

Moderation Effect Customer Commitment: E-Service Quality and E-Customer Relationship Management to Customer Loyalty

Susriyanti¹, Aidil Putra², Nanik Istianingsih³, Rio Nardo⁴, Fitri Yeni⁵

¹Universitas Putra Indonesia YPTK Padang, Padang City, Indonesia

²STMIK-AMIK Jayanusa, Padang City, Indonesia

³IAK Setih Setio Muaro Bungo, Jambi, Indonesia

⁴Universitas Binawan, DKI Jakarta, Indonesia

⁵Universitas Putra Indonesia YPTK Padang, Padang City, Indonesia

Corresponding email: susriyanti@upiytk.ac.id

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Abstract. This study is a descriptive causative study using primary data processed with SPSS and SmartPLS. The purpose of this study is to see how the influence of customer commitment as a moderation of e-service quality and e-consumer relationship management on customer loyalty at Bank Nagari in Padang City. In previous studies, customer commitment functions as an intervening between E-service quality and e-consumer relationship management on customer loyalty was not proven. However, many other studies have found a direct influence between E-service quality and e-consumer relationship management on customer loyalty. The population of the study was 200 Bank Nagari customers in Padang City, taken by tabulation of the determination of the number of samples Joreskog and Sorbom. There are 4 variables in the study, namely: customer loyalty (Y) as an exogenous variable, customer commitment (M) as a moderation, e-service quality (X1), and e-consumer relationship management (X2) as an endogenous variable. Data collection through questionnaires. Hypothesis testing was conducted using Structural Equation Model (SEM) Partial Least Square (PLS) with Moderated Regression Analysis (MRA) approach. The results of the hypothesis test concluded that the variables e-service quality and e-consumer relationship management have a positive and significant effect on customer loyalty directly. Customer commitment cannot moderate the effect of e-service quality and e-consumer relationship management on customer loyalty.

Keywords: E-Service Quality; E-Customer Relationship Management; Customer Commitment; Customer Loyalty

INTRODUCTION

This study used customers at Bank Nagari in Padang City by conducting an initial survey on 200 customers where 43% were found to have passive accounts. The number of customers at Bank Nagari according to the 2023 annual report reached 1,669,892 customers with an increase of 114,206 or 7.34%. In 2022, the number of Bank Nagari customers reached 1,555,686 customers with an increase of 155,480 customers or an increase of 11.10%. The low achievement of Bank Nagari in 2023 indicates a decline in customer loyalty as evidenced by a decline in the development of the number of its customers. The large number of passive accounts at Bank Nagari also provides an overview of the decline in customer loyalty. This is because according to the customer's view, there is a decline in the services provided which makes them dissatisfied with using the company's services.

Companies must strive to improve their best services, in order to meet customer needs so as to provide comfort in using services that will increase loyalty to the company.

According to Susriyanti (2023) customer loyalty is translated as a form of customer commitment to the use of a brand or company service in the long term that is positive. Customer loyalty is obtained from a combination of satisfaction and proper complaint handling so as to provide a sense of comfort in using the service. The concept of customer loyalty is shown by the existence of services repeatedly and recommending them to others. These recommendations will increase the number of new customers so that changes in the number of customers will be able to implement changes in customer loyalty.

Khan (2020) explains that loyalty is formed from attitudes or behaviors that reflect the tendency of customers to reuse a brand or company service. Customer loyalty depends on the attitude and sentiment towards the brand that drives them to be involved in using the service. Customers who have been involved will also recommend it to others as a form of loyalty and belief in the company's services. So customer loyalty is closely related to customer commitment to the company's services.

Customer loyalty will be very beneficial because it can maintain a long-term relationship between the company and the customer. This is also inseparable from the commitment of customers who want to always use the company's services. Customer commitment is an attitude or characteristic of each customer who promises to increase their trust in using the company's services (Kethan, 2022). Commitment is formed when customers have positive feelings about the services provided. Sometimes there are also alternative or forced commitments because customers do not have knowledge of replacement services so they continue to use the company's services. Customer commitment will emerge when customers are allowed to use the company's services properly and appropriately. So in this case, customer commitment will strengthen all indicators that cause changes in loyalty.

Customer loyalty is influenced by the e-service quality felt while using the company's services. Customers who have high loyalty to the company will seriously consider moving to competitors because they feel the pleasure of the service received (Muharam, 2021). Quality service standards through electronic media will affect the level of customer satisfaction so that it will increase trust which results in loyalty. This will benefit the company because loyalty allows the addition of new customers so that it will increase competitive advantage.

Upadhyaya (2020) explains that e-service quality will trigger the success of a company in all aspects because it is an obligation as a service provider. Whatever the business, always prioritize service quality, both offline and online. In general, e-service quality has an intangible, heterogeneous, and inseparable character. The higher the increase in e-service quality, the more customer desires will be fulfilled so that customer loyalty will be higher.

Bank Nagari has e-service quality through mobile banking. The mobile banking application is a form of e-service quality carried out by Bank Nagari in order to improve the quality of its services through the internet network. However, Bank Nagari customers have not maximized the use of the mobile banking application due to the lack of services received.

Data obtained in 2023 showed that the number of Bank Nagari customers reached 1,602,189 customers, while Bank Nagari mobile banking users only reached 287,483 customers or 17.94% of the total customers. Mobile banking users provided comments complaining that there were frequent disruptions that caused a decrease in the perceived e-service quality. Observations made on November 8, 2024 showed that the application received a rating of 3.3 on the Playstore, indicating the weak e-service quality felt by customers. This will reduce customer loyalty in using Bank Nagari mobile banking.

The findings in the research of Ibrahim (2020) and Sasono (2021) concluded that e-service quality has a positive and significant impact on customer loyalty. The findings concluded that every increase in e-service quality felt by customers can increase customer trust in the services provided so that customer loyalty will increase. However, the findings in the research of Juwaini (2022) concluded that e-service quality did not have a significant impact on changes in customer loyalty. The findings in the results of previous studies showed differences (gaps), so further research is needed on the relationship between e-service quality and customer loyalty. The research was conducted on customers who use the Bank Nagari mobile banking application.

Haudi (2022) explains that customer loyalty is influenced by electronic customer relationship management (e-CRM) felt by customers in enjoying the company's internet services. The implementation of e-CRM can generate significant value for companies and customers who have a mutually connected relationship through electronic media. The advantages of using e-CRM will make customers feel happy because there are many choices about the services provided, fast responses in solving problems, and easy access to information. The main purpose of using e-CRM is to identify, maintain, and retain customers so that it will increase the use of services repeatedly. So the increase in e-CRM makes it possible to build relationships between customers and companies so as to provide value that can increase customer loyalty.

The findings in Riyadi's (2021) study concluded that there is a significant relationship between e-CRM and customer loyalty. Improving e-CRM can increase the value perceived by customers, thereby increasing their loyalty in using the company's services. The same findings in Sasono's (2021) study revealed that improving e-CRM has a significant impact on increasing customer loyalty. Companies must continue to communicate to maintain good relationships with customers so that they can increase customer perceptions of the company's value. This will build a positive relationship between the company and customers, thereby increasing customer loyalty.

Kalia (2021) explains that customer loyalty can be influenced by customer commitment in using company services. Commitment is an essential component in building long-term relationships that generate value for the company. Customer commitment can be seen in the concern for the future of the company, thus creating a feeling of always being loyal to using the company's services. Customer commitment has a strong impact on loyalty because it shows a very strong relationship between the company and the customer. So every increase in customer commitment can increase customer loyalty if it is maintained properly.

This study modifies previous studies that place customer commitment as a mediating variable such as in the studies of Susriyanti (2023) and Kalia (2021). The findings in the model concluded that there was no mediation relationship by customer commitment between e-service quality and e-CRM on customer loyalty. So this study makes an update by placing the customer commitment variable as a moderating variable that can strengthen the influence between e-service quality and e-CRM on customer loyalty. Lai (2019) explains that customer commitment is a desire to continue to maintain an emotional attachment to the company. Good service quality and maintained CRM will increase customer loyalty if reinforced by high commitment. Customer commitment can cause customers to stick with the company's quality services. So customers will be loyal to the company if they receive good e-service quality and are reinforced by a commitment to continue using the company's services. Customers will also be loyal if the company is able to maintain good relationships

(e-CRM) with customers so that it will increase their loyalty if reinforced by a commitment to continue using the service.

METHOD

This type of research is in the form of quantitative descriptive research with primary data sources with respondents from Bank Nagari customers. The sampling technique used purposive sampling to 200 Bank Nagari customers selected randomly in Padang City. The purposive sampling technique was used because customers who use Bank Nagari's mobile banking services are still very few so that not all customers can use it. The data analysis technique used is moderated regression analysis (MRA) using Smart PLS.

RESULTS AND DISCUSSION

Result

Validity Test

Validity test by comparing the outer loading value > 0.7 then the data used in the indicator is valid. The number of indicators used is 41 items. The results of the validity test that has been carried out in this study are:

Table 1: Validity Test Results

Co de	Customer Commitme nt	Code	Customer Loyalty	Code	E- CRM	Code	E-SQ	Cod e	Mode rating
CC1	0.841	CL1	0.762	ECRM1	0.807	ESQ10	0.762	Mod 2	1.573
CC2	0.742	CL10	0.764	ECRM2	0.792	ESQ11	0.744	Mod 1	1.643
CC3	0.817	CL2	0.740	ECRM3	0.765	ESQ12	0.789		
CC4	0.743	CL3	0.761	ECRM4	0.732	ESQ13	0.790		
CC5	0.730	CL4	0.748	ECRM5	0.769	ESQ14	0.731		
CC6	0.832	CL5	0.709	ECRM6	0.786	ESQ15	0.785		
CC7	0.812	CL6	0.709	ECRM7	0.813	ESQ2	0.719		
CC8	0.767	CL7	0.822			ESQ3	0.743		
CC9	0.768	CL8	0.715			ESQ4	0.780		
CL1		CL9	0.719			ESQ5	0.779		
						ESQ6	0.747		
						ESQ7	0.763		
						ESQ8	0.784		
						ESQ9	0.766		
						ESQ1	0.777		

All indicators used have an outer loading value > 0.7 , so all indicators are valid. In this study, there are no indicators that are discarded so they can be used in hypothesis testing.

Reliability Test

The reliability test uses the criteria if the cronbach alpha value is > 0.7 , composite reliability > 0.7 , and AVE > 0.5 then the data is reliable. The results of the reliability test that have been carried out in this study are:

Table 2: Reliability Test Results

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Customer Commitment	0.921	0.923	0.935	0.615
Customer Loyalty	0.911	0.912	0.926	0.556
E-CRM	0.893	0.894	0.916	0.610
E-SQ	0.949	0.949	0.955	0.584
Moderating Effect 1	1.000	1.000	1.000	1.000
Moderating Effect 2	1.000	1.000	1.000	1.000

All variables used in this study have a cronbach alpha value and composite reliability value > 0.7 and AVE value > 0.5, so all data used are reliable. So the data can be used in hypothesis testing.

Inner Model Test

R Square Test (R²)

The R square test is used to see how much influence there is between the variables used in the research model. The results of the R square test that have been carried out in this study are:

Table 3: R Square Test Result

	R Square	R Square Adjusted
Customer Loyalty	0.885	0.882

The test results concluded that the magnitude of the influence of e-service quality and e-CRM variables on customer loyalty moderated by customer commitment variables was 88.5% while the remaining 11.5% was influenced by other variables besides the research model. The ability of e-service quality and e-CRM variables to explain their relationship with customer loyalty variables moderated by customer commitment was 88.5%.

F Square Test

The F square test uses the criteria if the F value < 0.02 indicates no effect, the F value between 0.02-0.15 indicates a small effect, the F value between 0.15-0.35 indicates a moderate effect, and the F value > 0.35 indicates a large effect. The results of the F square test that have been carried out in this study are:

Table 4: F Square Test Result

	Customer Loyalty
Customer Commitment	0.172
E-CRM	0.180
E-SQ	0.083
Moderating Effect 1	0.001
Moderating Effect 2	0.000

Based on the table above, the F square value of the relationship between e-service quality and customer loyalty is 0.083, which is between 0.02-0.15, so it has a small effect. The F square value of the relationship between e-CRM and customer loyalty is 0.180, which is between 0.15-0.35, so it has a moderate effect. The F square value of the relationship between customer commitment and customer loyalty is 0.172, which is between 0.15-0.35,

so it has a moderate effect. The F square value of the relationship between the moderation of customer commitment on the relationship between e-service quality and customer loyalty is $0.001 < 0.02$, so it has no effect. The F square value of the relationship between the moderation of customer commitment on the relationship between e-CRM and customer loyalty is $0.000 < 0.02$, so it has no effect.

Hypothesis Testing

Hypothesis testing uses the criteria if the significance value is < 0.05 then the hypothesis is accepted. The conclusion of the study is that there is an influence between the independent variables on the dependent variable. The results of the hypothesis test that have been carried out in this study are:

Table 5: Hypothesis Test Results

Mean, STDEV, T-Values, P-Values					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Customer Commitment -> Customer Loyalty	0.342	0.343	0.060	5.703	0.000
E-CRM -> Customer Loyalty	0.355	0.356	0.067	5.308	0.000
E-SQ -> Customer Loyalty	0.264	0.264	0.065	4.059	0.000
Moderating Effect 1 -> Customer Loyalty	-0.025	-0.022	0.066	0.374	0.709
Moderating Effect 2 -> Customer Loyalty	0.011	0.010	0.068	0.159	0.874

The results of the hypothesis testing concluded that the e-service quality variable has a significance value of $0.000 < 0.05$, so the hypothesis is accepted. The conclusion of the study is that the e-service quality variable has a positive and significant effect on customer loyalty. If there is an increase in e-service quality, it will be able to increase customer loyalty significantly.

The e-CRM variable has a significance value of $0.000 < 0.05$, so the hypothesis is accepted. The conclusion of the study is that the e-CRM variable has a positive and significant effect on customer loyalty. If there is an increase in e-CRM, it will be able to increase customer loyalty significantly.

The customer commitment variable has a significance value of $0.000 < 0.05$, so the hypothesis is accepted. The conclusion of the study is that the customer commitment variable has a positive and significant effect on customer loyalty. If there is an increase in customer commitment, it will be able to increase customer loyalty significantly.

The variable e-service quality on customer loyalty moderated by customer commitment has a significance value of $0.709 > 0.05$, so the hypothesis is rejected. The conclusion of the study is that the variable e-service quality does not have a significant effect on customer loyalty moderated by customer commitment. If there is an increase in e-service quality, it will not be able to increase customer loyalty significantly with customer commitment as a moderating variable. In this case, customer commitment cannot moderate the influence between e-service quality on customer loyalty.

The e-CRM variable on customer loyalty moderated by customer commitment has a significance value of $0.874 > 0.05$, so the hypothesis is rejected. The conclusion of the study is that the e-CRM variable does not have a significant effect on customer loyalty moderated by customer commitment. If there is an increase in e-CRM, it will not be able to increase customer loyalty significantly with customer commitment as a moderating variable. In this case, customer commitment cannot moderate the influence between e-CRM and customer loyalty.

Discussions

The Influence of E-Service Quality on Customer Loyalty

Based on the results of the study, it can be concluded that the e-service quality variable has a positive and significant effect on customer loyalty. Every increase in e-service quality will be able to significantly increase customer loyalty. This is because the increase in service quality through internet media carried out by the company can increase comfort and satisfaction in enjoying the service. Increased comfort and satisfaction in enjoying the service will be able to increase customer loyalty to the company's services. Customers who feel an increase in e-service quality such as an increase in the completeness of the menu and speed of service will increase customer comfort. This increase in comfort will make customers have no reason to move so that customer loyalty will increase.

The results of the study are in line with the findings of previous studies, namely Ibrahim (2020) who concluded that there is a positive and significant influence between e-service quality and customer loyalty. The same findings were also found in the study of Muharam (2021) who also concluded that there is a positive and significant influence between e-service quality and customer loyalty. Every increase in e-service quality will be able to increase customer satisfaction and comfort in using the company's services so that customer loyalty will increase.

The Influence of E-CRM on Customer Loyalty

Based on the research results, it can be concluded that the e-CRM variable has a positive and significant effect on customer loyalty. Every increase in e-CRM will be able to increase customer loyalty significantly. Increasing e-CRM indicates the relationship between the company and customers through electronic media so that it will increase the pleasure that makes it difficult for customers to switch. Customers who do not have the desire to switch because of a good relationship with the company through its electronic media can increase customer loyalty for the services provided. So the company must always communicate using electronic media in order to improve e-CRM which ultimately increases customer loyalty.

The results of the study are in line with the findings of previous studies, namely Haudi (2022) who concluded that there is a positive and significant influence of e-CRM on customer loyalty. The same findings were also found in Kumar's study (2021) which also concluded that there was a positive and significant influence between e-CRM and customer loyalty. Every increase in e-CRM will be able to increase pleasure and a sense of being cared for by the company so that it can increase customer loyalty for the services provided.

The Influence of Customer Commitment on Customer Loyalty

Based on the results of the study, it can be concluded that the customer commitment variable has a positive and significant effect on customer loyalty. Every increase in customer

commitment will significantly increase customer loyalty. Customer commitment is a feeling of customers who feel emotionally attached to the company. Customers who have an emotional bond want to always use the company's services so that customer loyalty will increase. Customers who have high commitment tend not to have the desire to move to competitors so that customer loyalty will increase.

The results of the study are in line with the findings of previous studies, namely Pratama (2023) who concluded that there is a positive and significant influence of customer commitment on customer loyalty. The same findings were also found in Khan (2020) study which also concluded that there is a positive and significant influence between customer commitment and customer loyalty. Every increase in customer commitment will be able to increase the drive or desire to continue using the company's services so that customer loyalty will also increase.

The Influence of E-Service Quality on Customer Loyalty Moderated by Customer Commitment

Based on the results of the study, it can be concluded that the e-service quality variable does not have a significant effect on customer loyalty moderated by customer commitment. Any increase in e-service quality will not significantly increase customer loyalty if moderated by customer commitment. So customer commitment cannot moderate the effect of e-service quality on customer loyalty. This is because services through the internet media have not been assessed as quality so that customers who have commitment will not give their loyalty in enjoying the company's services. Low comfort when enjoying services will not be able to increase customer loyalty because there is no increase in customer commitment in using the company's services. Customers who feel an increase in e-service quality such as an increase in the completeness of the menu and speed of service will increase customer comfort. However, customers do not yet have a high commitment to continue using the company's services so that it will not affect customer loyalty.

Companies need to innovate better so as not to harm customers. The innovation should be able to strengthen the increase in customer commitment based on the increase in e-service quality in its mobile banking services. This is done with the aim of increasing customer commitment which can ultimately affect customer loyalty. Sahabat does not yet have a strong commitment to using the company's services, so it has not been able to strengthen the influence of e-service quality on customer loyalty.

The Influence of E-CRM on Customer Loyalty Moderated by Customer Commitment

Based on the results of the study, it can be concluded that the e-CRM variable does not have a significant effect on customer loyalty moderated by customer commitment. Any increase in e-CRM will not significantly increase customer loyalty if moderated by customer commitment. So customer commitment cannot moderate the influence of e-CRM on customer loyalty. This is because the company has not been able to establish good communication through the internet media so that customers who have commitment will not give their loyalty in enjoying the company's services.

Companies must maintain good relationships by providing a communication menu through their mobile banking so that customers who have made a commitment can increase their loyalty. The company's ability to manage good relationships through the internet will be the main reference in increasing customer loyalty, even though there is a low commitment from customers to the company. In this case, customer commitment cannot strengthen or

weaken the influence between e-CRM and customer loyalty because of the low level of commitment. This is shown because of the many customer complaints related to the use of mobile banking so that customer commitment is not high to the company. So customer commitment cannot moderate the influence between e-CRM and customer loyalty.

CONCLUSION

The conclusion of the results of the hypothesis testing that has been done is that the e-service quality variable has a positive and significant effect on customer loyalty. If there is an increase in e-service quality, it will be able to increase customer loyalty significantly. The e-CRM variable has a positive and significant effect on customer loyalty. If there is an increase in e-CRM, it will be able to increase customer loyalty significantly. The customer commitment variable has a positive and significant effect on customer loyalty. If there is an increase in customer commitment, it will be able to increase customer loyalty significantly. The customer commitment variable cannot moderate the influence between the e-service quality and e-CRM variables on customer loyalty.

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