaml et al., (2002) as services that are being offered on the internet. Furthermore, Santos (2003) in Ariff et al., (2012) stated that electronic service quality is the overall evaluation and judgement of excellent and quality of online service by the customers in the virtual marketplace. Internet banking service allows customers to interact with banking services through network technology. Internet banking provides various electronic banking activities at any time and place with low handling cost (Amin, 2016).

Ghotbabadi and Feiz (2015) stated that the service quality help companies to discover their weaknesses and advantages and at the same time measuring customers' needs and desires. Later Parasuraman et al., (1985) stated that service quality involves a comparison of expectations with performance. Additionally, banks use service quality as one of their effective strategies to gain competitive advantage (Tharanikaran, Sritharan, and Thusyanthy, 2017).

As market desires changes overtime, scientist and practitioners have the need to find a suitable model to measure service quality to attain a competitive. There are numbers of research study that has been demonstrated on electronic service quality dimensions in an online banking has been demonstrated, for example web-site setting, trust, access, web interface dimensions in electronic service quality in UK by Joseph et al., (1999); efficiency, problem handling and security dimensions in Hong Kong by Noel and Siu, (2005); credibility, efficiency, fulfilment and other dimensions in Sweden by Kenova and Jonasson, (2006); and in Malaysia Ariff et al., (2012) and Baber (2019). Furthermore, Zaeithaml et al., (2000) defined E-services as services that are being offered on the internet.

Later, Raza et al., (2020) proposed a modified research model of E-SERVQUAL to identify the relation between e-service quality with customer satisfaction and its impact on customer loyalty in electronic banking service landscape. Service quality model is significant on determining the success rate of an organization but also significant in describing user's experiences in an interactive virtual setting. This study incorporates modified model of e-servqual given by Raza et al., (2020) and Baber (2019) in which site organization, reliability, responsiveness, user friendliness, personal needs, efficiency, and trust are found to be essential in determining e-service quality.

Site Organization

Site organization in this framework can be considered as web design or mobile application design, proper and well detailed service description offers by online banking services (Raza et al., 2020). In modern days, website is a useful tool for business to promote their products and services to generate more income. Previous study conducted by Casalo, Flavian and Guinalia (2008) in Al-Manasra, Zaid, and TaherQutaishuf (2013) found that customers' purchase intentions through their satisfaction with website functionality and features can be influenced by the website's quality. As stated by Ojeniyi, Alo, Oyetade, Ang, and Sanusi (2015) that there are various factors that plays a big role in delivering a better service to customers through electronic service, such as layout, navigation, graphic appeal, and clarity. Rasli, Khairi, Ayathuray, and Sudirman (2018) in their

research study mentioned that website quality plays a critical role to drive business online. Previously studies have been conducted which show positive and significant result between site organization and customer satisfaction (Raza et al., 2020, Ojeniyi et al., 2015 and Rasli et al., 2018).

Reliability

According to Raza et al., (2020) research framework, reliability is the organization's capability to finish an agreed work correctly and without any failure. Raza et al., (2020) also mentioned in his research paper that reliability is one of the significant determinant factors of digital banking performance. Additionally, Hadid, Soon, and Amreegah (2020) stated that reliability is related to something that can be successfully accomplished without any interruption. Hadid et al., (2020) further explained that reliability created a sense of security from other parties that the job or transaction will be fulfilled, in control and honesty that is shown by other party due to its outstanding performance. As the use of electronic banking is growing over the years in many countries, it is now considered as sets of powerful tools that allows customer to process financial transactions at anywhere and anytime. Thus, the reliability of banking electronic services is very important for banks to promote customer satisfaction and increase customer loyalty. Previously studies have been conducted which show positive and significant result between reliability and customer satisfaction (Raza et al., 2020, Nagar and Ghai, 2019, and Hadid et al., 2020).

Responsiveness

Responsiveness is an important factor to evaluate electronic service quality provided by banks. As described by Ali and Omar (2016) responsiveness measures the ability of banking service to provide information to customers in time, able to handle the quarries and give online guarantees. As proposed by Hammoud, Bizri, and Baba, (2018) responsiveness is the readiness to provide a service that are being delivered to customer rapidly. There are four forms of responsiveness mentioned in Hammoud et al., (2018) research paper. First, is when the electronic banking system can control and operate their service properly. Next, is when the electronic banking service can guide its users to process their transactions properly in case of any failing operations. Third, responsiveness was described as a rapid solution for any possible error while running transactions in electronic banking service. Lastly, it can provide solution to the customer's inquiry with on-the-spot response. Previously studies have been conducted which show positive and significant result between responsiveness and customer satisfaction (Raza et al., 2020; Ali and Omar 2016; Hammoud et al., 2018).

User Friendliness

User Friendliness or ease of use has great influence over user fulfilment and faithfulness. Functionality, usability, reliability, and efficiency of banking online service are also plays an important role in measuring customer satisfaction Ojeniyi et al., (2015). Ojeniyi et al., (2015) further explained that the goal of user interface is to create the most of every user experience while using the banking electronic service. PwC (2018) survey also shows that one of the primary objectives provided by online services is customer experience. These experiences include creating user's interaction as simple and efficient as possible, or also known as user centered design. In addition, the design user interface should concentrate more on the user usability and the design should be more user friendly as well as interactive. Previously studies have been conducted which

show positive and significant result between user friendliness and customer satisfaction (Ojeniyi et al., 2015; Raza et al., 2020).

Personal Needs

Maslow's hierarchy explains that there are various types of significant needs of humankind that may be related with the perception of online banking, for instance safety, belongingness, and preference needs. In addition, the differences from customer's personal needs will provide an opportunity for banks to initiate new features to increase fulfillment and faithfulness of clients (Raza et al., 2020). In this research paper, as the study conducted in an online Shariah banking service, this study plan to raise concern about how customer perceived their fulfilment of spiritual needs and whether bank BSI provide service according to Islamic economic law. Previous studies have been conducted that found personal need, as one of the key dimensions of internet banking service quality that have positive and significant relation with customer satisfaction (Amin 2016; Sundaram et al., 2017; Raza et al., 2020).

Efficiency

Efficiency is when banks can complete maximum transactions filed by customers (Raza et al., 2020). According to Raza et al., (2020) efficiency has the most significant effect on e-customer satisfaction. Ali and Omar (2016) in their research paper mentioned that efficiency introduce to bank's ability to deliver online service and provide customer with those service with minimum effort. Ali and Omar (2016) also stated that efficiency in an online service quality could lead to commercial bank's profitability. In addition, Hammoud et al (2018) elaborates that efficiency is one of the factors on determining customer satisfaction that refers to quick speedy service provided by banks. Previously studies have been conducted which show positive and significant result between efficiency and customer satisfaction (Ali and Omar 2016; Hammoud et al., 2018; Raza et al., 2020).

Trust

To find a suitable model to measure service quality in online Sharia banking in Indonesia, this study incorporates the modified model of E-SERVQUAL given by Raza et al., (2020) and also incorporate trust, which is the other important theory from Morgan and Hunt (1994) that found to be essential in determining the internet service quality in banking sector. Security or trust are highly important while dealing in financial transactions (Mukhtar, 2015). As explained by Gefen (2000) in Agyei, Sun, Abrokwah, Penney, and Bofo (2020) research papers that trust is explained as belief that an organization will act or perform in socially responsible way and meet other party's expectations bare of taking advantages of its accountability. Furthermore, it was mentioned in Agyei et al., (2020) research paper that trust allows customer to share personal information to an organization and belief that that information will stay confidential. Other theory about customer trust also defined by Morgan and Hunt (1994) that trust is when one party has the confidence on other party because of its honesty and reliability. Gul (2004) in Leninkumar (2017) research paper mentioned that when customers are loyal to product and service, they are basically having trust in that company. Moreover, Yieh, Chiao, & Chu, (2007) in Dahiyat et al., (2011) research paper highlights the importance of relationships for both direct and indirect effects between service quality, customer satisfaction, trust, and loyalty. Thus, variable trust is added as a modified variable framework from Raza et al., (2020) to this research paper since trust variable has been

used in study before and showed a positive relation between customer loyalty (Baber, 2019; Ariff, et al., 2012; Sundaram et al., 2017; Leninkumar 2017; Upamannyu, Gulati, Chack, and Kaur 2015). To measure variable trust, this research will conduct a questionnaire on service quality to BSI online banking users in Indonesia (Sundaram et al., 2017).

Customer Satisfaction

The study of customer satisfaction terms has been widely used in marketing literature. Another research conducted earlier has found that customer satisfaction has positively and significantly affected customer loyalty (Akroush, Dawood, and Affara, 2015). Akroush et al., (2015) further added that customer satisfaction and loyalty served as the basis of quality products and services that offers customers value for money, which are proposed to be an essential driver for companies' success and survival. Customer satisfaction can be fulfilled when there is an attitude towards a service provider to the difference between what customers expect and what they receive. When customer satisfaction is met and fulfilled by company's performance, it will then lead to the positive outcome of customer satisfaction. As mentioned by Oliver (1980) in his research study that satisfaction is believed to have an impact on attitude change and purchase intention. Many researchers point out the fact that satisfied customer is willing to share their experiences with other people, which then will lead to business success considering the repeat purchase, brand loyalty and positive word of mouth loyalty (Angelova and Zekiri, 2011). Customer satisfaction is important because it plays a big role on organization's profitability and studies earlier shows that customer satisfaction has positive relation with customer loyalty (Raza et al., 2020). Nowadays, many companies are realizing the importance of delivering and managing various factors that leads to customer satisfaction. This research will conduct an empirical study on service quality through questionnaire from BSI online banking users in Indonesia to measure BSI online banking's customer satisfaction (Raza et al., 2020). Previously studies have been conducted which show positive and significant result between customer satisfaction and customer loyalty (Akroush et al., 2015, Angelova and Zekiri, 2011, and Raza et al., 2020).

Customer Loyalty

Customer loyalty refers to a deeply commitment held by customers to re-purchase a preferred product or service in the future despite situational influences and marketing efforts that cause customer's switching behavior Oliver (1997) in (Angelova and Zekiri, 2011). Surahman, Yasa, and Wahyuni (2020) argue that customer loyalty refers to the customer's willingness to purchase products and services from a company repeatedly for over a long period and recommend the products and services to other people in their environment. It seen as buyer behavioral intention to maintain relation with service provider. Due to the high competition among banking products and services, banking industry is anticipating customer switching behavior. To eliminate customer high switching behavior, banks are required to focus on developing and maintaining customer loyalty (Bhat, Darzi, and Parrey, 2018). Raza et al., (2020) in his paper mentioned that when customers enjoyed internet banking or when the banking product met their expectations, the level of customer service is instantly increased to their level. Thus, all the variables which were used in study conducted by Raza et al., (2020) are important to enhance customer loyalty.

Bhat et al., (2018) also added in his research paper that loyal customers are generating more profitability as they are less price sensitive as well as more amenable to cross-selling and up-selling. Loyal customers are willing to recommend various banking products and services to other

people with positive word of mouth. It was noted from Surahman et al., (2020) paper that high customer loyalty also believed to play a critical role on company's success and profitability, since loyal customer is believed to be less price sensitive and willing to repurchase company's product. This research will conduct an empirical study on service quality through questionnaire from BSI online banking users in Indonesia to measure customer loyalty in BSI online banking (Raza et al., 2020). Musiime and Tamadhan (2011) in Raza et al., (2020) found that iBSQ have a direct proportional relation with customer loyalty.

Taking into consideration from all the previous research conducted, regarding electronic service quality, the following hypothesis can be developed as follows:

H1: Site organization as a dimension of E-SERVQUAL positively influence customer satisfaction.

H2: Reliability as a dimension of E-SERVQUAL positively influence customer satisfaction.

H3: Responsiveness as a dimension of E-SERVQUAL positively influence customer satisfaction.

H4: User friendliness as a dimension of E-SERVQUAL positively influence customer satisfaction.

H5: Personal needs as a dimension of E-SERVQUAL positively influence customer satisfaction.

H6: Efficiency as a dimension of E-SERVQUAL positively influence customer satisfaction.

H7: Trust positively influence customer satisfaction.

H8: Trust positively impacts customer loyalty.

H9: Customer satisfaction positively impacts customer loyalty.

RESEARCH METHOD

This research framework is a modification of research conducted by Raza et al., (2020). The model is constructed by using service quality model and adding trust to test the relation with customer satisfaction and direct impact to customer loyalty, as seen on Figure 1. This research focuses on the quality of online banking service and contributes to customer satisfaction and customer loyalty among BSI clients in Indonesia in 2021.

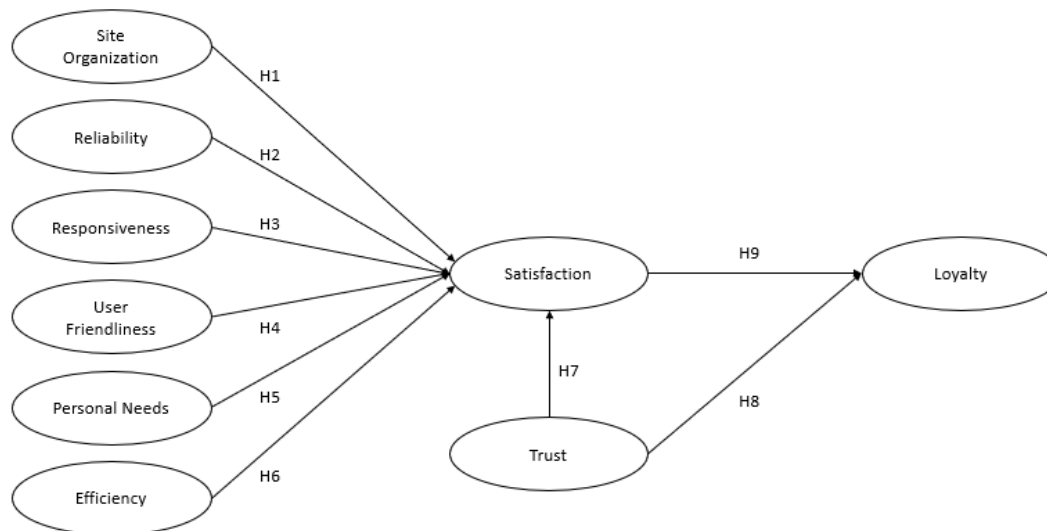


Figure 1 Pictorial Result of Path Analysis

In this study the independent variable and the dependent variable will be mediated by customer satisfaction to strengthen the direct and indirect relationship between variables. Based on the time that the data collected for this study, it can be classified as cross-sectional studies. According to Sekaran and Bougie (2016) cross-sectional study is conducted when the data is collected only once in a certain period-of-time. These data then can be used to answer the research question. In this case, based on a certain consideration, this study only collecting data at once and analyze it whether those data are valid and reliable to use.

This is a descriptive research that used correlational study that measure the correlation between two variables or more within one research model framework which are based on the data variance. A correlation analysis will test whether the hypothesis is substantiated or not (Sekaran and Bougie, 2016). There is no intervention and special treatment to the subject of the study within the period of research. This research used the data collected from the observation on the subject obtained from questionnaire formed according to the research model framework.

This research focuses on the quality of online banking service and contributes to customer satisfaction and customer loyalty among BSI clients in Indonesia in 2021. This study uses ordinal scale to test the differences for each of the construct where it is possible to convert the data received from respondents through questions in the questionnaire into numeric. The sample for this study consists of 171 BSI clients who are older than 17 years old and have used BSI Online banking service for more than one month. After the samples fulfills the criteria, questionnaire was sent electronically in the form of online questionnaire. The research tool that was used in this study is Likert scale with the aim to analyze how subjects strongly agree or disagree with statements provided on questionnaire based on a five-point scale (Sekaran and Bougie, 2016; Lee and Lin, 2005; Amin M., 2016). The items for site organization, reliability, responsiveness, user friendliness, personal needs, efficiency, and trust were adapted from Raza et al., (2020), Sundaram et al., (2017) and Leninkumar (2017).

Data were collected with various sample attributes, namely age, gender, education, level, domicile, occupation, and household expenditure. This study uses non-probability convenience sampling, as the data collected were from users that were available and easy to access. According to Lameshow et al., (1990) the minimum sample gathered are 96 samples. However, as this study uses PLS-SEM to analyze the data, the minimum samples are 160 (Kock & Handara., 2018). Hence, 200 respondents were targeted initially, however, due to uncompleted responses, the final data reproduced was 171 respondents. The respondent's information would be kept private and was made sure that the responses given were voluntarily.

Determining variables is an important factor in research study. Dependent variable is the primary interest to this study. The aim is to understand as well as to describe the dependent variable or predict the variable. As the study finds what variable influence it, it is feasible to find solutions to the concern (Sekaran and Bougie, 2016). In this research, this study is interested in analyzing dependent variable, and other variables that affect customer loyalty.

This research study uses multivariate statistical analysis method since the research method purposed in this study considered complex and uses latent variable or construct validity (Sekaran and Bougie, 2016). There are nine variables with nine hypothesis path and one mediating variable in the research model purposed. Therefore, it is required an analysis method that can examine the impact between variables simultaneously to the dependent variables. Furthermore, out of the multivariate analysis method available, this study uses partial least square - structural modelling (PLS-SEM) analysis method that is based on variance.

PLS-SEM method is used due to one of the research objectives is to better interpret the increasing complexity through exploring theoretical construction of an established theory (Hair et al., 2019). The first model is outer model or also known as the measurement model. In the outer model it shows the relation between indicators as manifest variable with latent variable (Hair et al., 2019). The outer model is used to test the reliability and validity of the indicators as a measurement scale in research model. Secondly, PLS-SEM will produce the inner model or also known as structural model. In the inner model PLS-SEM will show the relation between construct in the research model. Inner model will also test the quality of research model dan test the significancy of the influence between constructs and the coefficient analysis.

RESULT AND DISCUSSIONS

The characteristics of the samples are as shows in Table 1.1 As shown on the table that 46% of respondents under the age group of 36-45. 36% of respondents under the age of 26-35. 74% were male and 26% were female respondents. There were 80% of respondents were undergraduate and 13% were postgraduate. In terms of domicile, there were 50% of the respondents that lived in Jakarta, and 27% of the respondents were lived in other area than *Jabodetabek*. There were 59% participants that worked in private sector, 14% were entrepreneur, 105 were government employee and 4% were professional. 53% of respondents' household expenditure were 3 million to 6 million Rupiah per month, 25% spent 6 million to 10 million Rupiah per month, and 8% spent 10 million to 15 million Rupiah per month.

In terms of respondents' behavior, it was found that 58% of uses online banking to transfer and 8% to checked account statements. 51% of respondents uses BSI online banking more than five times in a month. 59% of respondents were also a customer of conventional banking. There were 60% of respondents were using mobile banking and 29% used internet banking. 72% of respondents will extremely be likely to recommend BSI online banking to other. 51% of the respondents chose BSI due to the products & services that is in accordance with Islamic law and 24% of the respondents chose BSI due to the recommendation (from figure, ulama, or parents).

Table 1.1 Respondents' Profile

Description	Category	Total	Presentage
Age	18 - 25	17	10%
	26 - 35	61	36%
	36 - 45	79	46%
	46 - 55	14	8%
	> 56	0	0%
Total		171	100%
Sex	Male	127	74%
	Female	44	26%
Total		171	100%
Education	High School	13	8%
	Senior High School	0	0%
	S1	136	80%
	S2	22	13%
	S3	0	0%
Total		171	100%

Description	Category	Total	Presentage
Domicile	Jakarta Pusat	7	4%
	Jakarta Utara	6	4%
	Jakarta Selatan	14	8%
	Jakarta Timur	52	30%
	Jakarta Barat	7	4%
	Bogor	5	3%
	Depok	7	4%
	Tangerang	0	0%
	Bekasi	27	16%
	Others	46	27%
Total		171	100%
Occupation	Professional	6	4%
	Private Employee	101	59%
	Government Employee	17	10%
	Entrepreneur	24	14%
	Housewife	6	4%
	Student	6	4%
	Retired	0	0%
	Others	11	6%
	Total		171
Household Expenditure	< 3.000.000	16	9%
	3.000.001 - 6.000.000	90	53%
	6.000.001 - 10.000.000	43	25%
	10.000.001 - 15.000.000	14	8%
	> 15.000.000	8	5%
	Total		171

Source: Data from Research Study, 2021

This research utilizes multivariant that uses PLS Sem (Outer Model & Inner Model) SMART PLS 3.3 (Ringle, Wende, & Backer, 2015; Hair et al., 2019). This technique is used to test both estimation and structural model. Analyst Hair et al., (2019) and Raza et al., (2020) suggest that PLS-SEM is effective and rational to use for analyzing complex models. This research used items that are constructed on a Likert scale. The assessment of reliability is conducted by evaluating indicator reliability and construct reliability (Hair et al., 2019). This study further assesses the effectivity of models using two methods, namely convergent validity (Hair et al., 2019) and discriminant validity (Henseler et al., 2015). All the items in this study are regarded as reliable and valid.

Table 1.2 Indicator Reliability, Construct Reliability & Construct Validity

Variable	Indicator	Outer loading	Cronbach's Alpha	Composite Reliability	Result	Average Variance Extracted (AVE)	Result
Site Organization	SO1	0,833	0.754	0.857	Reliable	0.666	Valid
	SO2	0,812			Reliable		
	SO3	0,804			Reliable		
Reliability	REL1	0,705	0.762	0.863	Reliable	0.679	Valid
	REL2	0,856			Reliable		
	REL3	0,899			Reliable		
Responsiveness	RES1	0,891	0.830	0.899	Reliable	0.749	Valid
	RES2	0,943			Reliable		
	RES3	0,751			Reliable		
User Friendliness	USF1	0,897	0.914	0.946	Reliable	0.853	Valid
	USF2	0,938			Reliable		
	USF3	0,936			Reliable		
Personal Needs	PEN1	0,888	0.896	0.935	Reliable	0.829	Valid
	PEN2	0,938			Reliable		
	PEN3	0,904			Reliable		
Efficiency	EFF1	0,882	0.908	0.943	Reliable	0.846	Valid
	EFF2	0,939			Reliable		
	EFF3	0,937			Reliable		
Trust	TRS1	0,837	0.833	0.899	Reliable	0.749	Valid
	TRS2	0,865			Reliable		
	TRS3	0,892			Reliable		
Customer Satisfaction	CS1	0,889	0.885	0.929	Reliable	0.813	Valid
	CS2	0,901			Reliable		
	CS3	0,915			Reliable		
Customer Loyalty	CL1	0,905	0.850	0.909	Reliable	0.769	Valid
	CL2	0,894			Reliable		
	CL3	0,830			Reliable		

Source: Data from Research Study, 2021

The Outer Loading > 0,708 are recommended (Hair et al., 2019). As shown on Table 1.2, all indicators in this study are reliable to test the variable on research model. All constructs are also reliable because it has Cronbach's alpha & composite reliability score between 0,7 to 0,95 (Hair et al., 2019). All indicators in this research are appropriate and well discriminated to test the construct, since it has the value of HT/MT that are lower than 0,9 (Henseler et al, 2015). On inner model analysis, this study has conducted one-tailed hypothesis test with bootstrapping method in SmartPLS™. Inner model analysis explains the relation between one latent variable and another latent variable.

On inner model analysis, this study has conducted one-tailed hypothesis test with bootstrapping method in SmartPLS™. Inner model analysis explains the relation between one latent variable and another latent variable. There are various parameters used to measure the quality of a model in the inner model, namely variance inflation factor (VIF) as shown on Table 1.2, R-square as shown on Table 1.3, and f-square as shown on Table 1.4. Furthermore, this test

can also identify whether the hypothesis in the research model proposed is supported as shown on Table 1.5.

This research has also analyzed the path through specific indirect effect test. Lastly, this research study has also conducted the importance-performance based on IPMA data that uses the value of total effect on target construct as well as mean value from the data gathered from respondents. IPMA analysis will gives an input for BSI to create a strategy on which factor should be prioritized.

Table 1.3 Multicollinearity

Variable	Customer Loyalty	Customer Satisfaction	Efficiency	Personal Needs	Reliability	Responsiveness	Site Organization	Trust	User Friendliness
Customer Loyalty									
Customer Satisfaction	2.279								
Efficiency		2.265							
Personal Needs		2.617							
Reliability		2.315							
Responsiveness		2.710							
Site Organization		2.896							
Trust	2.279	2.206							
User Friendliness		2.700							

Source: Data from Research Study, 2021

According to multicollinearity table, the highest VIF value is site organization on customer satisfaction, which is 2,896. Meanwhile, the lowest VIF value on table 1.2 is trust on customer satisfaction, which is 2,206. It can be concluded that the VIF value on the inner model calculation on each of the variable are less than 3,000. This means that all variable on inner VIF research models is ideal and there are no issues on the multicollinearity. The result of this calculation proved that the quality of research model is acceptable in terms of multicollinearity (Hair et al., 2019).

Table 1.4 R-Squared

Variable	R ²
Customer Loyalty	0.526
Customer Satisfaction	0.797

Source: Data from Research Study, 2021

Customer satisfaction variable as the mediating variable is greater than 0,750, thus it is categorized as strong. Moreover, the value of R-square for customer loyalty as independent variable is 0,526. As the value of R-square for customer loyalty is between 0,500 to 0,750, it can be concluded that customer loyalty variable is categorized as moderate. To have derived from

Table 1.3, it shows that variables in this research model can predict the dependent variable from moderate to strong (Hair et al., 2019).

Table 1.5 f-Squared

Variable	f ²	T-Statistics
Customer Satisfaction -> Customer Loyalty	0.271	2.500
Efficiency -> Customer Satisfaction	0.140	1.589
Personal Needs -> Customer Satisfaction	0.020	0.743
Reliability -> Customer Satisfaction	0.030	0.996
Responsiveness -> Customer Satisfaction	0.011	0.543
Site Organization -> Customer Satisfaction	0.015	0.564
Trust -> Customer Loyalty	0.047	1.041
Trust -> Customer Satisfaction	0.208	2.243
User Friendliness -> Customer Satisfaction	0.036	1.088

Source: Data from Research Study, 2021

Variable customer satisfaction and trust has effect size that are greater than 0,15. Customer satisfaction on customer loyalty shows that it has f-square value of 0,271 and trust on customer satisfaction has f-square value of 0,208. This means that variable customer satisfaction on customer loyalty and trust on customer satisfaction are considered to have a significant effect size. Thus, trust and customer satisfaction have medium effect size to influence customer loyalty (Cohen, 1988). In Addition, customer loyalty variable has medium predict relevance on Q² and Q², since the value of Q² and Q² predict are between 0,250 - 0,500 (Hair et al., 2019).

Table 1.6 Hypothesis Test Result

Variable	Standardized Coefficient	T-Statistics	Significance	Result
Customer Satisfaction -> Customer Loyalty	0.541	6.005	Significant	Supported
Efficiency -> Customer Satisfaction	0.254	4.244	Significant	Supported
Personal Needs -> Customer Satisfaction	0.103	1.673	Significant	Supported
Reliability -> Customer Satisfaction	0.118	2.279	Significant	Supported
Responsiveness -> Customer Satisfaction	0.076	1.270	Insignificant	Not Supported
Site Organization -> Customer Satisfaction	0.093	1.400	Insignificant	Not Supported
Trust -> Customer Loyalty	0.225	2.315	Significant	Supported
Trust -> Customer Satisfaction	0.305	5.863	Significant	Supported
User friendliness -> Customer Satisfaction	0.140	2.289	Significant	Supported

Source: Data from Research Study, 2021

Seven hypotheses in the research model proposed as shown on Table 1.5 that they were significant and supported with the value of standard coefficient and the value of T-statistics that had passed the >1,6475 T-statistics. However, two of the hypotheses proposed, namely

responsiveness to customer satisfaction and site organization to customer satisfaction shown that they were not supported with the hypothesis proposed. This study found that E-SERVQUAL dimensions seem to be different according to the type of business and country being analyzed, where most studies have either add or remove items from the instrument to create appropriate analysis to the service situation being tested.

H1 Site organization have insignificant effect on customer satisfaction. The T-statistics value for site organization dimension is lower than 1,645, which was 1,355. This is in contrary with the result of research conducted by Raza et al., (2020), Ojeniyi et al., (2015) and Rasli et al., (2018) where the result of their research study stated that site organization has significant effect on customer satisfaction.

Reliability on customer satisfaction shows positive and significant effect with value of T-statistics 2,279. This T-statistics value is greater than 1,645 which means that the variable has significant effect on customer satisfaction. Moreover, the value of standardized coefficient for reliability is 0.118, that means this variable has positive and support the path on hypothesis. In can be concluded that hypothesis H2, based on the empirical study conducted the hypothesis 2 is supported. Thus, if a value of reliability were increased, then the value of customer satisfaction on BSI online banking will also be increased. This finding on BSI online banking research study is in line with other studies that has been conducted earlier by Raza et al., (2020), Nagar and Ghai (2019), and Hadid et al., (2020).

H3 Responsiveness have insignificant effect on the customer satisfaction. This is due to the value of T-statistics that is lower than 1,645. The value of T-statistics for responsiveness on customer loyalty is 1,270. This is in contrary with the result of research conducted by Raza et al., (2020), Ali and Omar (2016) and, Hammoud et al., (2018) where the result of their research study stated that responsiveness has significant effect on customer satisfaction. H1 Site Organization and H3 Responsiveness is certainly an important factor on a website or mobile application, but respondents in this research study about Sharia internet banking shows that responsiveness does not show significant effect on customer satisfaction.

Since, there are 59% or 101 respondents that uses other online banking platform from conventional banks and 30% of the respondents are using other Sharia online banking service. This could potentially be the reason why responsiveness insignificantly influence customer satisfaction. As mentioned previously on site organization variable, Kocak, A and Ruzgar N (2017) mentioned that there is emotional factor from a brand, namely brand personality that determined consumers' brand preferences criteria. It is possible that BSI online banking users expect other factors when they use online Sharia banking platform, such as the efficiency and trust from BSI online banking.

Other studies conducted by (Abbas, Islam, Hussain, Baqir, and Muhammad, 2021) shows that favorites brand is impacting their choices and preferences of brand and product. This hypothesis test result shows managerial implications that responsiveness is not the most important factor on increasing customer satisfaction on BSI online banking, especially when customers are using other online banking service from other banks.

H4 user friendliness on customer satisfaction shows positive and significant effect with value of T-statistics 2,289. Moreover, the value of standardized coefficient for reliability is 0,140, that means this variable has positive and support the path on hypothesis. This finding on BSI online banking research study is similar with other studies that has been conducted earlier by Raza et al., (2020) and Ojeyeni et al., (2015).

H5 personal needs on customer satisfaction shows positive and significant effect with value of T-statistics 1,673. In addition, the value of standardized coefficient for reliability were 0,103, that means this variable has positive and support the path on hypothesis. In can be concluded that hypothesis H5 is supported. Thus, if a value of personal needs were increased, then the value of customer satisfaction on BSI online banking will also be increased. This finding on BSI online banking research study is similar with other studies that has been conducted earlier by Raza et al., (2020), Amin, M (2016), and Sundaram et al., (2017) on online banking service with different population.

H6 efficiency on customer satisfaction shows positive and significant effect with value of T-statistics 4,244. Moreover, the value of standardized coefficient for efficiency is 0.254, this means that efficiency variable has positive and support the path on hypothesis. In can be concluded that hypothesis H6 is supported. If a value of efficiency were increased, then the value of customer satisfaction on BSI online banking will also be increased. This finding on BSI online banking research study is in line with other studies that has been conducted earlier by Ali and Omar (2016), Hammoud et al., (2018), and Raza et al., (2020) on online banking service with different population.

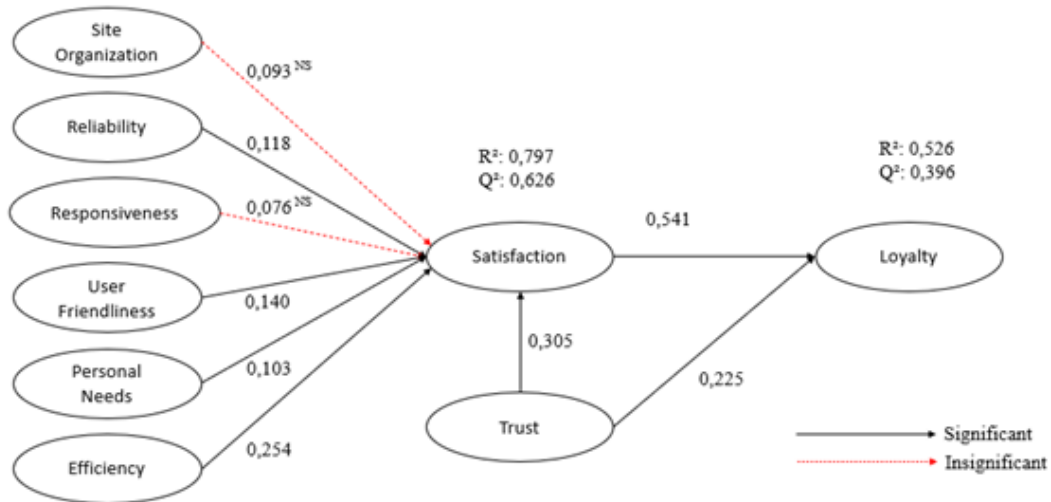
H7 trust on customer satisfaction shows positive and significant effect with value of T-statistics 5,863. Moreover, the value of standardized coefficient for efficiency is 0.305, that means this variable has positive and support the path on hypothesis. In can be concluded that hypothesis H7 is supported. This finding on BSI online banking research study is in line with other studies that has been conducted earlier (Baber, 2019; Ariff, et al., 2012; Sundaram et al., 2017; Leninkumar 2017; Upamanyu et al., 2015) on online banking service with different population.

H8 customer satisfaction on customer loyalty shows positive and significant impact with value of T-statistics 6,005. Moreover, the value of standardized coefficient for customer satisfaction is 0.541, that means this variable has positive and support the path on hypothesis. In can be concluded that hypothesis H8 is supported. Thus, if a value of customer satisfaction were increased, then the value of customer loyalty on BSI online banking will also be increased. This finding on BSI online banking research study is in line with other studies that has been conducted earlier by Akroush et al., (2015), Angelova and Zekiri, J (2011), and Raza et al., (2020) on online banking service with different population.

H9 trust on customer loyalty shows positive and significant impact with value of T-statistics 2,315. Moreover, the value of standardized coefficient for trust is 0,225, this means that variable has positive and support the path on hypothesis. In can be concluded that hypothesis H9 is supported. Thus, if a value of trust were increased, then the value of customer loyalty on BSI online banking will also be increased. This finding on BSI online banking research study is similar with other studies that has been conducted earlier Sundaram et al., (2017); Leninkumar (2017); Upamanyu et al., (2015); Baber, (2019) and Ariff et al., (2012) on online banking service with different population.

With the result of hypothesis test found above, it can be concluded that the capability of online banking service to manage its service quality, increase customer's satisfaction and eventually loyalty. In addition, customer satisfaction should be prioritized and maintained while trust should be improved by BSI managers.

Figure 2 Research Model Result



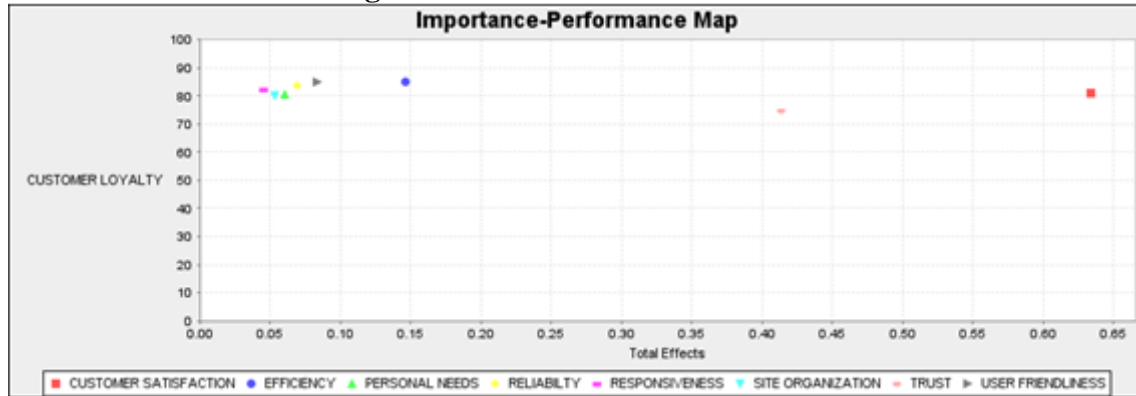
Source: Data from Research Study, 2021

Table 1.7 Specific Indirect Effect

Variable	Standardized Coefficient	T - Statistics
Site Organization -> Customer Satisfaction -> Customer Loyalty	0.050	1.355
Efficiency -> Customer Satisfaction -> Customer Loyalty	0.137	3.820
Reliability -> Customer Satisfaction -> Customer Loyalty	0.064	1.975
Responsiveness -> Customer Satisfaction -> Customer Loyalty	0.041	1.188
Trust -> Customer Satisfaction -> Customer Loyalty	0.165	4.706
Personal Needs -> Customer Satisfaction -> Customer Loyalty	0.056	1.528
User Friendliness -> Customer Satisfaction -> Customer Loyalty	0.076	2.123

Source: Data from Research Study, 2021

Specific Indirect Effect is used to analyze the most significant path from independent variable to dependent variable through mediating variable. In this study, trust has the most significant effect on customer loyalty when mediated by customer satisfaction, then followed by efficiency that has the second most significant effect on customer loyalty when mediated by customer satisfaction. Next, The result of IPMA calculation on SmartPLS™ is used to gather information about the most important variables and find out which variable is the most important or has the highest performance as well as have the biggest impact on dependent variables, therefore this variables should be prioritized by BSI managers.

Figure 3 Result of IPMA Construct

Source: Data from Research Study, 2021

As shown in Figure 3, the result of IPMA Construct shows that there was one variable in the top right quadrant, namely customer satisfaction. It can be concluded that this variable has showed its optimal performance and considered to be important by online banking users. Trust is considered important, yet it still has room for improvements. Therefore, customer satisfaction should be prioritized and maintained while trust should be improved by BSI managers. To improve customer satisfaction, efficiency has the most significant influence on customer satisfaction.

CONCLUSION AND IMPLICATIONS

This research model is found to have moderate predictive accuracy ability and medium predictive relevance ability. This research study has one path to customer loyalty dependent variable from customer satisfaction. It is also found that e-customer satisfaction as the mediating variable shows positive and significant impact on customer loyalty, and customer satisfaction is capable to mediate the effect from independent variables. In addition, this study also discovers that customer satisfaction has the highest impact to customer loyalty.

From six dimensions in service quality, there are four dimensions that significantly influence customer satisfaction, while two of the service quality dimensions, namely site organization and responsiveness has insignificant effect to customer satisfaction. So, if site organization and responsiveness were increased, it will not have significant influence on customer satisfaction. In addition, from all dimensions purposed by Raza et al., (2020), efficiency has the most significant influence on customer satisfaction, followed by user friendliness. Therefore, efficiency should be prioritized by BSI managers to increase customer satisfaction. In addition, trust also has direct influence on customer satisfaction and impact toward customer loyalty.

Based on research findings, it shows that customer satisfaction has the highest impact to customer loyalty. There are three indicators used to determine customer satisfaction, namely the simpleness of BSI online banking, the pleasantness and general satisfaction on BSI online banking. Based on the research questionnaire, the simpleness of online banking as one of customer satisfaction is still has room for improvements, yet banking pleasantness and general satisfaction with BSI online banking on customer satisfaction shows positive accomplishment and needs to be maintained by BSI managers.

To improve and maintain the e-service quality on BSI online banking, BSI managers should prioritize its resources on efficiency, which is the ability to deliver online service and provide customer with minimum effort. Additionally, efficiency in completing maximum transactions filed by customers. This study also found that trust has direct influence on customer satisfaction and impact toward customer loyalty, therefore BSI managers should also focus on building customers' trust on online Sharia banking service, for instance developing customer's belief that an organization will act or perform in socially responsible way. This is in accordance with the previous findings by Yieh, Chiao, & Chu, (2007) in Dahiyatet al., (2011) research paper that highlight the importance of relationships for both direct and indirect effects between service quality, customer satisfaction, trust and loyalty.

This study argue that E-SERVQUAL dimensions seem to be different according to the type of business and country being analyzed, where most studies have either add or remove items from the instrument in order to create appropriate analysis to the particular service situation being tested. Lastly, this study expects from the result of this empirical test can help BSI managers to identify existing concerns and issues in BSI online banking platform, so the result of this study can be one of the references to build and establish effective marketing tactics and building reliable integrated sharia financial ecosystem.

References

- Abbas, U., Islam, K. A., Hussain, S., Baqir, M., & Muhammad, N. (2021). Impact of Brand Image on Customer Loyalty with the Mediating Role of Customer Satisfaction and Brand Awareness. *International Journal of Marketing Research Innovation*, 1-15.
- Agyei, J., Sun, S., Abrokwah, E., Penney, E. K., & Bofo, O. (2020). Influence of Trust on Customer Engagement: Empirical Evidence From the Insurance Industry in Ghana. *Journal Sage Open*, 1-18.
- Akroush, M. N., Dawood, S. A., & Affara, I. B. (2015). Service Quality, Customer Satisfaction and Loyalty in the Yemeni Mobile Service Market. *International Journal Services, Economics and Management*, 53-73.
- Al-dweeri, R. M., Obeidat, Z. M., Al-dwiry, M. A., Alshurideh, M. T., & Alhorani, A. M. (2017). The Impact of E-Service Quality and E-Loyalty on Online Shopping: Moderating Effect of E-Satisfaction and E-Trust. *International Journal of Marketing Studies*, 92-103.
- Ali, B. J., & Omar, W. A. (2016). Relationship between E-Banking Service Quality and Customer Satisfaction in Commercial Banks in Jordan. *American Based Research Journal*, 34-42.
- Al-Manasra, E. A., Zaid, M. K., & TaherQutaishuf, F. (2013). Investigating the Impact of Website Quality on Consumers' Satisfaction in Jordanian Telecommunication Sector. *Arab Economic and Business Journal* 8, 31-37.
- Amin, M. (2016). Internet Banking Service Quality and Its Implication on E-Customer Satisfaction and E-Customer Loyalty. *International Journal of Bank Marketing*, 280-306.
- Angelova, B., & Zekiri, J. (2011). Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model). *International Journal of Academic Reserach in Business and Social Science*, 232-258.
- Ariff, M. S., Yun, L. O., Zakuan, N., & Jusoh, A. (2012). Examining Dimensions of Electronic Service Quality for Internet Banking Services. *International Congress on Interdisciplinary Business and Social Science*, 854-859.
- Baber, H. (2019). E-SERVQUAL and Its Impact on the Performance of Islamic Banks in Malaysia from the Customer's Perspective. *Journal of Asian Finance, Economics and Business*, 169-175.

- Bhat, S. A., Darzi, M. A., & Parrey, S. H. (2018). Antecedents of Customer Loyalty in Banking Sector: A Mediation Study. *The Journal for Decision Makers*, 92-105.
- Dahiyat, S. E., Akroush, M. N., & Abu-Lail, B. N. (2011). An integrated model of perceived service quality and customer loyalty: an empirical examination of the mediation effects of customer satisfaction and customer trust. *Int. J. Services and Operations Management*, 453-89.
- DBS. (2020, September 21). *DBS Double Down On Intelligent Banking Amid Still-Surging Digital Adoption*. Retrieved from [dbs.com: https://www.dbs.com/newsroom/DBS_doubles_down_on_intelligent_banking_amid_still_surging_digital_adoption](https://www.dbs.com/newsroom/DBS_doubles_down_on_intelligent_banking_amid_still_surging_digital_adoption)
- George, A., & Kumar, G. (2014). Impact of Service Quality Dimensions in Internet Banking on Customer Satisfaction. *Decision*, 73-85.
- Ghotbabadi, A. R., & Feiz, S. D. (2015). Service Quality Measurement: A Review. *International Journal Research in Business and Social Sciences*, 267-286.
- Gilder, A. (2020, September 18). *The COVID-19 pandemic has overturned credit markets across the world. How banks act in 2020 could shape their performance for years to come*. Retrieved from EY.com: https://www.ey.com/en_gl/financial-services-asia-pacific/covid-19-how-asia-pacific-can-lead-the-way-in-lending-transformation
- Gronroos, C. (1982). Strategic Management and Marketing in the Service Sector. *Chattwell-Bruff*, 1-106.
- Gronroos, C. (1984). A Service Quality Model and its Marketing Implications. *European Journal of Marketing*, 36-44.
- Hadid, K. I., Soon, N. K., & Amreeghah, A. A. (2020). The Effect of Digital Banking Service Quality on Customer Satisfaction: A Case Study on the Malaysian Banks. *Asian Journal of Applied Science and Technology*, 06-29.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report the Result of PLS-SEM. *European Business Review*, 2-24.
- Hammoud, J., Bizri, R. M., & Baba, I. E. (2018). The Impact of E-Banking Service Quality on Customer Satisfaction: Evidence From the Lebanese Banking Sector. *Journal Sage Open*, 1-12.
- Indonesian Financial Services Authority. (2021). *The Indonesia Financial Services Sector Master Plan*. Jakarta: Indonesian Financial Services Authority.
- Jain, S. (2021, July 15). *Industry Report Card: Top 60 Asia-Pacific Banks: Covid-19 Drives Downside Risks As Credit Losses*. Retrieved from [spglobal.com: https://www.spglobal.com/ratings/en/research/articles/200715-industry-report-card-top-60-asia-pacific-banks-covid-19-drives-downside-risks-as-credit-losses-jump-and-ear-11560805](https://www.spglobal.com/ratings/en/research/articles/200715-industry-report-card-top-60-asia-pacific-banks-covid-19-drives-downside-risks-as-credit-losses-jump-and-ear-11560805)
- Joreskog, K., & Wold, H. (1979). The ML and PLS techniques for modelling with latent variables; comparative aspects. *Proceedings of the Conference Systems under Indirect Observation*, 18-20.
- Joseph, Mathew, McClure, Cindy, Joseph, & Beatriz. (1999). Service quality in the banking sector: the impact of technology on service delivery. *International Journal of Bank Marketing*, 182-191.
- Karamoy, H., & Tulung, J. E. (2020). The Effect of Banking Risk on Indonesian Regional Development Bank. *Banks and Bank Systems*, 15(2), 130-137
- Kaura, V., Durga Prasar, C., & Sharma, S. (2015). Service Quality, Service Convenience, Price and Fairness, Customer Loyalty, and the Mediating Role of Customer Satisfaction. *Journal of Bank Marketing*, 404-442.
- Kenova, V., & Jonasson, P. (2006). Quality online banking service. *Technical Report, Jonkoping International Business School*.
- Khatoon, S., & Zhengliang, X. (2020). The Mediating Effect of Customer Satisfaction on the Relationship Between Electronic Banking Service Quality and Customer Purchase Intention: Evidence From the Qatar Banking Sector. *Sage Open*, 1-12.
- Leninkumar, V. (2017). The Relationship between Customer Satisfaction and Customer Trust on Customer Loyalty. *International Journal of Academic Research in Business and Social Sciences*, 451-465.

- McKinsey & Company. (2019). *Digital Banking in Indonesia: Building Loyalty and Generating Growth*. Jakarta: Global Banking McKinsey & Company.
- Mojambo, G. A., Tulung, J. E., & Saerang, R. T. (2020). The Influence of Top Management Team (TMT) Characteristics Toward Indonesian Banks Financial Performance During the Digital Era (2014-2018). *JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi)*, 7(1).
- Morgan, R. M., & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 20-38.
- Mukhtar, M. (2015). Perceptions of UK Based Customers toward Internet Banking in the United Kingdom. *Journal of Internet Banking and Commerce*, 1-37.
- Noel, Y., & Siu, J. C. (2005). Measuring service quality in internet banking: the case of Hong Kong. *Journal of International Consumer Marketing*, 99-116.
- Ojeniyi, A., Alo, O. K., Oyetade, E. M., Ang, M. T., & Sanusi, Y. K. (2015). Online Banking User Interface: Perception and Attitude. *International Conference on Computer, Communication, and Control Technology*, 64-69.
- Oliver, R. L. (1980). Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 460-469.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 41-50.
- PwC. (2018). *PwC Survey: Digital Banking in Indonesia 2018*. Jakarta: PwC.
- Rahman, R. (2020, October 14). *State-owned Banks From Biggest Sharia Bank in Subsidiaries Merger*. Retrieved from thejakartapost.com: <https://www.thejakartapost.com/news/2020/10/14/state-owned-banks-form-biggest-sharia-bank-in-subsidiaries-merger.html>
- Rasli, S., Khairi, N., Ayathuray, H., & Sudirman, M. S. (2018). The Impact of E-Business Website Quality on Customer Satisfaction. *Research Gate*, 1-8.
- Raza, S., Umer, A., Qureshi, M. A., & Dhari, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *The TQM Journal*, 1754-2731.
- Ringle, C. M., Wende, S., & Backer, J.-M. (2015, 06 01). *Smart PLS*. Retrieved from smartpls.com: smartpls.com
- Sondakh, J. J., Tulung, J. E., & Karamoy, H. (2021). The effect of third-party funds, credit risk, market risk, and operational risk on profitability in banking. *Journal of Governance & Regulation*, 10(2), 179–185. <https://doi.org/10.22495/jgrv10i2art15>
- Sundaram, V., Ramkumar, D., & Shankar, P. (2017). Impact of E-service Quality on Customer Satisfaction and Loyalty Empirical Study in India Online Business. *KINERJA*, 46-69.
- Surahman, I. G., Yasa, P. N., & Wahyuni, N. m. (2020). The Effect of Service Quality on Customer Loyalty Mediated by Customer Satisfaction in Tourism Villages in Badung Regency. *Jurnal Ekonomi & Bisnis Jagaditha*, 44-52.
- Taylor, S., & Cronin Jr, J. (1994). Modeling Patient Satisfaction and Service Quality. *Journal of Health Care Marketing*, 1.
- Tharanikaran, V., Sritharan, S., & Thusyanthy, V. (2017). Service Quality and Customer Satisfaction in the Electronic Banking. *International Journal of Business and Management*, 67-83.
- Upamannyu, N. K., Gulati, C., Chack, A., & Kaur, G. (2015). The Effect of Customer Trust on Customer Loyalty and Repurchase Intention: The moderating Influence of Perceived CSR. *International Journal of Research in IT, Management and Engineering*, 1-31.
- Walker, R. (2020, December 4). *How are Asian-Pacific Bank Responding to The Post-Covid Financial World?* Retrieved from IBM: <https://www.ibm.com/blogs/industries/apac-banks-post-covid-ibm-financial-services-cloud/>

-
- Wilson, N., Keni, K., & Tan, P. H. (2019). The Effect of Website Design Quality and Service Quality on Repurchase Intention in the E-Commerce Industry: A Cross-Continental Analysis. *Gadjah Mada International Journal of Business*, 187-222.
- Wold, H. (1975). Modelling in complex situations with soft information. *Thrid World Congress of Economic Society*, 21-26.
- Wold, H. (1980). Model construction and evaluation when theoretical knowledge is scarce. *Evaluation of Econometric Models*, 47-74.
- Yieh, k., Chiao, Y., & Chu, Y. (2007). Understanding the antecedents to customer loyalty by applying structural equation modeling. *Total Quality Management*, 267-284.
- Zaithaml, V. A., Parasuraman, A., & Malhotra, A. (2000). A Conceptual Framework for Understanding e-Service Quality: Implications for Future Research and Managerial Practice. Marketing Science Institute, 1-46.