The Impact Of Digitalization On Credibility And Satisfaction Of Qris Users

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Abstract

This research examines the effect of digitalization, transaction security, service speed and credibility on customer satisfaction levels through the use of Bank Indonesia's QRIS in the Jakarta, Bogor, Depok Tangerang and Bekasi (JABODETABEK) areas. The aim is to make it easier for users to use QRIS as an online payment system. This research includes quantitative research using an online survey method, namely collecting data from QRIS users. The results of the analysis will help identify the relationship between the variables mentioned above and user behavior and provide valuable insight for the business world and financial institutions in increasing customer satisfaction using QRIS. This research concludes that digitalization factors, transaction security and service speed have a direct influence on the level of customer satisfaction. Digitalization and transaction security have a significant influence on customer satisfaction, while service speed does not have a significant influence.

Keywords: digitalization; transaction security; service speed; credibility; customer satisfaction

1. Introduction

Based on the Bank Indonesia website, the Quick Response Code Indonesian Standard (QRIS) was launched on August 17 2019 as a QR code payment system formed by Bank Indonesia and the Indonesian Payment System Association (ASPI). The aim of developing this payment method is to make it easier, faster and safer for users (BAKHITAH, A., INDRA, R., et al. 2023)

According to Lonardi, H., & Legowo, N. (2021). QRIS is a payment gateway that uses R technology as its transaction method and the existing QR Code is a two-dimensional matrix symbol consisting of a series of square boxes arranged in a larger square pattern and is equipped with a security system that meets global standards.

Even though QRIS is equipped with a security system that meets global regulatory and security standards, users are still advised to be careful when using QR-based payment methods to avoid digital crime. Previous research shows that the impact of digitalization, transaction security, and service speed have a strong correlation with the success of increasing customer satisfaction. However, there has been no research that specifically explores how these factors contribute to credibility to increase user satisfaction in the context of online payments in Indonesia.

The aim of this research is to determine the influence of the impact of digitalization, transaction security and service speed on credibility in an effort to increase customer satisfaction through the use of QRIS and also enable users to carry out payment transactions quickly and easily, without having to make payment transactions. to carry out payment transactions. bring cash or credit cards (Lonardi, H., & Legowo, N. 2021).

2. Literature Review

2.1 Digitalization

Digitalization is the movement of information media from analog to digital. The application of digital technology in business is currently a major trend (Atmoko, 2015; Ritter & Pedersen, 2020). Digital transformation is the change of products, services, brands, or business activities to the digital realm, the integration of information technology in organizations, and social impact through the use of multiple devices (Fraysse, 2013). Utilization of digital technology in business can increase selling prices and storage efficiency. Digital transformation involves digital technology, digital competition, and digital customer behavior (Rusyidina, 2019; Verhoef, et al.). Each driver of digital transformation has its own digital transformation process with interacting impacts (2019).

2.2 Transaction Security

Online transaction security reduces consumer concerns about data misuse and damage during the transaction process, builds consumer trust to share personal information and shop safely (Wisnu Rayhan Adhitya, 2019). Online transaction security involves controlling consumer data and ensuring the integrity of transactions in the online environment. This is important to maintain the confidentiality of consumer data and prevent criminal acts such as theft and fraud in online banking (Darmawan, 2022). This security also involves maintaining confidentiality and managing safety risks, which influence user perceptions of online banking

activities (Djaja, 2022). With effective communication skills, we can convey messages clearly and precisely at every opportunity.

2.3 Speed of Service

Speed of service is an activity carried out by one party to another party without any transfer of ownership. A strategy is needed to achieve the best service quality. Speed of service includes product delivery, provision of information, purchasing and payment. (Adelia, 2021) Speed is the level of speed of an action or process. Services are economic activities involving customer or goods interactions, without any transfer of ownership. Service speed is an aspect of service quality that reflects service responsiveness in helping customers. This influences responses to customer requests, questions, complaints and problems (Anggraini, 2020).

2.4 Credibility

Credibility is a characteristic that makes other people believe what someone says (Anggreini, 2023), related to the view that an individual's character and behavior can be trusted. The level of trust in information sources such as influencers influences changes in audience behavior through internalization (Anggita, 2022). Credibility is the perception of communication quality by members and influencing them through internalizing the same values and attitudes as the speaker.(Sokolova, 2019) Sources with high credibility can have a positive influence on consumer attitudes and behavior, so that these sources are considered desirable brand communicators (Breves, 2019)

2.5 Customer Satisfaction

Customer satisfaction is defined as a relationship with what consumers feel after receiving a product/service. it assumes that certain aspects of a product/service can satisfy customers. Customer satisfaction is important for businesses and customers in the long term (Awadhi, Obeidat, 2023). According to Tjiptono (2018), satisfaction occurs when products and services meet consumer desires. This satisfaction is the result of consumers' assessment of the level of satisfaction given to a product or service, which can exceed or below their expectations (Maslikhan, 2023).

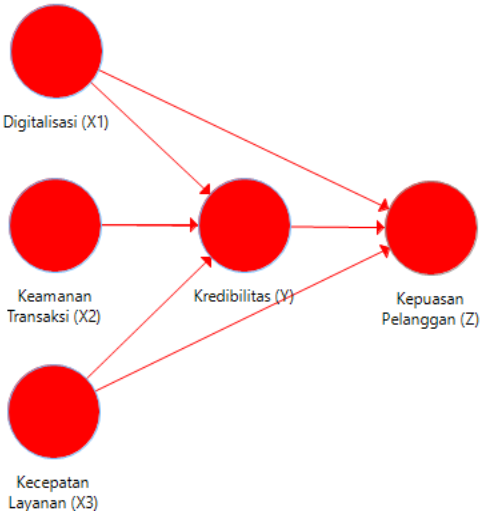

Figure 1. Research Model

3. Material and Method

3.1 Design Study

This type of research is quantitative research. Quantitative research is defined as systematically investigating phenomena by collecting data (Siahaan et al, 2022). Many people consider quantitative methods to be traditional methods, because quantitative methods have been used for a long time and have become a tradition in research. The variables linked in this research are variables consisting of Digitalization, Transaction Security, Service Speed, Credibility and Customer Satisfaction variables.

Population is an area in the form of objects or subjects determined by researchers to be studied and conclusions drawn (Afifa, Zahra, 2021). The population in this study are QRIS service users who live in Jabodetabek.

The sample is part of the population size and characteristics (Futane et al, 2021). Purposive sampling is a sample selection technique with certain considerations that are adjusted based on certain criteria: 1. QRIS Service Users 2. Domicile in Jabodetabek.

The data collection method in this research uses a questionnaire. A questionnaire is a data collection technique where participants or respondents fill in questions or statements and then, once filled in completely, return them to the researcher (Afifa, Zahra, 2021). In providing responses to each list of questions or statements via Google form which is then distributed widely on social media, respondents have been prepared with 5 score levels from strongly disagree to strongly agree to measure the respondent's response so that respondents can choose the appropriate answer. according to existing conditions. felt. The measurement scale in this questionnaire is measured using a Likert scale. The Likert scale is a scale used to measure the attitudes, opinions and perceptions of a person or group of people towards a social phenomenon (Afifa, Zahra, 2021).

3.2 Data Analysis

Data analysis techniques were carried out using Microsoft Excel software and the SmartPLS 3 application. This research model consists of independent variables which include

Digitalization (X1), Service Speed (X2), Transaction Security (X3), while the dependent variables are Credibility (Y) and Satisfaction Customer (Z).

H1: There is a significant positive influence of digitalization on customer satisfaction with QRIS services

H2: There is a significant positive influence of digitalization on the credibility of QRIS services

H3: There is a significant positive influence of transaction security on customer satisfaction with QRIS services

H4 : There is a significant positive influence of transaction security on the credibility of QRIS services

H5: There is a significant positive effect of service speed on customer satisfaction with QRIS services

H6: There is a significant positive effect of service speed on the credibility of QRIS services

H7: There is a significant positive effect of digitalization on credibility through customer satisfaction with QRIS services

H8: There is a significant positive influence of transaction security on credibility through customer satisfaction with QRIS services

H9: There is a significant positive effect of service speed on credibility through customer satisfaction with QRIS services

4. Results

4.1 Types of Research

This research uses a purposive sampling method in selecting respondents. The questionnaire was used to evaluate customer views on Bank Indonesia's QRIS services, including services from commercial banks (BCA Mobile, BRI Mobile, Mandiri Mobile, Cimb Niaga Mobile) and digital wallets (Gopay, OVO, Dana, ShopeePay, Jenius). The main criterion for respondents is to use QRIS at least once a month. The total number of respondents in this study was 100 people. All respondents are QRIS service users. Non-user respondents will be removed and not included.

Table 1. Age Range of Responden

Age Group	Frequency	Percentage
17 - 25 Tahun	90	90%
26 - 30 Tahun	5	5%
31 - 40 Tahun	5	5%

Based on the Table 1, the age range of respondents in this study has 3 types of age range, namely 17-25 years as much as 90% (90 people), 26-30 years as much as 5% (5 people) and 31-40 as much as 5% (5 people).

Table 2. Respondents Based on Gender

Gender	Frequency	Percentage
Male	32	32%
Female	68	68%

Based on the Table 2, it can be seen that there were 32 male respondents (32%) and 68 female respondents (68%).

Table 3. Respondent's Occupation

Job Group	Frequency	Percentage
Student or College Student	87	87,0%
Private sector employees	13	13,0%

Based on the Table 3, the majority of respondents in this study were students at 87% (87 people) and private employees at 13% (13 people).

Table 4. QRIS Services Used by Respondent

Job Group	Frequency
GoPay	59
OVO	39
Dana	57
ShopeePay	63
Jenius	5
BCA Mobile	41
BRI Mobile	8
Mandiri Mobile	25
CIMB Niaga Mobile	1

Based on Table 4, the majority of respondents in this study used QRIS services with the largest choices, namely, ShopeePay as much as 63 people, Gopay as much as 59 people, Dana 57 people, BCA Mobile as much as 41 people, OVO as much as 39 people, Mandiri Mobile as much as 25 people, BRI Mobile as much as 8 people, Jenius as much as 5 people, and CIMB Niaga Mobile as much as 1 person.

4.2 Descriptive Analysis of Variables

4.2.1 Descriptive Analysis of Digitalization

In this research, Digitalization is a variable that includes 1 indicator, namely Product and Service Innovation. Each indicator contains 10 statements in the questionnaire as the primary data source in the research. Descriptive statistics on the Digitalization variable can be seen in table 5 below.

Table 5. Descriptive Statistics of Digitalization Variables

Items	Statement	Mean	TCR
X1.1	I feel that digitalization has helped Bank Indonesia increase its product and service innovation.	4,59	91,8
X1.2	In my opinion, product and service innovation carried out by Bank Indonesia is increasingly developing along with advances in digitalization.	4,4	88

X1.3	I believe digitalization plays an important role in improving the quality of Bank Indonesia's products and services.	4,41	88,2
X1.4	As a customer, I see that the use of digital technology has brought positive changes to the product and service innovations offered by Bank Indonesia.	4,49	89,8
X1.5	I feel that digitalization has had a positive impact on Bank Indonesia's efforts to increase product and service innovation.	4,53	90,6
X1.6	As a QRIS user from Bank Indonesia, I see significant product and service innovation thanks to digitalization.	4,43	88,6
X1.7	I believe digitalization has increased Bank Indonesia's credibility in QRIS payments.	4,37	87,4
X1.8	In my experience, the use of QRIS from Bank Indonesia has increased the security of transactions in payments.	4,3	86
X1.9	As a user, I feel that digitalization has accelerated QRIS payment services from Bank Indonesia.	4,45	89
X1.10	The use of QRIS from Bank Indonesia which is supported by digitalization has made a major contribution to increasing my satisfaction as a customer.	4,44	88,8
Average		4.441	88,82

Descriptive statistical data from table 5 shows that the Digitalization variable has an average value of 4.441 and an average TCR value of 88.82%. This variable shows the significant influence of digitalization on QRIS at Bank Indonesia.

4.2.2 Descriptive Analysis of Transaction Security

In this research, Transaction Security is a variable that includes 1 indicator, namely the Application of Security Technology. Each indicator contains 10 statements in the questionnaire as the primary data source in the research. Descriptive statistics for the Transaction Security variable can be seen in table 6 below.

Table 6. Descriptive Statistics of Transaction Security Variables

Items	Statement	Mean	TCR
X2.1	In my opinion, Bank Indonesia has effectively implemented security technology in QRIS transactions to protect customer information.	4,22	84,4
X2.2	I feel that Bank Indonesia's internal efforts to secure QRIS transactions are in line with customer expectations.	4,17	83,4

X2.3	As a user, I believe that the security measures implemented are very strong in protecting QRIS transactions so that they can protect my data.	4,23	84,6
X2.4	I believe that Bank Indonesia has succeeded in mitigating transaction security risks in QRIS payments.	4,17	83,4
X2.5	I feel that digitalization has helped Bank Indonesia improve the overall security of QRIS transactions.	4,22	84,4
X2.6	As a QRIS user from Bank Indonesia, I am confident that the security technology implemented can protect my transactions well.	4,24	84,8
X2.7	Based on my experience, Bank Indonesia effectively protects QRIS transactions with sophisticated security technology.	4,18	83,6
X2.8	I am sure that Bank Indonesia really prioritizes the security of QRIS transactions in its services to customers.	4,38	87,6
X2.9	As a customer, I feel that the implementation of security technology by Bank Indonesia provides good protection in QRIS transactions.	4,26	85,2
X2.10	The use of QRIS from Bank Indonesia which is supported by security technology has made a positive contribution in increasing my satisfaction as a customer.	4,18	83,6
Average		4.225	84,5

Source: Primary Data Processing, 2023

Descriptive statistical data from table 6 shows that the Transaction Security variable has an average value of 4.225 and an average TCR value of 84.5%. This variable shows a significant influence of Transaction Security on QRIS at Bank Indonesia.

4.2.3 Descriptive Analysis of Service Speed

In this research, Service Speed is a variable that includes 1 indicator, namely Transaction Time Development. Each indicator contains 10 statements in the questionnaire as the primary data source in the research. Descriptive statistics for the Transaction Security variable can be seen in table 7 below.

Table 7. Descriptive Statistics of Service Speed Variables

Items	Statement	Mean	TCR
X3.1	I think the time needed to complete a QRIS transaction with Bank Indonesia is quite fast.	4,36	87,2
X3.2	In my opinion, Bank Indonesia has succeeded in increasing the efficiency of QRIS transaction times	4,45	89

	through digitalization.		
X3.3	I feel that the use of QRIS from Bank Indonesia which is supported by speed of service during transactions has made a positive contribution in increasing my satisfaction as a customer.	4,38	87,6
X3.4	I believe that Bank Indonesia has succeeded in shortening the completion time for QRIS transactions.	4,36	87,2
X3.5	I feel that digitalization has helped Bank Indonesia increase the speed of service and shorten the overall QRIS transaction time	4,4	88
X3.6	As a QRIS user from Bank Indonesia, I feel that transaction times with Bank Indonesia are very efficient.	4,48	89,6
X3.7	In my experience, Bank Indonesia succeeded in providing QRIS transaction services in a short time.	4,45	89
X3.8	I am sure that Bank Indonesia has optimized QRIS transaction times for customer satisfaction.	4,37	87,4
X3.9	As a customer, I feel that Bank Indonesia has succeeded in shortening the QRIS transaction time so that it is more efficient.	4,4	88
X3.10	The use of QRIS from Bank Indonesia which is supported by speed of service has made a positive contribution in increasing my satisfaction as a customer.	4,43	88,6
	Average	4.408	88,16

Source: Primary Data Processing, 2023

Descriptive statistical data from table 7 shows that regarding Service Speed it has a mean of 4.408 and an average TCR value of 88.16%. This variable shows a significant influence on Service Speed on QRIS at Bank Indonesia.

4.2.4 Descriptive Analysis of Credibility

In this research, credibility is a variable that includes 1 indicator, namely the level of customer trust. Each indicator contains 10 statements in the questionnaire as the primary data source in the research. Descriptive statistics for the Transaction Security variable can be seen in table 8 below.

Table 8. Descriptive Statistics of Credibility Variables

Items	Statement	Mean	TCR
Y1	In my opinion, Bank Indonesia has earned customer trust well in terms of QRIS payments.	4,31	86,2

Y2	I feel that the level of customer trust in Bank Indonesia is increasing over time.	4,29	85,8
Y3	I am sure that Bank Indonesia has succeeded in building strong credibility in the eyes of customers.	4,28	85,6
Y4	I am sure that Bank Indonesia has a positive reputation for maintaining high levels of customer trust.	4,22	84,4
Y5	I feel that digitalization has helped increase the level of customer trust in QRIS payment services from Bank Indonesia.	4,27	85,4
Y6	As a QRIS user from Bank Indonesia, I feel confident with the level of trust given by Bank Indonesia in payment transactions.	4,28	85,6
Y7	In my experience, the level of customer trust in Bank Indonesia regarding QRIS payments is quite high.	4,29	85,8
Y8	I am confident that Bank Indonesia has succeeded in building strong credibility in terms of security and customer trust.	4,23	84,6
Y9	As a customer, I feel that Bank Indonesia has a good reputation in maintaining the level of customer trust.	4,28	85,6
Y10	The use of QRIS from Bank Indonesia which is supported by a level of trust has made a positive contribution in increasing my satisfaction as a customer.	4,33	86,6

Descriptive statistical data from table 8 shows that credibility has a mean of 4.278 and an average TCR value of 85.56%. This variable shows a significant influence on QRIS Credibility at Bank Indonesia.

4.2.5 Descriptive Analysis of Customer satisfaction

In this research, Customer Satisfaction is a variable that includes 1 indicator, namely the Level of Customer Satisfaction. Each indicator contains 10 statements in the questionnaire as the primary data source in the research. Descriptive statistics for the Transaction Security variable can be seen in table 9 below.

Table 9. Descriptive Statistics of Customer Satisfaction Variables

Items	Statement	Mean	TCR
Z1	I feel that Bank Indonesia has succeeded in increasing the level of customer satisfaction with QRIS payment services.	4,45	89
Z2	In my opinion, Bank Indonesia's internal efforts play an important role in increasing the level of customer	4,29	85,8

	satisfaction.		
Z3	I believe that Bank Indonesia has prioritized the level of customer satisfaction in its QRIS service strategy.	4,26	85,2
Z4	I am confident that Bank Indonesia has succeeded in understanding and meeting customer expectations, thereby increasing their level of satisfaction.	4,23	84,6
Z5	I feel that digitalization has helped Bank Indonesia provide more satisfying QRIS services for customers.	4,32	86,4
Z6	As a QRIS user from Bank Indonesia, I am satisfied with the convenience provided in transactions.	4,41	88,2
Z7	In my experience, QRIS services from Bank Indonesia have met or exceeded my expectations in terms of customer satisfaction.	4,33	86,6
Z8	I feel that Bank Indonesia has provided a very satisfying payment solution for me as a customer.	4,36	87,2
Z9	As a customer, I feel that Bank Indonesia has succeeded in creating a comfortable and satisfying shopping experience.	4,31	86,2
Z10	The use of QRIS from Bank Indonesia makes a positive contribution in increasing my satisfaction as a user and loyal customer.	4,31	86,2
Average		4.327	86,54

Descriptive statistical data from table 9 shows that customer satisfaction has a mean of 4.327 and an average TCR value of 86.54%. This variable shows a significant influence on Customer Satisfaction on QRIS at Bank Indonesia.

4.2.6 Descriptive Analysis of Variables

a. Outer Loading

After reviewing this research data, the first step taken was to test the research results using the SEM-PLS method, namely an external model measurement method that shows the accuracy of the indicators used to identify or describe each existing variable. Outer loadings is a table that describes how strong the relationship between indicators and latent variables is in factor analysis. If the factor loading value is in the range of 0.5-0.6 then it can be said to be sufficient, whereas if the factor loading value is ≥ 0.7 then it can be considered high, Imam Ghozali (2006).

Table 10. Outer Loading

Digitalization (X1)	Transaction Security (X2)	Service Speed (X3)	Customer Satisfaction (Z)	Credibility (Y)
794				
761				
720				
765				
729				
721				
681				
704				
659				
697				
	735			
	715			
	788			
	803			
	805			
	756			
	770			
	759			
	750			
	731			
		712		
		785		
		730		
		694		
		784		
		779		
		798		
		807		
		757		

		692		
				820
				718
				746
				775
				777
				651
				738
				767
				684
				815
			742	
			732	
			717	
			783	
			790	
			732	
			740	
			769	
			781	
			779	

From the calculation results in table 10 which displays the outer loading values, it is known that there are 7 indicators that will be excluded from the analysis. These indicators are X1.6, X1.8, X1.9, X3.3, X3.9, Y5, and Y8. All indicators that have a value of less than 0.70 will be removed and not used in the next analysis stage.

b. Reliability and Validity Test

Validity and reliability do not only depend on the instrument itself. Another factor that influences validity and reliability is the implementer of the measurement and the individual who is the subject of the measurement. A test or measuring instrument is said to have high validity if the instrument functions in accordance with the measurement objectives or produces relevant results in accordance with the measurement objectives Sugiyono (2014). On the other hand, tests that produce data that are not relevant to the purpose of measurement are considered to have low validity, Azwar (2000).

Table 11. Establishing Reliability and Validity

	Alfa Cronbach	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Digitalization (X1)	0,878	0,881	0,905	0,578
Transaction Security (X2)	0,919	0,922	0,932	0,580
Service Speed (X3)	0,907	0,910	0,925	0,607
Customer Satisfaction (Z)	0,917	0,917	0,931	0,573
Credibility (Y)	0,906	0,908	0,924	0,603

You can see here, Table 11 reflects the results showing good reliability and construct validity. These data show that each variable has strong reliability, with values exceeding 0.70, including composite reliability which also exceeds 0.70. This shows that the overall data is reliable. In addition, the validity of the data has been confirmed, with Average Variance Extracted (AVE) values exceeding the threshold of 0.5 for all variables, indicating strong validity for the entire data.

c. Discriminant Correlation Test

Fornell-Lacker states that the AVE of a variable must be more than 0.5 to meet validity criteria. In addition, if the AVE is more than 0.5 then the square root of the AVE must exceed the correlation with other variables (Firman et al., 2021).

Table 12. Discriminant Validity Value

	Digitalization (X1)	Transaction Security (X2)	Service Speed (X3)	Customer Satisfaction (Z)	Credibility (Y)
Digitalization (X1)	0,760				
Transaction Security (X2)	0,540	0,762			
Service Speed (X3)	0,753	0,659	0,779		
Customer Satisfaction (Z)	0,694	0,730	0,815	0,757	
Credibility (Y)	0,671	0,814	0,701	0,842	0,777

In table 12 the AVE value is considered good because all the values are greater than 0.5. However, there are several AVE values that are smaller than the correlation. In the credibility variable, the AVE value is 0.777, making this variable lower than several correlation values, namely the Customer Satisfaction variable of 0.842 and Transaction Security of 0.814. In the Customer Satisfaction variable, the AVE value is 0.757, so this variable is lower than one of the correlations, namely Service Speed, which is 0.815.

4.2.7 Model Structure Testing

To get good predictions in an econometric model, the R-square or Adjusted R-square must be high. Gujarati, Porter, and Gunasekar (2012). This principle gives researchers confidence, as stated by Hill, Griffiths, and Lim (2018), that the explanatory variables in the model have a significant role as strong predictors of the dependent variable.

Table 13. R-Square Value

	R square	**R Square Adjustable**
Customer Satisfaction (Z)	0,740	0,732
Credibility (Y)	0,741	0,733

In Table 13 we can observe data related to R-Square in this study. For the first variable, namely customer satisfaction, an R-Square value of 0.740 was obtained, which shows that this variable is influenced by 74% and 26% is explained by other variables. Meanwhile, the credibility variable has an R-Square value of 0.741, which means around 74% and 26% is explained by other factors.

a. Direct Influence Analysis

In this study, path coefficients were calculated to analyze the direct influence of variables. Hair et al. (2021) stated that the hypothesis can be accepted if the T Statistics value between variables is > 1.960 or P Values < 0.05. The results of the analysis are listed in table 14 below.

Table 14. Path Coefficient Results

	Original Sample (O)	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**Statistics T (|O/STDEV|)**	**P value**	**Results**
Digitalization (X1) -> Customer Satisfaction (Z)	0,151	0,151	0,78	1.948	0,052	Rejected
Digitalization (X1) -> Credibility (Y)	0,269	0,264	0,93	2.877	0,04	Accepted
Transaction Security (X2) -> Customer Satisfaction (Z)	0,328	0,348	0,107	3.062	0,02	Accepted
Transaction Security (X2) -> Credibility (Y)	0,601	0,600	0,85	7.042	0,0	Accepted
Service Speed (X3) -> Customer Satisfaction (Z)	0,485	0,470	0,120	4.053	0,0	Accepted
Speed of Service (X3) -> Credibility (Y)	0,103	0,110	0,90	1.150	0,251	Rejected

Source: Primary Data Processing, 2023

The results of calculating the path coefficient for the first hypothesis, namely the influence of digitalization on customer satisfaction, Table 4.10 shows that there is an insignificant relationship between the two, with a p-value of 0.052 > 0.05 and a t statistic of 1.94 < 1.96. Apart from that, the original sample results also prove that the relationship between the two is negative with a value of 0.151. Thus the first hypothesis can be declared rejected.

The results of calculating the path coefficient for the second hypothesis, namely the effect of digitalization on credibility, Table 4.10 shows that there is a significant and positive relationship between the two, with a p-value of 0.04 < 0.05 and a t statistic of 2.87 > 1.96. Apart from that, the results of the original sample also prove that the relationship between the two is positive with a value of 0.269. Thus the second hypothesis can be declared accepted.

The results of calculating the path coefficient for the third hypothesis, namely the influence of Transaction Security on Customer Satisfaction, Table 4.10 shows that there is a significant and positive relationship between the two, with a p-value of 0.02 < 0.05 and a t statistic of 3.06 > 1.96 . Apart from that, the original sample results also prove that the relationship between the two is positive with a value of 0.328. Thus the third hypothesis can be declared accepted.

The results of calculating the path coefficient for the fourth hypothesis, namely the influence of Transaction Security on Credibility, Table 4.10 shows that there is a significant and positive relationship between the two, with a p-value of 0.0 < 0.05 and a t statistic of 7.04 > 1.96. Apart from that, the results of the original sample also prove that the relationship between the two is positive, with a value of 0.601. Thus the fourth hypothesis can be declared accepted.

The results of calculating the path coefficient for the fifth hypothesis, namely the influence of Service Speed on Customer Satisfaction, Table 4.10 shows that there is a significant and positive relationship between the two, with a p-value of 0.0 < 0.05 and a t statistic of 4.05 > 1.96. Apart from that, the results of the original sample also prove that the relationship between the two is positive with a value of 0.485. Thus the fifth hypothesis can be declared accepted.

The results of calculating the path coefficient for the sixth hypothesis, namely the influence of Service Speed on Credibility, Table 4.10 shows that there is an insignificant relationship between the two, with a p-value of 0.25 > 0.05 and a t statistic of 1.15 < 1.96. Apart from that, the original sample results also prove that the relationship between the two is negative with a value of 0.103. Thus the sixth hypothesis can be declared rejected.

b. Indirect Effect Analysis

Table 15. Significant Indirect Effects

	Original Sample (O)	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**Statistics T (|O/STDEV|)**	**P value**	**Results**
Digitalization -> Credibility -> Customer Satisfaction	0,141	0,135	0,61	2.323	0,021	Accepted

Transaction Security -> Credibility -> Customer Satisfaction	0,313	0,302	0,92	3.406	0,01	Accepted
Service Speed -> Credibility -> Customer Satisfaction	0,42	0,45	0,51	0,808	0,420	Rejected

The results of the significant indirect effect on the first hypothesis are the influence of digitalization on credibility through customer satisfaction. Table 4.11 shows that there is a significant and positive relationship between the two, with a p-value of 0.21 < 0.05 and a t statistic of 2.32 > 1 .96. Apart from that, the original sample results also prove that the relationship between the two is positive with a value of 0.141. Thus the first hypothesis can be declared accepted.

The results of the significant indirect effect on the second hypothesis are the influence of transaction security on credibility through customer satisfaction. Table 4.11 shows that there is a significant and positive relationship between the two, with a p-value of 0.01 < 0.05 and a t statistic of 3.40 > 1 .96. Apart from that, the results of the original sample also prove that the relationship between the two is positive, with a value of 0.313. Thus the second hypothesis can be declared accepted.

The results of the Significant Indirect Effect calculation for the third hypothesis, namely the influence of Service Speed on Credibility through Customer Satisfaction, Table 4.11 shows that there is an insignificant relationship between the two, with a p-value of 0.42 > 0.05 and statistically 0.8 < 1.96 . Apart from that, the results of the original sample also prove that the relationship between the two is negative, with a value of 0.42. Thus the third hypothesis can be declared rejected.

5. Discussion

As explained in chapter II, this research involves testing 9 hypotheses to evaluate the relationship between two or more variables. This section will focus on analyzing the 9 hypotheses and determining whether the relationship between these hypotheses is significant or not, based on the results of the calculations carried out.

H1: The Relationship between Digitalization and Customer Satisfaction

The test results show that there is an insignificant positive influence between the influence of Digitalization on Customer Satisfaction with QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.269 indicating a positive relationship between these two variables. Apart from that, this relationship is also not significant, as can be seen from the t statistical value is 1.948 < 1.96 and the p-value, is 0.052 > 0.05. This shows that digitalization has no impact on the credibility of QRIS services from Bank Indonesia.

H2: The Relationship between Digitalization and Credibility

The test results show that there is a significant positive influence between the influence of digitalization on the credibility of QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.269 indicating a positive relationship between

the two variables. Apart from that, the significance of this relationship can be seen from the statistical t value, is 2.87 7> 1.96 and the p-value, is 0.04 < 0.05. This shows that the influence of digitalization on the credibility of QRIS services from Bank Indonesia will have a positive and significant effect on digitalization in banking.

H3: The Relationship between Transaction Security and Customer Satisfaction

The test results show that there is a significant positive influence between the influence of Transaction Security on Customer Satisfaction with QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.328 indicating a positive relationship between the two variables. Apart from that, the significance of this relationship can be seen from the statistical t value, is 3.062 > 1.96 and the p-value, is 0.04 < 0.05. This shows that the influence of Transaction Security on Customer Satisfaction with QRIS services from Bank Indonesia will have a positive and significant effect on Transaction Security at the Bank.

H4: The Relationship between Transaction Security and Credibility

The test results show that there is a significant positive influence between the influence of Transaction Security on the Credibility of QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.601 indicating a positive relationship between these two variables. Apart from that, the significance of this relationship can be seen from the statistical t value, which is 7.042 > 1.96 and the p-value, which is 0.0 < 0.05. This shows that the influence of Transaction Security on the Credibility of QRIS services from Bank Indonesia will have a positive and significant effect on Transaction Security at the Bank.

H5: The Relationship between Service Speed and Customer Satisfaction

The test results show that there is a significant positive influence between the influence of Service Speed on Customer Satisfaction with QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.485 indicating a positive relationship between the two variables. Apart from that, the significance of this relationship can be seen from the statistical t value, is 4.053 > 1.96 and the p-value, is 0.0 < 0.05. This shows that the influence of Transaction Security on the Credibility of QRIS Services from Bank Indonesia will have a positive and significant effect on Service Speed at the Bank.

H6: The Relationship between Service Speed and Credibility

The test results show that there is an insignificant positive influence between the influence of Service Speed on the credibility of QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.269 indicating a positive relationship between these two variables. Apart from that, this relationship is also not significant, as can be seen from the t statistical value, is 1.948 < 1.96 and the p-value, is 0.052 > 0.05. This shows that there is no influence of Service Speed on the Credibility of QRIS services from Bank Indonesia.

H7: The Relationship between Digitalization and Credibility Through Customer Satisfaction

The test results show that there is a significant positive influence between the influence of Digitalization on Credibility through Customer Satisfaction on QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.141 indicating a positive relationship between these two variables. Apart from that, the significance of this

relationship can be seen from the statistical t value, is 2.32 > 1.96 and the p-value, is 0.02 < 0.05. This shows that the influence of digitalization on credibility through customer satisfaction with QRIS services from Bank Indonesia will have a positive and significant effect on digitalization on bank credibility and customer satisfaction with QRIS services at banks.

H8: The Relationship between Transaction Security and Credibility Through Customer Satisfaction

The test results show that there is a significant positive influence between the influence of Transaction Security on Credibility through Customer Satisfaction in QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.313 indicating a positive relationship between the two variables. Apart from that, the significance of this relationship can be seen from the statistical t value, is 3.40 > 1.96 and the p-value, is 0.1 < 0.05. This shows that the influence of digitalization on credibility through customer satisfaction with QRIS services from Bank Indonesia will have a positive and significant effect on transaction security, bank credibility and customer satisfaction with QRIS services at the bank.

H9: The Relationship between Service Speed and Credibility Through Customer Satisfaction

The test results show that there is an insignificant positive influence between the influence of Service Speed on Credibility through Customer Satisfaction in QRIS services from Bank Indonesia. The path coefficient value in the original sample was 0.42, indicating a positive relationship between the two variables. Apart from that, the insignificance of this relationship can be seen from the t statistical value, is 0.80 < 1.96 and the p-value, is 0.42 > 0.05. This shows that the influence of Service Speed on Credibility through Customer Satisfaction with QRIS services from Bank Indonesia will have a positive but not significant effect in influencing Transaction Security on Bank Credibility and Customer Satisfaction with QRIS services at the Bank.

6. Conclusions, Implications, and Recommendations

This research provides a significant theoretical contribution, especially within the framework of Bank Indonesia's QRIS services in the Jakarta, Bogor, Depok, Tanggerang and Bekasi (JABODETABEK) areas. The research results show that in using QRIS, variables such as the level of digitalization, transaction security, service speed and credibility have a significant influence on the level of customer satisfaction. In this context, digitalization and speed of service play an important role in shaping individuals' intentions to continue using QRIS as a payment method. However, it should be noted that even though users feel the benefits of using QRIS, this does not always have a positive impact on their intention to continue using the service.

Therefore, this research provides valuable insight into the factors that influence customer satisfaction in the context of Bank Indonesia QRIS payments in the JABODETABEK area. These findings are not only useful for practitioners in the electronic payments industry, but also for regulators and other stakeholders involved in developing and improving digital payments infrastructure in Indonesia. With a better understanding of the

factors that influence customer satisfaction, strategic steps can be taken to improve service quality and increase QRIS adoption in society.

7. References

Adhitya, W. R., & Fauziah, A. (2023). Pengaruh Kemudahan Transaksi, Keamanan Transaksi, Dan Kualitas Pelayanan Pelanggan Terhadap Keputusan Pembelian Online Di Shopee (Studi Kasus Pada Mahasiswa Manajemen Universitas Potensi Utama). *Manajemen Kreatif Jurnal*, 1(1), 178-189.

Darmawan, D., & Putra, A. R. (2022). Pengalaman Pengguna, Keamanan Transaksi, Kemudahan Penggunaan, Kenyamanan, Dan Pengaruhnya Terhadap Perilaku Pembelian Online Secara Impulsif. Relasi: *Jurnal Ekonomi*, 18(1), 26-45.

Djaja, J., Tongli, B., & Tahendrika, A. (2022). Pengaruh Kemudahan Dan Keamanan Transaksi Menggunakan Kode QR Terhadap Kepuasan Pengguna Shopeepay Pada Mahasiswa Universitas Atma Jaya Makassar. *Jurnal Ekonomi, Bisnis dan Terapan (JESIT)*, 3(1), 35-50.

Adelia, A., & Purwaningrum, E. (2022). KEMUDAHAN INFORMASI, KECEPATAN LAYANAN DAN KUALITAS LABA PERUSAHAAN BERPENGARUH TERHADAP MINAT MAHASISWA DALAM INVESTASI SAHAM PADA PERUSAHAAN E-IPO. In Seminar Nasional Akuntansi dan Manajemen PNJ (Vol. 3).

Anggraini, N. A. (2020). Pengaruh Kecepatan Layanan dan Cita Rasa terhadap Loyalitas Pelanggan pada Café Intermezzo Medan (*Doctoral dissertation, Universitas Medan Area*).

Anggreani, Y. T. (2023). Pengaruh Kredibilitas Brand Ambassador dan Kredibilitas Merek terhadap Keputusan Pembelian Produk Oriflame pada PT. Orindo Alam Ayu Cabang Medan.

Cahyani, Anggita Friska (2022). Pengaruh daya tarik fisik, kredibilitas dan interaksi parasosial pada diri beauty influencer terhadap niat beli produk kosmetik focallure pada generasi z *Universitas Jember*.

Nainggolan, R. (2021). PENGARUH KREDIBILITAS DAN TRUSTWORTHINESS BEAUTY INFLUENCER DI INSTAGRAM TERHADAP KEPUTUSAN PEMBELIAN PRODUK KOSMETIK WARDAH. Jurnal Performa: *Jurnal Manajemen dan Start-up Bisnis*, 6(6), 526-535.

Awadhi, J., Obeidat, B., & Alshurideh, M. (2021). The impact of customer service digitalization on customer satisfaction: Evidence from the telecommunication industry. *International Journal of Data and Network Science*, 5(4), 815-830.

Huda, T., Nuringwahyu, S., & Chanafi, A. (2023). PENGARUH KUALITAS LAYANAN, KETEPATAN WAKTU PENGIRIMAN DAN FASILITAS TERHADAP KEPUASAN PELANGGAN (Studi Pada Pelanggan J&T Grati Pasuruan). JIAGABI (*Jurnal Ilmu Administrasi Niaga/Bisnis*), 14(3), 85-92.

Maslikhan, M., Basalamah, M. R., & Athia, I. (2022). Pengaruh Sistem Pelacakan Online Dan Ketepatan Waktu Pengiriman Terhadap Kepuasan Pelanggan (Studi Kasus JNE Cabang Utama Malang). E-JRM: *Elektronik Jurnal Riset Manajemen*, 11(15).

BAKHITAH, A., INDRA, R., HALIM, W., FERBIAN, V., & HIDAYAT, Z. (2023). QRIS as a Drivers of Product Distribution Flows in Indonesia: Factors of Consumer

Purchasing Behavior in the Use of Fintech Payments. Journal of Distribution Science, 21(12), 59-69.

Lonardi, H., & Legowo, N. (2021). Analysis of factors affecting use behavior of QRIS payment system in DKI Jakarta. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(6), 3709-3728.