EFFECT OF E-SERVQUAL ON SATISFACTION AND LOYALTY IN BANK NEGARA INDONESIA (BNI)

Bisma Ultari[1], Syafrizal[2],Eri Besra[3]

[1]Magister of Management Study Program, Economic and Business Faculty, Universitas Andalas, Padang, Indonesia
[2,3] Management Department of Economic and Business Faculty, Universitas Andalas, Padang, Indonesia

Abstract: The Covid-19 pandemic has brought many changes to life. One of them is in the banking industry, namely Bank Negara Indonesia (BNI). The presence of technology makes BNI must be able to meet the needs of its customers so that loyalty is created. One of the technologies currently available at BNI is a mobile banking application. Mobile banking makes it easy for customers to make financial transactions. This study aims to analyze the impact of the variables of e-service quality, customer satisfaction and loyalty. Questionnaire survey was conducted to 274BNI's customers who have mobile banking applications. Hypothesis testing is done using Structural Equation Modeling with PLS software. The results of this study indicate that there is a significant effect of e-servqual on customer satisfaction and customer loyalty as well. The conclusion of this research can be applied by BNI to maintain customer satisfaction and loyalty in the future.

Keywords: *Electronic Service Quality, Customer Satisfaction, Loyalty*

1.   Background

Economic conditions currently affected by the COVID-19 pandemic have an impact on all aspects of people's lives, one of which is the banking industry. This change requires the banking industry to adapt to existing changes, one of which is to change its business landscape to a digital-focused-company. This condition forces customers to limit their interactions with outsiders to encourage banks to increase the role of digital in meeting the financial needs of their customers. Digital transformation in the banking industry continues to be carried out continuously in an effort to improve banking services, especially with the COVID-19 pandemic that causes changes in consumer behavior, including in terms of banking transaction patterns. During this pandemic, banks are feeling significant growth in digital transactions. The COVID-19 pandemic since the first quarter of 2020 hit Indonesia, making consumers move from cash transactions to digital transactions.

PT Bank Negara Indonesia (Persero) Tbk has recorded the growth of digital transactions during the COVID-19 pandemic began to increase in the country. In the first quarter of 2020, the growth of digital transactions in BNI's electronic service network increased by 31% compared to the same period in 2019, be it transactions made through SMS banking, internet banking, and BNI mobile banking. The main reason for the increase was the increase in BNI Mobile Banking transaction volume which increased by 84.4% compared to the first quarter of 2019. The volume of transactions through BNI Mobile Banking in the first quarter of 2019 amounted to 43 million, increasing in the first quarter of 2020 to 63 million transactions, from Rp56.1 trillion in the first quarter of 2019 to Rp 103.4 trillion in the first quarter of 2020 (keuangan.kontan.co.id may 17, 2020).

The presence of technology will change customer behavior in terms of meeting needs, product attendance, demand and expectations for the speed of service in every type of industry including banks. Customers demand a superior service experience from financial institutions and service providers that includes uninterrupted and unlimited access to bank accounts and services offered (Jyoti &Kesharwani, 2020). Customers can conduct daily banking transactions such as checking market information, trading, and even applying for various services. Thus, the bank in this way can provide convenient and cost-effective services to its customers by adopting technology. Technology utilizing smartphone applications has used many service functions from banks, one of which is atm cards. By using the bank's online services, customers can view balances, transfer money, make bill payments, shop, open new accounts, and even apply for credits that are all available 24 hours according to their comfort, unlike physical branches. Bank BNI's e-channel services include ATM, SMS Banking, Internet Banking, Phone Banking, Mobile Banking, Mobile Banking, Mobile Services, Agen46, Tapcash, BNI Debit Online, BNI SMS Notification, BNI Ipay, BNI Smartpay, EDC BNI and Digital account opening.

The increasingly competitive banking industry makes banks in Indonesia compete to lure customers by offering various portfolios according to customer needs and desires. The presence of e-banking and m-banking helps customers to complete the needs in managing finances. Therefore, customer satisfaction in using services from banks is a leading indicator of the bank's success in running its business. On the other hand, better customer satisfaction results in a number of behavioral outcomes such as commitment, customer retention, bond building, increasing customer tolerance for service failures and positive word of mouth (Oh & Kim, 2017).

Customers currently have increasing expectation to the quality of internet banking provided by the banks. Banks must be able to improve their performance and improve customer appraisal that is expected to be their future customer. The Bank need to assesthe quality of service delivered to customers in order to identify the improvements that are required by the bank in the future (Harahap et al., 2019). E-service is an overview of consumer assessment of the provision of services whether it is in accordance with the wishes and expectations of customers so that it can influence buyers to repurchase intentions in the future. The value of customers received becomes one of the most important elements in the online platform. E-service quality and the value of services received are things that affect customer satisfaction.

2.   Literature Review

2.1.   Electronic Service Quality

According to (Rowley, 2006) electronic service is defined as an action, effort, or performance intervened by information technology (ie. website, social media, and digital devices). Electronic service quality has an important role in society, as it has become the basis of how customers interpret online banking interacting and operating on services. E-servqual demonstrates certain internet banking services can serve and facilitate online transactions effectively and efficiently (Zeithaml, 2000).

One of the e-service quality models that are often used is the E-SERVQUAL model. According to (Tjiptono, 2008), this model identifies the main dimensions (or components) of service quality; propose a scale to measure service quality (SERVQUAL), and suggest possible causes of service quality issues. The dimensions put forward by (Zeithaml, 2000) are relevant and overall meet the need to evaluate the quality of electronic services.

From the traditional model of SERVQUAL, (Zeithaml, 2000) successfully developed the five main dimensions of service quality into seven dimensions of e-SERVQUAL (Tjiptono, 2008).

2.2.   Satisfaction

According to Yazid (2005: 55), customer satisfaction is the absence of difference between expectations and protests that are actually accepted. If expectations are high, while the show of work is mediocre, satisfaction will not be achieved (it is very likely that consumers will feel disappointed). Conversely, if the performance exceeds expected, satisfaction increases and also creates loyalty.

The concept of customer satisfaction, according to (Prabhakar & Ram, 2013) there are two, namely the first view based on results, customer satisfaction is determined after the customer uses the product or service. This concept is based on the consumer's feelings towards the company offeringin order to meet the customer's needs. The second perspective is based on the process received by customer. Customers compare their expectationon offerings with performance received by them. The degree of customer satisfaction in a process-based view is assesed by the gap between expectations and realized results.

2.3.   Loyalty

Customer loyalty to a brand refers to the extent to which customers remain loyal to the product or service that the company offers over a long period of time (Stuart & Tax, 2004). According to (Zeithaml et al., 1990), positive things about the services obtained by customers and then conveyed to other customers is one form of loyalty behavior. This behavior will encourage other customers to have the intention of using services recommended by loyal customers.

The form of loyalty in financial services can be reflected in the length of time the customer is at a service provider, the number of services used and the frequency of service usage (Lewis &Soureli, 2006). Loyalty behavior also encourages customers to consider their brand first in everything they do in the banking industry. (Zeithaml et al., 1990) also show that consumer loyalty behavior encourages consumers to do more business with service providers over the next five years. The dimensions of loyalty according to (Stuart & Tax, 2004) consist of the top four dimensions, namely: word of mouth, buying intentions, price sensitivity and complaining behavior.

2.4.   Research Hypotheses

2.4.1.   E-Servqual and Satisfaction

Expectations and experiences obtained from consumers are the definition of servicequality. According to academies and analysts, customer satisfaction becomes an essential element for a business process (Churchill &Surprenant, 1982). Research of (Harris & Goode, 2010) shows that the quality of online services, namely E-Service scape which consists of aesthetic appeal, layout and functionality, and financial security has a positive and significant effect on the trust of website use. Based on the description above, the following hypothesis can be made:

H1: E-servqual affects customer satisfaction

2.4.2.   E-Servqual and Loyalty

Loyalty is a situation expected by buyers where customers are positive accompanied by a desire to buy back consistently from customers (Tjiptono, 2007). Research (Akbar & Parvez, 2009) there is a positive relationship between service quality received by customers and loyalty. The satisfaction created will benefit the

company, some of which is the relationship between the company and the customer harmoniously, the basis for customers to repurchase, and creating customer loyalty.

Quality of service has been revealed to have significant influence of consumer satisfaction and loyalty (Cronin et al., 2000). In mobile banking, the quality of existing services can meet consumer requirements. Services offered include payment transactions, loan services, inquiry services, investment services, and credit card services. Loyalty intention refers to banks improving the mobile banking service experience through service innovation that in turn will make consumer want to buy and recommend to others. Based on the description above, the following hypothesis can be made:

H2: E-servqual affects customer loyalty

2.4.3. Satisfaction and Loyalty

Behavior formed from the use of goods or services is a form of satisfaction. Satisfaction plays an important role in the smooth running of a business or company. This will have an impact on customer loyalty by reusing the goods or services offered. Customers who are loyal to the company mean that the customer already trusts the company. In research (Otman et al., 2015), satisfaction has a positive effect on loyalty and the best predictor in forming loyalty to online banking users. Thus, the hypotheses proposed in this study are as follows:

H3: Satisfaction affects customer loyalty

2.5. Research Framework

A theoretical framework is a concept of a theory or group of theories, which provides a logical explanation of the influence or some factor that has been identified as an important factor that explains the problem to be studied. Based on several variables that affect BNI Padang customer satisfaction, the conceptual framework is as follows:
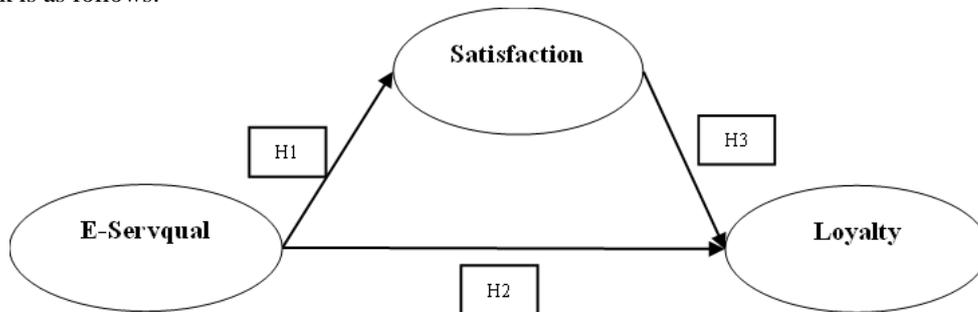

Figure1. Research Framework

3. Research Method and Results

3.1. Research Design

Causality relationships between variables can be seen from hypothesis testing in research. In this study, researchers used a type of quantitative research with a questionnaire method. The data was collected based on answers from respondents through questionnaires compiled by researchers. This research will be carried out in BNI Region 02, namely West Sumatra, Riau and Riau Islands. The questionnaire was distributed online using a google form submitted to marketing personnel at BNI Branch and conveyed WA Blast to all marketing management customers. The time for the distribution of the questionnaire was carried out within a span of 7 days, from January 15, 2022 to January 22, 2022. An independent variable is a dependent variable that affects a dependent variable. This study will analyze the influence of e-servqualon customer satisfaction and loyalty.

Measurement Model

The validity and reliability of observe variableswere evaluated using convergent validity, discriminant validityand composite reliability analysis.Convergent validity of observe variables were assessed using the average variance extracted (AVE) value. In this study it was found that all latent variables have an AVE value of more than 0.5, which means that all latent variables have good convergent validity (see Table 1).

Table 1. Convergence and Composite Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	R^2
Effi	0,957	0,957	0,972	0,920	
E-Servqual	0,983	0,983	0,985	0,881	
RPI	0,962	0,965	0,973	0,899	
Rel	0,965	0,966	0,975	0,906	

Res & Com	0,953	0,955	0,970	0,915	
STS	0,977	0,977	0,985	0,956	0,870
Sec &Priv	0,976	0,976	0,980	0,892	
WOM	0,970	0,970	0,980	0,943	
loyalty	0,979	0,979	0,983	0,904	0,892

Discriminant validity defined as the degree of uniqueness one construct compare to other constructs (Chen, Aryee and Lee, 2005). Following Forner and Larcker criterions, when the square root of AVE value is higher than thecorrelation of a construct with other constructs therefore the discriminant validity of the construct is fulfilled. From the Table 2 it can be seen that discriminant validity of the construct has been fulfilled.

Table 2. Correlation Matrix

	E-Servqual	STS	loyalty
E-Servqual	0,939		
STS	0,933	0,978	
loyalty	0,910	0,940	0,951

Structural Model Analysis

In this structural model analysis, at least it contains information about the value of the regression coefficient and the value of the statistical t-test. With this value, the researcher can test the hypothesis. In more detail, the results of the structural model analysis can be seen in Table 3.

Table3. Structural Model Analysis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ($|O/STDEV|$)	P Values
E-Servqual -> STS	0,933	0,929	0,019	48,686	**0,000**
E-Servqual -> loyalty	0,253	0,252	0,105	2,400	**0,017**
STS -> loyalty	0,704	0,703	0,101	6,939	**0,000**

The results of this study found that the coefficient of determination of the satisfaction variable was 0,870 (see Table 1). This means that 87% of the variation in customer satisfaction is influenced by E-Servqual variables. In addition, the results of this study also found that the coefficient of determination of loyalty variable was 0,892 (see Table 1). This means that 89,2% of the variation in loyalty is influenced by the variables of E-Servqual and Satisfaction. Furthermore, Table 3 also shows that the path value between E-Servqual towards satisfaction is β = 0.933with t count of (t = 48,686) and the path value between E-Servqual towards loyalty is β = 0.253with t count of (t = 2,4) . From the path value, it can be concluded that the hypothesis H1 (E-Servqual has a significant influence on customer satisfaction) and H2 (E-Servqual has a significant effect on customer loyalty) are supported.

Table 3 also shows that the path value between satisfaction towards loyalty is β = 0.704with t count of (t = 6,939). From the path value, it can be concluded that the hypothesis H3 (satisfaction has a significant effect on loyalty).

3.2.   The Structural Model

In this study will use structural equation model (SEM) technique with PLS (Partial Least Square) software. According to the high collectibility of SEM makes it easier for researchers to connect between theory and data. The study used a partial least square (PLS) approach based on components or variants. The PLS approach is an alternative approach that shifts from a covariance-based SEM approach to a variant-based (Latan, 2017).
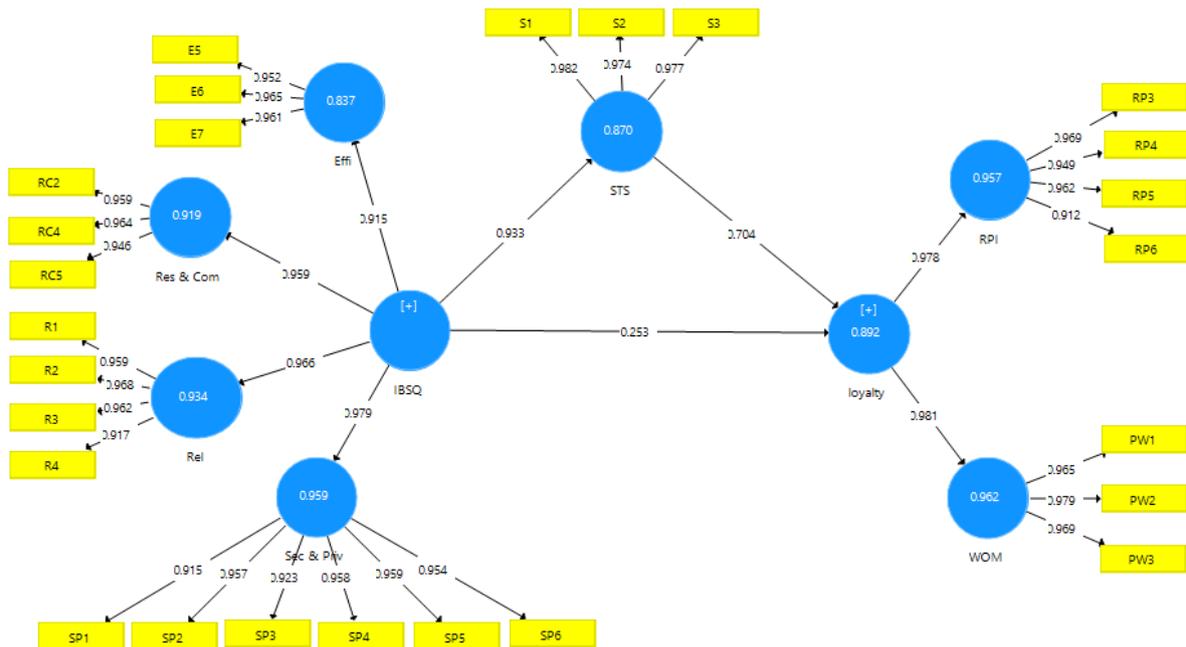
Figure 2. The Framework of Structural ModelAnalysis

4. Result and Discussion

4.1 Electronic Service Quality to Satisfaction

The influence between electronic service quality (e-servqual) on satisfaction can be concluded based on hypothesis testing conducted proven that there is a positive and significant influence between variables. This means that the higher the quality of service received by customers electronically on BNI mobile banking will further increase customer satisfaction. This means that as a service provider bank, BNI must continue to improve the quality of services provided to customers.

E-servqual plays an important role in the company, because with this variable will help the company in maintaining its customers. Customers who have felt the satisfaction of service received in accordance with the needs will form the nature of loyalty. This has an impact on improving the company's performance by maintaining its services.   The costs incurred to get new customers are greater than retaining old customers. Therefore, e-servqual is an important component for companies, especially BNI in this research because it can maintain customer satisfaction. The characteristics of respondents in this study were dominant with respondents aged 20-30 years who belonged to the millennial generation. This generation is fast in adopting new technologies. Technology is now a prime necessity for millennials.   One of them is BNI mobile banking application that helps facilitate customers in financial transactions, such as making transfers, charging digital money, bill payments, and transactions. other finances. Bank Negara Indonesia, must be able to bridge customer needs in order to meet their needs.

Research from Perera(2011) shows a positive relationship between satisfaction and the dimensions of electronic quality of service such as assurance, reliability, and responsiveness attributes.This is also supported by research conducted by Syafrizal and Geni (2020) that e-servqual has a significant impact on customer satisfaction. Examples of implementing technology in the form of fingerprint, facial recognition, and iris scanning will make consumers feel comfortable when transacting finances.

4.2 Electronic Service Quality to Loyalty

The results of this study showed that there was an insignificant influence between e-servqual variables on customer loyalty. This means that the higher the quality of service received by customers does not have a significant impact on customer loyalty to BNI mobile banking applications.

This is in accordance with research (Amin, 2016) which states that e-service quality has no positive and significant effect on loyalty. This is because the quality of service has an indirect impact on loyalty when customers are satisfied with the services received. Research(Baumann et al., 2007) found that customer satisfaction would make them willing to recommend the bank toothers. Therefore, more customers who are satisfied with Bank Negara Indonesia, the more loyal their customers will be. This will be inversely proportional

if the customer is not satisfied with the existing service, the customer is likely to leave the bank and go to the competitor's bank.

4.3 Satisfaction to Loyalty

The results showed a significant influence between variable satisfaction and loyalty. This shows that the satisfaction obtained by customers will form loyalty to Bank Negara Indonesia. The satisfaction obtained can be in the form of services, relationships with banks, and experiences felt while using the mobile banking application. This is in line with research from Foroudi et., al (2016) where with the innovation created by the company, consumers will be loyal and improve the reputation of the company so that Loyalty from consumers will increase. Customers who are satisfied with BNI's mobile banking services will tend to recommend BNI to others and this is a form of customer loyalty to Bank Negara Indonesia.

5. Conclusion and Recommendation

This study found the important role of E-servqual as predictor of satisfaction and loyalty. Providing e-servqual that is equal or exceed customer expectation is required to result on customer satisfaction. Furthermore, customer satisfaction to mobile banking usage is very crucial to develop customer loyalty. In addition, the ability of e-servqual to predict loyalty indirectly is higher than direct relationship. In other words, the e-servqual that result on customer satisfaction will enhance customer loyalty.

Today, technological developments and changing circumstances have become uncertain. The trend towards digital products is getting higher. Companies in the banking industry, one of which banks must be careful in making strategic decisions for their companies so that the impact persists. Satisfaction and loyalty factors are one of the important factors for banks to retain their customers. Many factors affect customer satisfaction and loyalty to the bank. One of them is the presence of BNI mobile banking application will help the formation of customer satisfaction and loyalty. Bank Negara Indonesia needs to improve the quality of service in mobile banking in order to increase customer satisfaction. Fitur on the application is more friendly for use by customers. BNI can ask for input from customers (voice of customer) so as to improve the quality of mobile banking services in accordance with customer's desires. The security of personal information from customers so that it can be further improved to support the trust and satisfaction of nasabah towards BNI.

Reference

[1]. Abu-Shanab, E., &Anagreh, L. (2015). Impact of electronic customer relationship management in banking sector. *International Journal of Electronic Customer Relationship Management*, *9*(4), 254–271. https://doi.org/10.1504/IJECRM.2015.074196

[2]. Amen, M. (2016). Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. *International Journal of Bank Marketing*, *34*(3), 280–306. https://doi.org/10.1108/IJBM-10-2014-0139

[3]. Baumann, C., Burton, S., Elliott, G., &Kehr, H.M. (2007). Prediction of attitude and behavioural intentions in retail banking. *International Journal of Bank Marketing*, *25*(2), 102–116. https://doi.org/10.1108/02652320710728438

[4]. Febrian, D., Simanjuntak, M., &Hasanah, N. (2021). The Effect of Benefits Offered and Customer Experience on Re-use Intention of Mobile Banking through Customer Satisfaction and Trust. *Journal of Finance and Banking*, *25*(3), 551–569. https://doi.org/10.26905/jkdp.v25i3.5879

[5]. Foroudi, P., Jin, Z., Gupta, S., Melewar, T.C., &Foroudi, M.M. (2016). Influence of innovation capability and customer experience on reputation and loyalty. *Journal of Business Research*, *69*(11), 4882–4889. https://doi.org/10.1016/j.jbusres.2016.04.047

[6]. Harahap, D. A., Hurriyati, R., Gaffar, V., Amanah, D., & Loyalty, A.C. (2019). *Service Quality Towards Bank Customer Loyalty (Empirical Study at BNI USU Medan)*. *4*(5), 1–6.

[7]. Jyoti, &Kesharwani, S. (2020). E-Service Quality in Banking industry-A Review. *Global Journal of Enterprise Information System*, *12*(3 SE-View Point (VP)), 74–83. https://doi.org/10.18311/gjeis

[8]. Latan, H. (2017). Partial Least Squares Path Method : Basic Concepts, Methodological Issues, and Application. In *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*. Springer. https://doi.org/10.1007/978-3-319-64069-3_6

[9]. Molinillo, S., Navarro-García, A., Anaya-Sánchez, R., &Japutra, A. (2020). The impact of affective and cognitive app experiences on loyalty towards retailers. *Journal of Retailing and Consumer Services*, *April 54*, 101948. https://doi.org/10.1016/j.jretconser.2019.101948

[10]. Oh, H., & Kim, K. (2017). Customer satisfaction, service quality, and customer value: years 2000-2015. *International Journal of Contemporary Hospitality Management*, *29*, 2–29. https://doi.org/10.1108/IJCHM-10-2015-0594

[11].   Perera, A. L. D. and G. A. G. D. L.(2011). Interrelations between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the. *International Journal of Business and Management*, *6*(3), 21-22.

[12].   Rashwan, H. H.M., Mansi, A. L.M., & Hassan, H. E. (2020). Exploring electronic -loyalty antecedents in Egyptian commercial banks; Electronic customer relationship management and banking electronic satisfaction. *Journal of Business & Retail Management Research*, *14*(02), 56–72. https://doi.org/10.24052/jbrmr/v14is02/art-

[13].   Syafrizal, S &Geni. S.L. (2020). The link of e-servqual& perceived justice of e-recovery to satisfaction and loyalty.