

## The Effect of E-Service Quality and E-Trust on Customer Loyalty and Mediating Customer Satisfaction of Internet Banking Users

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### Abstract

*These points of research to analyze the effect of e-service quality and e-trust on customer satisfaction and loyalty of internet banking users. The population in this research was Bank of Kaltimara customers who had used internet banking services. The sampling technique in this study used a non-probability sampling technique with the accidental sampling method with a total sample of 105 respondents. We performed data analysis using PLS (Partial Least Square) software. The results show that: 1) e-service quality has a positive and significant effect on customer satisfaction, 2) e-service quality has an insignificant effect on customer loyalty, 3) e-trust has a positive and significant effect on customer satisfaction, 4) e-trust has an insignificant effect on customer loyalty, 5) customer satisfaction has a positive and significant effect on customer loyalty, 6) e-service quality has a positive and significant effect on customer loyalty through customer satisfaction, and 7) e-trust has a positive and significant effect on customer loyalty through customer satisfaction. The limitations of research on the use of internet banking, comparisons can be made with other regional banks in Indonesia.*

**Keywords:** Customer Loyalty, Customer Satisfaction, E-Service Quality, E-Trust, Internet Banking

### INTRODUCTION

Technology facilitates people to complete their work. Technological sophistication is growing, making people more productive and innovative in doing things. This makes business people compete with other competitors to provide the best adjusting of their customer's needs. They satisfy if customers with what they get; they use the product or service again. Internet banking is a new trend of online finance. How online users deal with uncertainty and insecurity in the virtual world. The banking must be able to educate interactively to build trust with customers.

Internet banking users in the Asia-Pacific region have increased sharply in three years. According to Business times (2020), e-banking users in Indonesia reached 88 million. During the COVID-19 pandemic, internet banking users have increased by 13.91%, apart from convenience reasons, social distancing is the main reason. We expect Internet banking users to increase every year, because of including digitalized finance, e-commerce platforms and the expansion of the economic ecosystem. Banks

must commit to security systems and digital innovation. The key is in developing digital services.

Especially in the world of banking, the use of the internet makes it very easy for users to transact. However, people will choose what products or services to use because this makes people more selective. The goal that companies always want is to create customer's desire to use the products or services offered and establish close relationships between the company and its customers. A company's success is to create customers to be loyal to the company. Good e-service quality can increase customer loyalty, research is supported (Behjati et al., 2012; Jiang et al., 2016; Shafiee & Bazargan, 2018). Poor e-service quality does not influence customer loyalty (Al-Hawari, 2014; Chinomona et al, 2014; Dharmesti & Nugroho, 2013). However, e-service quality can increase customer loyalty through customer satisfaction (Quan, 2010) and (Sasono et al., 2021).

To increase consumer loyalty to banking, besides using e-service, loyalty can be increased by e-trust, namely how consumers believe in using

internet banking because they feel safe (Goutam & Gopalakrishna, 2018) and (Aslam et al., 2019). Perceived security and privacy influenced consumer trust in internet banking (Yousafzai et al., 2003). E-trust can increase customer satisfaction and loyalty to the banking world, this is related to the good name and bank facilities they provide (Ziaullah et al., 2014) and (Bricci et al., 2016).

One form of service using technology used by banks is internet banking. According to Bank Indonesia, internet banking is a service to customers in banking transactions using the internet network to get information. On the use of internet banking, the quality of services provided through electronics. In contrast to the quality of service directly. We can directly see assessment of service quality from the friendliness of the seller when meeting with the buyer. Meanwhile, the quality of service through electronics can be judged by the ease with which consumers can use online sites or websites provided by the company.

A lot of research on internet banking in various countries Baltic State (Skvarciany & Jurevičiene, 2018), China (Quan, 2010), Malacca (Ling et al., 2016), Ireland (Loonam & O'Loughlin, 2008), Jordan (Yaseen & El Qirem, 2018), Lebanon (Hammoud, Bizri, & El Baba, 2018), Malaysia (Poon, 2008), India (Banu, Mohamed, & Parayitam, 2019) and (Kesharwani & Bisht, 2012), South Africa (Chinomona et al., 2014), North Cyprus (Ozatac, Saner, & Sen, 2016), Vietnam (Ngo & Nguyen, 2016) and Indonesia (Sasono et al., 2021) and (Prisanti, Suyadi, & Arifin, 2017).

Internet banking is a banking service using the internet network (Hammoud et al., 2018). The internet banking is an integral part of global finance (Gupta & Yadav, 2017). Internet banking allows customers to access financial services through a private internet network (Medyawati & Maburi, 2012). They are preparing banking systems and information to facilitate public financial activities (Skvarciany & Jurevičiene, 2018). Internet banking must provide benefits, offer relevant and accessible markets who do not physically touch (Sudarsono et al., 2020). Internet banking in today's millennial era is an important thing needed by all people who are literate in information systems. This requires adoption and adaptation to this system (Cahaya & Siswanti, 2020). Integrated internet channels make it easier to service customer problems efficiently (Islam et al., 2019).

This study aims to analyse and prove empirically the effect of service quality and trust on the ability to increase customer satisfaction and superior customer loyalty

## LITERATURE REVIEW

Research by Loonam & O'Loughlin (2008) evaluated of e-service quality at Irish online banks uses ten dimensions, web usability, security, access,

trust, reliability, flexibility, responsiveness, self-recovery, personalization. According (Yaseen & El Qirem, 2018) an e-banking service in Jordan must be easy to use, can be used for transactions quickly, the technology can keep consumer information confidential, and convenient for transactions. Ten attributes are used (Poon, 2008) e-banking service in Malaysia perspective as convenience of usage, accessibility, features availability, bank management and image, security, privacy, design, content, speed, and fees and charges. Personal and security are the main source of dissatisfaction, but accessibility, convenience, design, and content are a source of satisfaction. E-banking service quality can increase customer satisfaction in Lebanese Bank sectors (Hammoud et al., 2018). E-banking service with reliability and customer support indicators improves customer loyalty (Shankar & Jebarajakirthy, 2019).

E-service quality is expected to increase customer satisfaction and customer loyalty (Chu & Lee, 2012). On the other hand, customer satisfaction can bridge the relationship between e-service quality and customer loyalty (Dharmesti & Nugroho, 2013) and (Al-dweeri et al., 2017). Some parts of service quality, namely tangible, reliability, assurance in Islamic banks of Oman is not able to affect customer satisfaction and loyalty (Fida et al., 2020). In conclusion, each country has e-service quality with different standards, when applied to other regional banks in Indonesia, it will also be different which affects customer satisfaction (Candra & Juliani, 2018).

Service quality has a variety of models. One model that is often used is the e-service quality model (Luarn & Lin, 2003). E-service quality they developed it to assess a service provided on the internet network (Ribbink et al., 2004). E-service quality called service quality in e-commerce can be interpreted as the ability of the website to provide payment instruments and product delivery effectively and efficiently (Afsar et al., 2013). We can conclude that e-service quality is a method for assessing consumer satisfaction from the quality of internet-based services provided following consumer expectations based on certain dimensions (Behjati et al., 2012). E-service quality, which comprises assurance-fulfillment, efficiency-system availability, privacy, contact-responsiveness and website aesthetics and guide, make up an effect on internet banking user satisfaction (Ariff et al., 2013). Web design, content, security, privacy convenience, and speed influenced Internet banking services quality (Ling et al., 2016).

Trust is a belief about one party and another that consumer trust is a consumer's expectation that a provider of goods/services can be trusted and relied on in fulfilling their promises (Ghane et al., 2011). According (Goutam & Gopalakrishna, 2018) e-trust is a company's belief that other companies will benefit the company. Beliefs about e-trust include

online consumers' beliefs and expectations regarding trust-related characteristics of online sellers (Quan, 2010). E-trust is an important construct for all things related to the internet that affect psychologically, socially, and social psychology (Mcknight & Chervany, 2014). Trust is truly concerned with principles, safe, service offered based on shariah (Amin et al., 2013)

A major factor in the development of internet banking is e-trust (Kesharwani & Bisht, 2012). E-trust is a commitment, the concern of current and future users, there is a mutually beneficial relationship between providers and users of e-banking. An e-trust has a significant effect on customer loyalty (Shankar & Jebarajakirthy, 2019). E-trust affects behavior and attitudinal loyalty (Al-dweeri et al., 2017). E-trust is a transaction in the expected manner, access to transaction information appropriately, fair in conducting customer transactions, fair in customer service policies after transactions, open and accepting of customer needs, taking care of customers, interests in mind during most transactions, trustworthy (Tran & Vu, 2019).

E-Trust in terms of technology is the customer bulletin board, security of information and privacy, customer feedback facility, complaint, and follow-up facility. It seems e-trust from the consumer side is the perception of risk, referrals from friends, belief in integrity, belief in bank competence, software reliability (Ismail & Safa, 2014). E-trust is how companies can provide capable websites for online transactions, have online expertise, quality websites, website appears to be successful at the things, website seems to have much knowledge, website appears to have specialized capabilities (Al-khayyal et al., 2020). E-Trust is the major key in the banking world.

Customer satisfaction is the level of consumer feelings after comparing the perceived performance or results with their expectations (Afsar et al., 2013). It formed consumer expectations from experiences that have occurred before, for example, such as asking other parties who have used the product/service in question, as well as digging up offer information from the company (Ghane et al., 2011). When consumers are satisfied with the company, they will buy or use other products or services. They will recommend the product or service to others, so that it becomes an indirect promotion and can help increase sales (Ribbink et al., 2004). Customer satisfaction is flashback to prompt service, financial service advice, product, and provider (Amin et al., 2013). Internet banking consumer satisfaction depends on the relationship, trust between the customer and the company (Ozatac et al., 2016)

Customer satisfaction is a feeling of satisfaction and pleasure with the product purchased, the right decision in the purchase, a wise decision (Tran & Vu, 2019). Customer satisfaction if satisfied with product, service, purchase experience (Sadeghi et al., 2018). Satisfaction refers to the perception of

pleasant fulfillment in the customer's transaction experience, consumption experience with goods or services over time, have repurchase intentions eager to recommend products, seeking information about alternatives (Ziaullah, et al., 2014). Consumers are satisfied if the system quality can trust, information quality is good, personalized web features are easy to understand, language compatibility, adequate facilities, product information, easy for transactions (Ismail & Safa, 2014).

Customer satisfaction has an effect and can increase customer satisfaction (Kandampully & Suhartanto, 2000). We expect customer satisfaction to mediate between e-service and customer loyalty (Al-dweeri et al., 2017) and (Al-khayyal et al., 2020). It also expected customer satisfaction to bridge the relationship between e-trust and customer loyalty (Ziaullah et al., 2014). They found that e-satisfaction is a predictor of e-loyalty.

The consumer loyalty is a company asset, so this is important for the company (Saki et al., 2014). They base consumer loyalty on decision making in making repeated purchases of the company's products or services chosen by consumers (Shafiee & Bazargan, 2018). Consumer loyalty is a commitment that is strongly held by consumers to buy continuously for certain products or services in the future, even though the influence of the situation can cause a behaviour change (Bricci et al., 2016). Customer loyalty is the website always my first choice, always to buy the same product, always shopping here, doubt to switch to another website (Sadeghi et al., 2018).

In Islamic Bank, customer loyalty is how to say positive things to others, willingness to recommend to friends, recommend to someone who seek information, always with Islamic Bank (Amin et al., 2013) and research (Al-khayyal et al., 2020) with a different object, customer loyalty is a favorable customer attitude towards e-business, and make repeat purchases. It affected customer loyalty, a private enterprise, trust sharing, government, and family culture (Ismail & Safa, 2014).

The company's principal asset is customer loyalty because they are not price sensitive, and they are a valid promotional asset for the company. For the banking world, providing a website with good quality makes consumers trust and become loyal because it is supported by ease of use, security, reliability, access, benefits (Behjati et al., 2012). Customer loyalty is the goal of customer satisfaction and service quality (Al-Hawari, 2014; Ariff et al., 2013; Behjati et al., 2012; Goutam & Gopalakrishna, 2018; Ngo & Nguyen, 2016). Trust and customer satisfaction also enhanced customer loyalty (Amin et al., 2013; Bricci et al., 2016; Ismail & Safa, 2014). They can also increase customer loyalty through e-service, e-trust, and customer satisfaction (Ghane et al., 2011). This answers the indirect relationship between e-trust, customer satisfaction and customer

loyalty and e-service quality, customer satisfaction and customer loyalty. Antecedents that affect customer loyalty are e-service quality and e-trust.

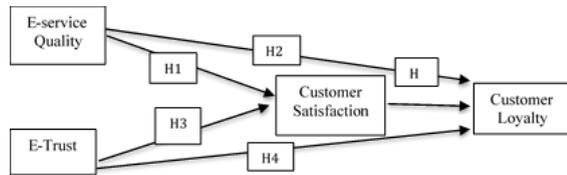


Figure 1: Research Model

## Hypothesis

In the framework presented to view and identify the problems raised in this research, it can draw a conceptual framework up that describes which will be explained in the conceptual framework image from Figure 1. Based on the description above, the following hypothesis can plan:

- H<sub>1</sub>: E-service quality influences customer satisfaction.
- H<sub>2</sub>: E-service quality influences customer loyalty.
- H<sub>3</sub>: E-trust quality influences customer satisfaction.
- H<sub>4</sub>: E-trust influences customer loyalty.
- H<sub>5</sub>: Customer satisfaction influences customer loyalty.
- H<sub>6</sub>: E-service quality influences customer loyalty through customer satisfaction.
- H<sub>7</sub>: E-trust influences customer loyalty through customer satisfaction.

## METHOD

This research uses quantitative research. The population in this study was Bank of Kaltimara customers who had used internet banking services three times. The sampling technique used was non-probability sampling with the accidental sampling method, namely the technique of determining the sample when the researcher met a consumer by chance or incidentally which can be used as a sample, the consumer is suitable to be a data source.

Data distributed 140 questionnaires and 35 were rejected. The number of samples in this study is 105 respondents. The data analysis technique tool uses PLS, because researcher to assessments for the interconnected and multiple reliance in a separate analysis (Basbeth & Ibrahim, 2018).

On the scale of measurement with Scala Likert, the number between 1 strongly disagrees and 5 strongly agrees. This scale used because it is simple and easy to understand. During the COVID-19 pandemic, we distributed data to participants online with Google Form.

Indonesia is an archipelagic country which is divided into several regions and each region has its own regional bank. Bank of Kaltimara is one of the regional banks in Indonesia, specifically the Province of East Kalimantan (Indonesia). Regional banks aim to support the regional economy. We distributed the

data to four major cities in East Kalimantan as Balikpapan, Tenggarong, Bontang and Samarinda, because they are easy to reach to get the data needed for this research. These cities serve as an illustration of the East Kalimantan area.

The indicators of customer satisfaction are feeling satisfied, fulfilment of customer expectations, proud to use the service, the system quality can be trusted, information quality is good, personalized web features are easy to understand, language compatibility, adequate facilities, product information, easy for transactions (Ismail & Safa, 2014; Sasono et al., 2021). From customer loyalty indicator is satisfied with service quality, recommend products or services to others, have a desire not to switch to another product or service (Jiang et al., 2016). The indicators of e-service quality are privacy/security, information quality/benefit, web design, reliability, flexibility, responsiveness, accessibility, features availability, bank management and image, and fees and charges (Loonam & O'Loughlin, 2008; Behjati et al., 2012). The indicators of e-trust are an excellent reputation, the site provides security in transactions, taking care of customers and conviction (Goutam & Gopalakrishna, 2018; Tran & Vu, 2019).

A regression analysis is employed in this research to test the one-way arrow line which indicates the existence of relationship. This research employs analysis with PLS program for model testing and hypothesis. The measurement model is used to test the one-dimensionality. Indicators form the construct in view of generated goodness of fit parameters. A convergent validity will be used to test the indicators whether they are valid to measure anything to be measured. In addition, the significance of indicators must also be tested, whether the indicators have the same dimension in forming latent variable. The next analysis is conducted with the SEM using the same steps, by testing the generated goodness of fit parameters and directly testing the research hypotheses of the causality relationship developed with the model. Further test is conducted using the maximum likelihood estimation technique.

## RESULT AND DISCUSSION

We conducted a pilot project by distributing questionnaires to thirty respondents to determine whether the indicators used for the questionnaire were valid. We illustrate the results in Figure 2. A pilot study is research conducted on a small scale as an experiment before conducting research. The results of the pilot study conducted, 22 respondents knew Bank of Kaltimara had internet banking services. There were 18 respondents who were interested in using Bank of Kaltimara internet banking services and 16 respondents had used Bank of Kaltimara internet banking services. Only 10 respondents of satisfied and loyal to Bank of Kaltimara's internet banking service. From 30

respondents, only 10 respondents satisfied and would be loyal to Bank of Kaltimantara internet banking services.

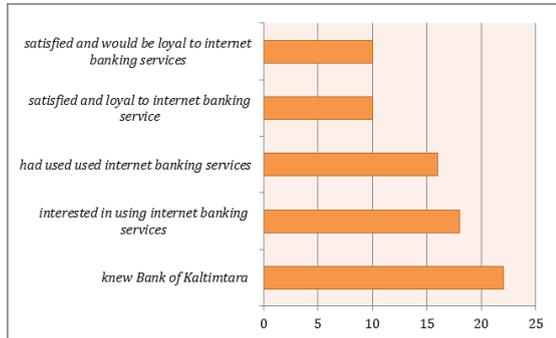


Figure 2: Respondent's Knowledge of Bank of Kaltimantara

Table 1. Descriptive of Demographics

Description	Frequency	Percentage
<b>Gender:</b>		
Man	46	43.8%
Woman	59	56.2%
<b>Age:</b>		
15 – 25 years	43	41%
26 – 35 years old	33	31.5%
>36 years old	29	27.5%
<b>Length of time as a customer:</b>		
1 year	38	36.2%
2 years	18	17.1%
>3 years	49	46.7%
<b>Customers Income:</b>		
IDR 1,000,000 – IDR 3,000,000	20	19%
IDR 3,000,000 – IDR 5,000,000	12	11.4%
Rp.5.000.000 – Rp.7.000.000	39	37.2%
>Rp.7.000.000	34	32.4%
<b>Customers Occupations:</b>		
Civil servant	11	10.5%
Private	28	26.6%
Businessman	34	32.4%
Student/Student	27	25.6%
Housewife	2	2%
BUMD employees	3	2.9%

The study collected data, starting with the demographic characteristics (age, sex, profession, income) of the respondent's data previous internet experience level from Table 1. Descriptive data shows that the gender of most clients is female 56.2%. The age of internet banking users is 26-35 years, where the age is accustomed to technology. As much as 46% internet banking user time is less than three years. The East Kalimantan regional bank recently launched internet banking. Customer revenue ranges from five to seven million. And the occupation of internet banking users is a business owner of 32.4%. The East Kalimantan regional banks can educate business owners with internet banking technology to facilitate their business transactions.

Measurement outer model is tests performed on instrument testing: Convergent validity test, the instrument declared valid if the value of the outer loading > 0.70, but the factor loading value of 0.50 - 0.60 can still be tolerated. Discriminant validity test, the instrument declared to be valid if it has a higher loading value compared to other loading values for other latent variables. Reliability test, the instrument declared reliable if the composite value of reliability and Cronbach's Alpha (CA) has a value > 0.70 recommended, but the value of 0.50 - 0.60 is still acceptable.

Table 2. Convergent Validity Test

Variable	Indicator	Outer Weights	Loading Factor	Information
E-Service Quality (X1) (Loonam & O'Loughlin, 2008) and (Behjati et al., 2012).	Privacy Information quality is good	0.250	0.751	Valid
	Web design Reliability	0.191	0.711	Valid
	Flexibility	0.162	0.723	Valid
	Feature availability	0.187	0.705	Valid
	Bank image	0.204	0.742	Valid
E-Trust (X2) (Goutam & Gopalakrishna, 2018) and (Tran & Vu, 2019).	Good reputation	0.205	0.799	Valid
	Security of transaction	0.159	0.706	Valid
	Taking care of customers	0.322	0.798	Valid
Customer Satisfaction (Y1) (Al-khayyal et al., 2020; Amin et al 2013; Sasono et al., 2021).	Conviction	0.334	0.828	Valid
	Feeling satisfied	0.325	0.867	Valid
	Fulfilment of customer expectation	0.260	0.711	Valid
	Proud to use the service	0.224	0.798	Valid
Customer Loyalty (Y2) (Jiang et al., 2016) and (Leninkumar, 2017).	Adequate facilities	0.222	0.862	Valid
	Easy to transaction	0.181	0.719	Valid
	System information is good	0.184	0.706	Valid
Customer Loyalty (Y2) (Jiang et al., 2016) and (Leninkumar, 2017).	Satisfied with service	0.217	0.836	Valid
	Recommend product/service to others	0.232	0.809	Valid
	Have a desire not to switch to another product or service	0.332	0.821	Valid
Customer Loyalty (Y2) (Jiang et al., 2016) and (Leninkumar, 2017).	Repeat purchase	0.357	0.829	Valid
	Repeat purchase	0.233	0.743	Valid
		0.302	0.856	Valid

The indicators of customer satisfaction are feeling satisfied, fulfilment of customer expectations, proud to use the service information quality is good, adequate facilities, easy for transactions, repeat purchase (Al-khayyal et al., 2020; Amin et al., 2013; Sasono et al., 2021) The customer loyalty indicator is satisfied with service quality, recommend products or

services to others, have a desire not to switch to another product or service (Jiang et al., 2016) and (Leninkumar, 2017). The indicators of e-service quality are privacy, information quality/benefit, web design, reliability, flexibility, responsiveness, accessibility, features availability, bank management and image (Loonam & O’Loughlin, 2008) and (Behjati et al., 2012). The indicators of e-trust are an excellent reputation, as the site provides security in transactions, taking care of customers and conviction (Goutam & Gopalakrishna, 2018; Tran & Vu, 2019).

The Table 2, it states that each indicator in each variable has a loading factor value of > 0.7, which is said to be valid. This shows that the variable indicator that has a loading factor value of > 0.7 has high validity so that it meets the convergent validity test (Hair et al., 2010).

Discriminant validity test is a step that is carried out to find out whether the variables or indicators in the research we are doing have a unique value. This is done with a cross loading value.

**Table 3. Cross Loading**

Indicators	E-Service Quality	E-Trust	Customer Satisfaction	Customer Loyalty
Privacy	0.751	0.568	0.661	0.580
Information quality is good	0.711	0.443	0.533	0.413
Web design	0.723	0.463	0.429	0.375
Reliability	0.705	0.563	0.505	0.423
Flexibility	0.742	0.514	0.546	0.466
Feature availability	0.799	0.571	0.537	0.485
Bank image	0.706	0.520	0.433	0.354
Good reputation	0.632	0.798	0.573	0.548
Security of transaction	0.504	0.828	0.623	0.533
Taking care of customers	0.628	0.867	0.608	0.516
Feeling satisfied	0.658	0.643	0.798	0.563
Fulfilment of customer expectation	0.631	0.599	0.862	0.595
Proud to use the service	0.443	0.438	0.719	0.553
Adequate facilities	0.470	0.401	0.706	0.580
transaction System information is good	0.553	0.623	0.836	0.592
Satisfied with service	0.633	0.700	0.809	0.591
Recommend product/service to others	0.516	0.615	0.619	0.821
Have a desire not to switch to another	0.552	0.502	0.703	0.829
	0.398	0.387	0.436	0.743

Indicators	E-Service Quality	E-Trust	Customer Satisfaction	Customer Loyalty
product or service Repeat purchase	0.507	0.471	0.573	0.856

Table 3 which shows the value of cross loading has a construct correlation value with its indicators greater than the correlation value with other constructs. We can conclude that the construct value has a good discriminant validity test value because the indicators in the construct indicator block are better than indicators in other blocks.

Reliability test is a measurement of the consistency test that is repeated on subjects under the same conditions. Finding conclude to be reliable if the results are consistent for the same measurement. The calculations using Composite Reliability and Cronbach Alpha summarized in Table 4.

The results of the calculation table above shows that the value of Cronbach’s Alpha and composite reliability of each construct in this study is > 0.70. The result that the measuring instrument used in this study is reliable.

In PLS calculation, after the validity and reliability test is the inner model test to calculate R-square (see Table 5). The value for the customer satisfaction variable is 0.614 or 61.4%. The e-service quality can explain this value shows variable and the e-trust variable by 61.4%. Meanwhile, 38.6% influenced by other variables that are not included in this study. The value for the customer loyalty variable is 0.557 or 55.7%. This value shows that the e-service quality can explain the customer loyalty variable and the e-trust variable by 55.7%. Meanwhile, 44.3% influenced by other variables that are not included in this study.

**Table 4. The CR and CA**

E-Service Quality	0.886	0.831	Reliable
E-Trust	0.909	0.879	Reliable
Customer Satisfaction	0.891	0.858	Reliable
Customer Loyalty	0.879	0.815	Reliable

**Table 5. R-square**

Variables	R-square
Customer Loyalty	0.557

After calculating the R-square, it is continued by Q-square manually with a result of the predictive relevance value is 87.9%. The calculation is through the following formulation:

$$Q^2 = 1 - (1 - I) (1 - 2) R^2 R^2$$

$$Q^2 = 1 - (1 - 0.614) (1 - 0.557)$$

$$Q^2 = 1 - (0.386) (0.443)$$

$$Q^2 = 1 - 0.171$$

$$Q^2 = 0.829$$

The 82.9% can explain this, shows that the model to be workable in the model. Meanwhile, 17.1% explained in other variables that are not included in this study or errors.

Table 6 displays direct and indirect relationships. *First*, the results of the study stated that the t-statistic was significant because  $>1.96$  with p-value  $<0.05$ , meaning that there was a positive and significant influence between e-service quality on customer satisfaction. *Second*, the results of the study stated that the t-statistic  $<1.96$  with p-value  $> 0.05$ , meaning that there was no significant effect between e-service quality on customer loyalty. *Third*, the results of the study stated that the t-statistic  $> 1.96$  with p-value  $<0.05$ , meaning that there was a positive and significant influence between e-trust on customer satisfaction. *Fourth*, the results of the study stated that the t-statistic  $<1.96$  with p-value  $>0.05$ , meaning that there was no significant effect between e-trust on customer loyalty. *Fifth*, the results of the study stated that t-statistics  $>1.96$  with p-value  $<0.05$ , meaning that there was a positive and significant influence between customer satisfaction and customer loyalty. *Sixth*, the results of the study stated that t-statistics  $>1.96$  with p-value  $<0.05$ , meaning that there was a positive and significant influence between e-service quality on customer loyalty through customer satisfaction. *Seventh*, the results of the study stated that t-statistics  $> 1.96$  with p-value  $<0.05$ , meaning that there is a positive and significant influence between e-trust in customer loyalty through customer satisfaction.

The effect of e-service quality on customer satisfaction, based on the results of the analysis of the inner model that has been described, shows that the e-service quality variable directly has a significant positive effect on the customer satisfaction variable. From path beta coefficient of 0.412 showed this with a p-value of 0.000. The p-value shows the number  $<0.05$  with positive coefficient values. That is better the e-service quality provided to Bank of Kaltimara customers, the higher customer satisfaction in using Bank of Kaltimara's internet banking services. Based on the results of research conducted on Bank of Kaltimara customers, we found that there was an effect of e-service quality on customer satisfaction. The results are following research conducted by (Quan, 2010) which examines the effect of e-service quality on customer satisfaction has a significant positive effect. Research conducted (Shafiee & Bazargan, 2018) mentions that e-service quality directly has a significant effect on customer satisfaction. The online banking services quality influences consumer satisfaction (Al-Hawari, 2014).

**Table 6. Direct and Indirect Causality**

Hypotheses	Original Sample	Sample Mean	Standard Deviation	T-Statistics	P-Value	Explanation
E-Service Quality -> Customer Satisfaction	0.412	0.423	0.099	4.180	0.000	Supported
E-Service Quality -> Customer Loyalty	0.133	0.148	0.119	1.117	<b>0.264</b>	<b>Not Supported</b>
E-Trust -> Customer Satisfaction	0.435	0.430	0.097	4.487	0.000	Supported
E-Trust -> Customer Loyalty	0.124	0.114	0.140	0.891	<b>0.373</b>	<b>Not Supported</b>
Customer Satisfaction -> Customer Loyalty	0.545	0.544	0.123	4.445	0.000	Supported
E-Service Quality -> Customer Satisfaction -> Customer Loyalty	0.224	0.229	0.073	3.068	0.002	Supported
E-Trust -> Customer Satisfaction -> Customer Loyalty	0.237	0.236	0.079	3.014	0.003	Supported

Effect of e-service quality on customer loyalty, based on the results of the inner model analysis model that has been described, shows that the e-service quality variable has no significant effect on the customer loyalty variable. The path beta coefficient of 0.133 shows this with a p-value of 0.264. The p-value shows the number  $> 0.05$  with a positive coefficient value. E-service quality variable has no direct significant effect on the customer loyalty variable. The results that the better or worse the e-service quality provided by Bank of Kaltimara to its customers does not significantly affect customer loyalty in using internet banking services. Research (Prisanti et al., 2017) shows that e-service quality on customer loyalty in conventional Indonesian banks is not significant. This research is in line with research conducted (Chinomona et al., 2014) and (Al-Hawari, 2014) which state that the e-service quality variable directly has no significant effect on customer loyalty. The decrease or increase in the quality of electronic services could not change customer loyalty in using internet banking services.

Effect of e-trust on customer satisfaction, based on the results of the analysis of the inner model that has been described, shows that the e-trust variable directly has a significant positive effect on the customer satisfaction variable. The path beta coefficient of 0.435 display this with a p-value of 0.000. The p-value shows a number  $<0.05$  and a positive coefficient value. E-trust variable directly has a significant positive effect on the customer satisfaction variable. The results that the higher the customer's e-trust, the higher the customer satisfaction in using Bank of Kaltimara's internet banking services. This research is in line with research conducted (Bricci et al., 2016) and (Rita at

al.,2019) which states that the e-trust variable influences the customer satisfaction variable. This study states that the higher the level of consumer conviction, the higher the satisfaction felt by consumers. Conversely, the lower the level of consumer conviction, the lower the satisfaction felt by consumers.

The effect of e-trust on customer loyalty, based on the results of the analysis model of the inner model that has been described, shows that the e-trust variable directly does not have a significant effect on the customer loyalty variable. The path beta coefficient of 0.124 showed this with a p-value of 0.373. P-value shows a number  $> 0.05$  and a positive beta coefficient value. E-trust variable directly has no significant effect on customer loyalty. The results show that the higher level of trust of Bank of Kaltimara customers does not affect customer loyalty in using Bank of Kaltimara internet banking services. This research is in line with research conducted by Al-Hawari (2014) and Chinomona et al. (2014) which states that e-trust does not have a significant effect on consumer loyalty. This shows that the higher or lower level of consumer confidence in a site does not affect the loyalty of the consumer.

The influence of customer satisfaction on customer loyalty, based on the results of the inner model analysis model that has been described, shows that the customer satisfaction variable directly has a significant effect on the customer loyalty variable. Path beta coefficient of 0.545 shows this, with a p-value of 0.000. The p-value shows a number  $< 0.05$  and a positive beta coefficient value. Customer satisfaction variable directly has a significant positive effect on customer loyalty. The results that the higher the level of customer satisfaction, the higher the level of customer loyalty in using Bank of Kaltimara internet banking services. This research is in line with research conducted (Chu & Lee, 2012) which states that consumer satisfaction has a significant positive effect on consumer loyalty. This shows that high consumer satisfaction increases consumer loyalty (Ngo & Nguyen, 2016; Mukhlis & Indriastuti, 2021).

The effect of e-service quality on customer loyalty through customer satisfaction, based on the results of the inner model analysis model that has been described, it shows that the e-service quality variable has a significant indirect effect on customer loyalty. E-service quality variable has a significant positive indirect effect on the customer loyalty variable through the customer satisfaction variable. The path beta coefficient of 0.224 shows this with a p-value of 0.002. The p-value shows a number  $< 0.005$  and a positive beta coefficient value. Research conducted by Quan (2010) also supported the results, which states that e-service quality affects customer loyalty through customer satisfaction. This shows that the better the e-service quality provided by the company, the customer loyalty increases through customer satisfaction. Other research

conducted (Sasono et al., 2021) states that the quality of electronic services provided properly will make consumers satisfied so that it can create a sense of consumer loyalty to the company (Behjati et al., 2012).

The effect of e-trust on customer loyalty through customer satisfaction, based on the results of the analysis of the inner model that has been described, shows that the e-trust variable indirectly has a significant effect on customer loyalty. The path beta coefficient of 0.237 shows this with a p-value of 0.003. P-value shows a number  $< 0.05$  and a positive beta coefficient value. E-trust variable indirectly affects the customer loyalty variable through the customer satisfaction variable. This study is supported (Bricci et al., 2016) who states that the effect of trust on consumer loyalty through customer satisfaction is positive and significant. Therefore, consumer satisfaction can mediate trust in consumer loyalty. Gultom et al. (2020) argue that trust has a significant positive effect on consumer loyalty. Form loyalty to consumers, companies must create a sense of trust in satisfying service.

## Conclusion

The results and discussions that have previously regarded the effect of e-service quality and e-trust on customer loyalty through customer satisfaction in using Bank of Kaltimara internet banking. We conclude that e-service quality has a positive and significant effect on customer satisfaction, e-service quality has an insignificant effect on customer loyalty, e-trust has a positive and significant effect on customer satisfaction, e-trust has an insignificant effect on customer loyalty, customer satisfaction has a positive and significant effect on customer loyalty, e-service quality has a positive and significant effect on customer loyalty through customer satisfaction, and e-trust has a positive and significant effect on customer loyalty through customer satisfaction.

Regarding the e-service quality variable, it has provided good quality electronic services, but there are still some shortcomings. The company must always improve the quality of its electronic services according to the needs of its customers. This can keep customers always using Bank of Kaltimara internet banking services.

The e-trust variable has made Bank of Kaltimara customers trust the use of internet banking services. This is because Bank of Kaltimara has a good image in the minds of the people and has highly qualified human resources. However, it is necessary to be more informative in providing information, so that customers properly educated and increase customer confidence in these electronic services.

This study has not given maximum results, the further researchers should be able to explore variables other than e-service quality and e-trust of internet banking users to be investigated with other

objects. We can take it into consideration for the public in using internet banking services.

There is an insignificant relationship between e-service quality and customer loyalty and e-trust and customer loyalty, where for future research, the relationship between these variables can be filled with other intervening variables. We focused on one regional bank in Indonesia to reveal findings related to e-banking dimensions of regional banking financial services. Comparative research needs to be done to confirm the generalizability of dimensions of proposed electronic services in regional financial markets with similar internet penetration, to ensure which regional bank consumers are different or comparable in terms of the dimensions of e-banking.

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