

## ELABORATION OF SOR AND ECM MODELS IN A CASHLESS SOCIETY ENVIRONMENT

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### Abstract

The phenomenon of rapidly developing technology triggers the emergence of a cashless society culture that prefers to make digital transactions rather than cash. This study aims to determine Continuance Intention on a technology by using Perceived Usefulness, Perceived Ease of Use, Trust, and Satisfaction and implementing the Stimulus-Organism-Response Model and Expectation-Confirmation Model. The research type of this study is quantitative, using a correlational method. Respondents in this study were visitors to Samarinda Central Plaza who had used QRIS. Data was collected using purposive sampling and Structural Equation Model (SEM) as a data analysis technique. The results prove that all hypotheses are accepted, and in the mediation test, only Trust cannot mediate Perceived Usefulness on Continuance Intention.

**Keywords:** Stimulus-Organism, Response Model, Expectation-Confirmation Model, Perceived Usefulness, Perceived Ease of Use, Trust, Satisfaction, Continuance Intention.

Elaboration of  
SOR and ECM  
Model in A  
Cashless Society  
Environment

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As of January 2023, internet users in Indonesia reached 212.9 million people (DataIndonesia.id, 2023). This number of internet users has increased by 3.85% from the previous year, which recorded internet users in Indonesia, totaling 205 million users. The increase in the number of internet users occurred because of the many technologies today that utilize the internet to access and use it. One of the technologies that utilize the internet is digital payment. Digital payments offer the convenience of making transactions wherever we are; as long as the place still has an internet signal, we can make transactions. The existence of this digital payment method has led to the development of a new culture in society, namely, a cashless society. Cashless Society develops society as a group that does not rely on cash payments and prefers to make digital-based payments because it provides convenience and efficiency when using it.

One payment method that has been widely used in Indonesia is the Quick Response Code Indonesian Standard (QRIS) issued by Bank Indonesia in 2020. The QRIS payment method is growing because it has the convenience of being based on a QR Code and can be used in server-based electronic money applications, e-wallets, and m-banking. In 2022, 23.97 million merchants used QRIS, and 28.76 million QRIS users (Ahdiat, 2023). In addition, there are 12.28 trillion transactions using QRIS (Damara, 2023).

In East Kalimantan, Samarinda is the city that conducts the most QRIS transactions, amounting to 43.75%, followed by Balikpapan at 34.51% and Bontang at 4.77% (Sya'rawie, 2022). As a city with the most QRIS transactions in East Kalimantan, Samarinda has a shopping center that has been established for a long time and is still being visited, namely, Samarinda Central Plaza (SCP). The existence of Samarinda Central Plaza among the public is due to its strategic location in the middle of the city, which has many diverse and trendy outlets for young people, and many outlets provide payments using QRIS, which supports the cashless society in making transactions.

The existence of a cashless society indicates that there are people who make payments sustainably using digital payments. To find out these behavioral changes, Do et al. (2020) explain the Stimulus Organism and Response model, which explains that there is a stimulus (Stimulus) affecting the internal individual (Organism), which then causes a response in the form of an attitude (Response). Then, it can be linked to the Technology Acceptance Model (TAM) and the Expectation-Confirmation Model (ECM) to predict acceptance of the use of new technology or information systems (Ashsifa, 2020). In the TAM Model, Perceived Usefulness and Perceived Ease of Use are significant aspects in technology acceptance (Davis et al., 1989). The ECM model explains that Satisfaction is the most vital factor in sustainable use. And in previous studies, many have used trust to measure sustainable use. Utami & Rahayu (2022) explain that interest arises because of the Trust and Satisfaction that encourage individuals to use a technology service. Previous research has proven that Satisfaction and Trust have a direct effect on sustainable use (Damanik et al., 2022; Hermawan & Paramita, 2021). Ashsifa (2020) explains that the existence of Trust and Satisfaction in a system or technology will encourage the emergence of sustainable use intentions.

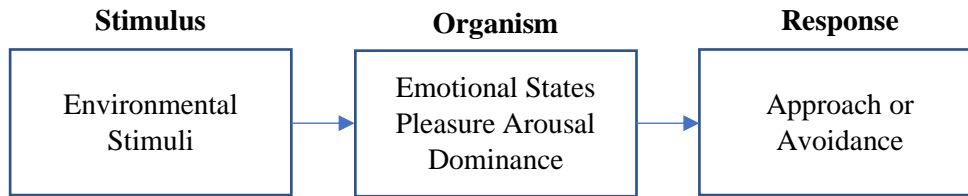
Trust and Satisfaction certainly cannot be formed just like that, and this is where the role of TAM explains that Perceived Ease of Use and Perceived Usefulness are the primary aspects in accepting a system (Siregar, 2011). Trust and Satisfaction are influenced by users' views on the usefulness and ease of the system (Hermawan & Paramita, 2021; Putri & Iriani, 2021). The better the user's view of convenience and usability, the more the user's trust and satisfaction with a system or technology will increase (Purba et al., 2020; Putri & Iriani, 2021).

This research aims to measure the acceptability of QRIS as a payment method in a cashless society environment at Samarinda Central Plaza because the mall is still busy being visited by the public because of its strategic location, trendy outlets, and many outlets that have payments using QRIS. The purpose of this study is to determine the user's acceptance of technology with the intention of sustainable use arises by implementing the Stimulus-Organism-Response Model and the Expectation-Confirmation Model (ECM).

## LITERATURE STUDY

### Stimulus-Organism-Response Model

The Stimulus-Organism-Response Model (SOR Model) was established by Mehrabian & Russell (1974). This model explains that there is a stimulus that comes from the environment that can affect the internal individual or organism so that it will cause a behavioral response, either positive or negative (Mehrabian & Russell, 1974). The SOR Model framework has also been used several times to analyze user behavior in the field of information systems (Cao et al., 2020; Do et al., 2020; Ling et al., 2023)



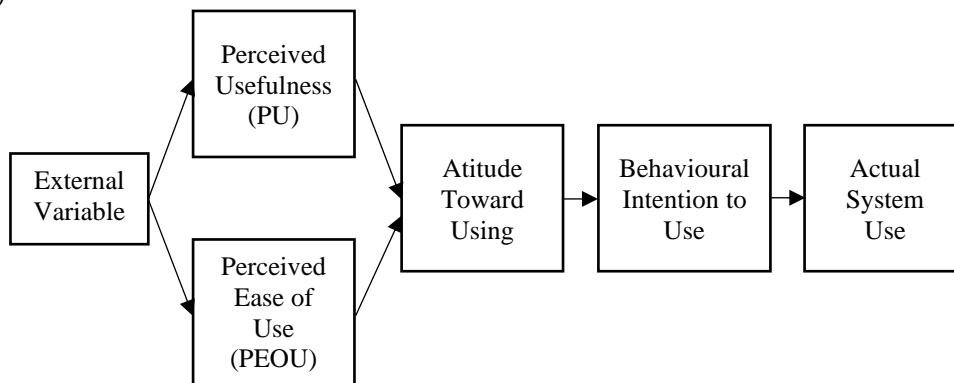
Source: Mehrabian and Rusell (1974)

## Elaboration of SOR and ECM Model in A Cashless Society Environment

**Figure 1.**  
Stimulus-  
Organism-  
Response Model

### Technology Acceptance Model (TAM)

The TAM Model was established and retrieved from a previous theory called Reasoned Action by Ajzen and Fishbein (1975). The TAM model is used to quantify the determinants of acceptance of an information system and explain the end user's behavior in using information systems. Davis et al. (1989) described that the TAM Model could produce an attitude of acceptance or rejection of system information caused by perceptions. In TAM, users can accept information systems due to Perceived Usefulness and Perceived Ease of use as the crucial aspects (Siregar, 2011). In addition, many studies have combined TAM and SOR to measure technology acceptance. (Jeong & Chung, 2022; Wu et al., 2022). In addition, many studies have used TAM to adopt digital payments that provide benefits and convenience to users when transacting (Olivia & Marchyta, 2022; Phuong et al., 2020; Purba et al., 2020)



Source: Davis et. al. (1989)

**Figure 2.**  
Technology  
Acceptance Model

### Expectation-Confirmation Model (ECM)

Bhattacharjee (2001) established the Expectation-Confirmation Model (ECM), which is retrieved from the Expectation Disconfirmation Theory (EDT) developed by Oliver (1980). The ECM model also has similarities with the formulation of the Technology Acceptance Model (TAM) developed by Davis et al. (1989) regarding the acceptance of a system or technology. Bhattacharjee (2001) describes the Expectation-Confirmation Model as a model for predicting the repeated use of a technology based on user experience and this model explains that satisfaction is a major factor in the repeated use of an information system. In addition, many previous studies have combined the ECM Model and TAM to measure technology's continuance intention.



Source: Bhattacharjee (2001)

**Figure 3.**  
Expectation-  
Confirmation  
Model

### Perceived Usefulness

Perceived Usefulness explains that establishing trust in an information system can improve an individual's work performance (Davis et al., 1989). Putri & Iriani (2021) suggest that when users see a system that can increase their work efficiency and productivity, it will positively affect trust. Based on previous research, it shows a positive effect of Perceived Usefulness on Satisfaction (Do et al., 2020; Olivia & Marchyta, 2022; Purba et al., 2020).

H1: There is an influence between Perceived Usefulness on Trust

H2: There is an influence between Perceived Usefulness on Satisfaction

### Perceived Ease of Use

Perceived Ease of Use is the level of effort required for someone to use technology so that it can be trusted to be used (Davis et al., 1989). Purba et al. (2020) suggest Perceived Ease of Use is determined as the level of user Trust in a technology that can provide an experience that is adaptable. Putri & Iriani (2021) explained that higher the level of convenience provided, the easier it will be for users to Trust a technology. In previous studies, it showed a positive effect of Perceived Ease of Use on Satisfaction (Monica & Briliana, 2020; Olivia & Marchyta, 2022)

H3: There is an influence between Perceived Ease of Use on Trust

H4: There is an influence between Perceived Ease of Use on Satisfaction

### Trust

Trust is a person's willingness to trust other people who have risks (Lau & Lee, 1999). Kotler & Keller (2016) in Hermawan & Paramita (2021) added that Trust is a person's desire to depend on something from another person. Trust is the basis for the emergence of interest (intention), which can trigger someone to become a continuous user of a service for a long time. In previous studies, it shows a positive effect of Trust on Continuance Intention (Hermawan & Paramita, 2021; Utami & Rahayu, 2022)

H5: There is an influence between Trust on Continuance Intention

### Satisfaction

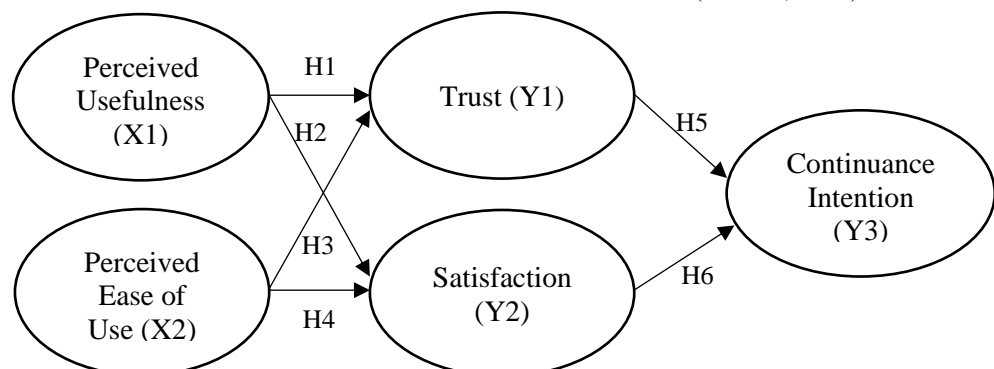
Satisfaction is a comparison made after knowing the performance of a product or service that results in feelings of pleasure or disappointment (Damanik et al., 2022). The Expectation-Confirmation Model (ECM) developed by Bhattacharjee (2001) explains that Satisfaction is one of the factors supporting the acceptance of a technology or system. (Olivia & Marchyta, 2022) argues that users who are satisfied with a technology's performance will have the Continuance Intention. In previous studies, it showed a positive effect of Satisfaction on Continuance Intention.

H6: There is an influence between Satisfaction on Continuance Intention

### Continuance Intention

Continuance Intention is an individual's assessment of a service or goods to use or buy again (Monica & Briliana (2020). Bhattacharjee (2001) says that Continuance Intention is the willingness to use continuously and play a role in a system. Damanik et al. (2022) explains Continuance Intention is very important because it is more expensive to find new users than to retain them. Technology must be able to retain it's users by providing a sense of satisfaction and trust in them so that will have the Continuance Intention (Ashsifa, 2020)

**Figure 4.**  
Research Model



## RESEARCH METHODOLOGY

This quantitative study uses a correlational method that can reveal and detect the relationship between the variables used. In the study, the population used was visitors to Samarinda Central Plaza who had transacted using QRIS, which was not known with certainty. The Hair *et al.* (2018) formula is used, which is done by multiplying the observed variable value (5-10) with the total number of indicators of the study. In this study, there are 16 indicators and an observed variable of 10, which aims to maximize the goodness of a sample so that a value of 160 samples is obtained. The sample was collected using a non-probability sampling technique through purposive sampling. The criteria are visitors to Samarinda Central Plaza who have transacted using QRIS at least twice because it takes at least more than one transaction to experience and generate attitudes. The data was obtained by distributing questionnaires directly at Samarinda Central Plaza through physical sheets and Google Forms.

## RESULT AND DISCUSSION

### Respondent Criteria

This research uses 160 respondents who were visitors to Samarinda Central Plaza. Descriptive analysis results show that 68% of respondents are female and 32% are male. Based on age, the age range of < 20 years is 35%, 21-25 years is 60%, 26-30 years is 2%, and >31 years is 3%. Then, based on the place of residence, Samarinda is dominated by 80%, followed by Balikpapan at 6%, Kutai Kartanegara at 5%, Bontang at 3%, East Kutai at 3%, and other regions at 3%.

### Convergent Validity

The convergent validity test determines whether or not each indicator's construct is valid. Convergent validity testing is declared valid if the loading factor value is > 0.7 and the Average Variance Extracted (AVE) is > 0.5. The results of convergent validity testing are shown in the following table.

Variable	Item	Loading Factor	AVE	Description
Perceived Usefulness (X1)	X1.1	0.939	0.810	Valid
	X1.2	0.930		Valid
	X1.3	0.947		Valid
	X1.4	0.959		Valid
	X1.5	0.957		Valid
	X1.6	0.896		Valid
	X1.7	0.914		Valid
	X1.8	0.944		Valid
Perceived Ease of Use (X2)	X2.1	0.907	0.803	Valid
	X2.2	0.919		Valid
	X2.3	0.943		Valid
	X2.4	0.913		Valid
	X2.5	0.928		Valid
	X2.6	0.780		Valid
	X2.7	0.842		Valid
	X2.8	0.926		Valid
Trust (Y1)	Y1.1	0.831	0.876	Valid
	Y1.2	0.920		Valid
	Y1.3	0.946		Valid
	Y1.4	0.928		Valid
	Y1.5	0.950		Valid
	Y1.6	0.914		Valid
	Y1.7	0.928		Valid
Satisfaction (Y2)	Y2.1	0.893	0.884	Valid
	Y2.2	0.934		Valid
	Y2.3	0.949		Valid
	Y2.4	0.939		Valid
	Y2.5	0.947		Valid
	Y2.6	0.965		Valid
	Y2.7	0.939		Valid
	Y2.8	0.954		Valid

**Table 1.**  
Convergent Validity  
Results

Continuance Intention (Y3)	Y3.1	0.892	0.842	Valid
	Y3.2	0.892		Valid
	Y3.3	0.903		Valid
	Y3.4	0.896		Valid
	Y3.5	0.928		Valid
	Y3.6	0.934		Valid
	Y3.7	0.906		Valid
	Y3.8	0.843		Valid

Source: Data processed from Smartpls 3.29 (2024)

Table 1 shows the results of convergent validity testing. Each item has a loading factor value  $> 0.7$  and an AVE value of 0.5, so each item is declared valid and meets the convergent validity criteria.

### Discriminant Validity

Discriminant validity will be declared valid if the loading factor value is  $> 0.7$  and the related construct is higher than others. The results of discriminant validity testing are shown in the following table.

**Table 2.**  
Discriminant  
Validity Results

	Perceived Usefulness	Perceived Ease of Use	Trust	Satisfaction	Continuance Intention
X1.1	0.939	0.893	0.867	0.863	0.781
X1.2	0.930	0.875	0.779	0.846	0.814
X1.3	0.947	0.924	0.848	0.926	0.823
X1.4	0.959	0.897	0.847	0.896	0.773
X1.5	0.957	0.907	0.882	0.871	0.858
X1.6	0.896	0.833	0.889	0.796	0.792
X1.7	0.914	0.845	0.777	0.808	0.765
X1.8	0.944	0.884	0.802	0.868	0.826
X2.1	0.857	0.907	0.826	0.897	0.794
X2.2	0.877	0.919	0.838	0.903	0.799
X2.3	0.887	0.943	0.846	0.888	0.809
X2.4	0.893	0.913	0.825	0.886	0.818
X2.5	0.890	0.928	0.861	0.907	0.773
X2.6	0.656	0.780	0.644	0.758	0.623
X2.7	0.767	0.842	0.748	0.803	0.763
X2.8	0.904	0.926	0.912	0.891	0.839
Y1.1	0.766	0.780	0.831	0.708	0.824
Y1.2	0.830	0.822	0.920	0.774	0.767
Y1.3	0.785	0.800	0.946	0.753	0.753
Y1.4	0.749	0.789	0.928	0.778	0.767
Y1.5	0.861	0.906	0.950	0.907	0.868
Y1.6	0.907	0.874	0.914	0.870	0.885
Y1.7	0.826	0.858	0.928	0.827	0.788
Y2.1	0.792	0.850	0.722	0.893	0.731
Y2.2	0.832	0.904	0.806	0.934	0.836
Y2.3	0.866	0.911	0.826	0.949	0.880
Y2.4	0.866	0.922	0.827	0.939	0.834
Y2.5	0.882	0.929	0.872	0.947	0.836
Y2.6	0.893	0.927	0.880	0.965	0.860
Y2.7	0.859	0.895	0.811	0.939	0.841
Y2.8	0.916	0.946	0.854	0.954	0.839
Y3.1	0.842	0.832	0.841	0.819	0.892
Y3.2	0.816	0.850	0.846	0.879	0.892
Y3.3	0.846	0.843	0.831	0.877	0.903
Y3.4	0.758	0.772	0.784	0.806	0.896
Y3.5	0.709	0.731	0.740	0.755	0.928
Y3.6	0.772	0.785	0.827	0.780	0.934
Y3.7	0.774	0.770	0.784	0.785	0.906
Y3.8	0.630	0.639	0.675	0.637	0.843

The table above is the results of discriminant validity testing show that each related construct has a more excellent value than other constructs, so it can be said that all constructs used are valid and fulfill the criteria for discriminant validity.

### Composite Reliability

The criteria for Composite Reliability are 0.6 - 0.7, which is considered acceptable, and 0.7 - 0.9, which is said to be satisfactory. The table below is the result of the reliability test.

Variable	Composite Reliability	Keterangan
Perceived Usefulness (X1)	0.983	Reliable
Perceived Ease of Use (X2)	0.970	Reliable
Trust (Y1)	0.974	Reliable
Satisfaction (Y2)	0.984	Reliable
Continuance Intention (Y3)	0.971	Reliable

Source: Data processed from Smartpls 3.29 (2024)

Table 3 shows that the reliability test results show a composite reliability value greater than 0.9 for each variable, so all variables are declared satisfactory and reliable.

**Table 3.**  
Composite  
Reliability Results

### R Square

R Square predicts the percentage of independent variables that can explain the dependent variable. The criteria for testing R Square are that 0.25 is considered weak, 0.50 is considered moderate, and 0.75 is considered strong (Hair *et al.*, 2017). The following table are the results of the R Square test.

Variable	R Square
Trust (Y1)	0,750
Satisfaction (Y2)	0,826
Continuance Intention (Y3)	0,750

Source: Data processed from Smartpls 3.29 (2024)

Based on Table 4, the result of testing R Square on Trust (Y1) is 0.750, which shows a strong prediction of the model. Then, the result on Satisfaction (Y2) is 0.826, which shows a strong prediction of the model. The Continuance Intention value is 0.750, which shows a strong prediction of the model.

**Table 4.**  
R Square Results

### Predictive Relevance (Q2)

Predictive Relevance (Q2) is used to determine how good the resulting observation value is for validating the model's predictive ability. The Predictive Relevance model will be said to be good if the Q2 value > 0 and is said to be harmful if the Q2 value < 0. The following is the calculation of Predictive Relevance.

$$Q^2 = 1 - (1 - R1^2) \times (1 - R2^2) \times (1 - R3^2)$$

$$Q^2 = 1 - (1 - 0,750) \times (1 - 0,826) \times (1 - 0,750)$$

$$Q^2 = 0,989125$$

Information:

- $Q^2$  = Predictive Relevance Value
- $R1^2$  = R Square Value Trust
- $R2^2$  = R Square Value Satisfaction
- $R3^2$  = R Square Value Continuance Intention

The calculation results show that the Q2 value is 0.989125, which means that Q2 has a good model prediction observation ability.

### T-test (hypothesis)

T-test results are obtained by comparing the t-statistical value with the t-table. The criteria in the t-test are the t-statistics value > t-table value (1.975) and to get a significant effect with p values < 0.05. The t-test results are shown in the table below:



**Table 5.**  
T-test Result

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Keterangan
PU $\Rightarrow$ T	0,345	0,351	0,118	2,916	0,004	Positive and Significant Effects
PU $\Rightarrow$ S	0,397	0,393	0,100	3,985	0,000	Positive and Significant Effects
PEOU $\Rightarrow$ T	0,538	0,532	0,120	4,490	0,000	Positive and Significant Effects
PEOEU $\Rightarrow$ S	0,530	0,533	0,105	5,038	0,000	Positive and Significant Effects
T $\Rightarrow$ CI	0,372	0,370	0,106	3,509	0,000	Positive and Significant Effects
S $\Rightarrow$ CI	0,534	0,536	0,105	5,064	0,000	Positive and Significant Effects

Source: Data processed from Smartpls 3.29 (2024)

Based on Table 5, all tests carried out in the T-test have t-statistics value  $>$  t-table value (1.975) and p values  $<$  0,05, so it can be said that all tests in the T-test have a positive and significant effect. Therefore, H1, H2, H3, H4, H5, and H5 are accepted.

#### Indirect Effect

The criteria for testing indirect effects are t statistics  $>$  t table value (1.975) and p values  $<$  0.05. The following are the results of testing indirect effects.

**Table 6.**  
Indirect Effect Result

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Keterangan
PU $\Rightarrow$ T $\Rightarrow$ CI	0,128	0,133	0,065	1,958	0,051	No Positive & Significant Effects
PU $\Rightarrow$ S $\Rightarrow$ CI	0,212	0,210	0,066	3,235	0,001	Positive and Significant Effects
PEOU $\Rightarrow$ T $\Rightarrow$ CI	0,200	0,193	0,063	3,174	0,002	Positive and Significant Effects
PEOU $\Rightarrow$ S $\Rightarrow$ CI	0,283	0,287	0,083	3,416	0,001	Positive and Significant Effects

Source: Data processed from Smartpls 3.29 (2024)

Based on Table 6, indirect effect testing shows that Trust cannot mediate Perceived Usefulness on Continuance Intention, but can mediate Perceived Ease of Use on Continuance Intention. Furthermore, Satisfaction can mediate Perceived Usefulness on Continuance Intention as well as Perceived Ease of Use on Continuance Intention

#### Discussion

Based on the tests that have been carried out show Perceived Usefulness affects Trust (H1). This study's findings indicate that using QRIS can save time and simplify the transaction process to provide effectiveness and convenience to its users. As stated by Ashghar & Nurlatifah (2020) the higher the user feels the benefits of technology, the more user's trust will increase. A stimulus that provides a good user experience will create a sense of trust in technology. The H2 test shows that Perceived Usefulness has a positive and significant effect on Satisfaction, so H2 is accepted. This result is in line with previous research (Ashsifa, 2020; Damanik et al., 2022; Do et al., 2020; Hartanto et al., 2020; Monica & Briliana, 2020; Olivia & Marchyta, 2022; Phuong et al., 2020). Many outlets in Samarinda Central Plaza have provided payments using QRIS, which only requires barcode scans, does not require a long time in transactions, and can be used in various digital payment applications, making users satisfied with the performance of QRIS. Therefore, QRIS is expected to maintain the existing transaction system to support user convenience and expand the merchant network with QRIS payments.

Test H3 shows that Perceived Ease of Use has a positive and significant effect on Trust, which means that H3 is accepted. Research conducted by Subagio & Rachmawati (2020) and Utami & Rahayu (2022) also show similar results. Utami & Rahayu (2022) explain that the high level of user trust in technology is influenced by one.



of them by the convenience felt by users. QRIS users at Samarinda Central Plaza are able to increase their trust that QRIS is able to meet user expectations, which include the ease of understanding QRIS instructions and QRIS displays so as to create a sense of trust in using QRIS. Furthermore, Test H4 shows that Perceived Ease of Use has a positive and significant effect on Satisfaction, which means that H4 is accepted. Previous research also proves the same result (Hermawan & Paramita, 2021; Monica & Briliana, 2020; Olivia & Marchyta, 2022; Phuong et al., 2020; Purba et al., 2020). QRIS makes it easy to access various digital payments, so users don't need to download additional applications to use QRIS. At Samarinda Central Plaza, many outlets provide payments using QRIS, so users don't need to worry if they don't have cash. Therefore, QRIS must continually improve the transaction system by supporting user activities in accessing QRIS despite low network quality.

Then, the H5 test shows that Trust has a positive and significant effect on Continuance Intention, so H5 is accepted. This finding is in accordance with previous research (Damanik et al., 2022; Dinanti & Bharata, 2023; Hermawan & Paramita, 2021; Purba et al., 2020; Subagio & Rachmawati, 2020; Utami & Rahayu, 2022). The findings in the field obtained the results that users want to use QRIS continuously because QRIS can be trusted legally because QRIS is issued directly by Bank Indonesia. There is security in transactions using QRIS. Transactions with QRIS can only be said to be successful if they have successfully passed verification twice by the acquiring bank so that the transaction process using QRIS can be trusted (Septiadi, 2019). QRIS must be able to maintain user convenience in operating QRIS, especially in user security.

Finally, Test H6 shows that satisfaction has a positive and significant effect on continuation intention, which means that H6 is accepted. These results are in line with previous studies (Damanik et al., 2022; Hermawan & Paramita, 2021; Olivia & Marchyta, 2022; Phuong et al., 2020). Based on the findings in the field, the satisfied attitude of QRIS users at Samarinda Central Plaza Mall is created because QRIS payments are fast enough to shorten the transaction process compared to manual payments. Users feel a pleasant experience after transacting using QRIS, so there is a desire to use it again. Sustainable use intention will be shown by QRIS users with the desire to continue using QRIS wherever and whenever as a payment method (Kurniasari et al., 2020). Therefore, QRIS must be able to maintain the experience that its users have felt.

The Indirect Effect test shows that trust has no positive and significant effect in mediating the effect of Perceived Usefulness on Continuance Intention. Research conducted by Utami & Rahayu (2022). This happens because the majority of respondents who use QRIS at Samarinda Central Plaza Mall are women, and women tend not to be able to trust technology by only considering the usefulness of the technology. However, women actually feel more at ease with technology. On the other hand, Perceived Usefulness is actually highly considered by users of the male gender Widodo & Susanto (2018). Likewise, the Expectation-Confirmation Model (ECM) does not use a Trust to link Perceived Usefulness with Continuance Intention. The ECM model explains that Satisfaction is the most critical factor in Continuance Intention. QRIS must be able to encourage user trust, mainly by convincing them that QRIS can be helpful for its users.

Furthermore, Satisfaction has a positive and significant effect on Perceived Usefulness and Continuance Intention. Previous research also stated similar results (Damanik et al., 2022; Hartanto et al., 2020; Hermawan & Paramita, 2021; Monica & Briliana, 2020; Olivia & Marchyta, 2022), likewise, in the Expectation-Confirmation Model (ECM) developed by Bhattacharjee (2001) which explains that Satisfaction is the most critical factor in sustainable use intentions. The results of this study also prove the Stimulus-Organism-Response Model developed by Mehrabian & Russell (1974). The stimulus in question is the Perceived Usefulness received by users, which results in a sense of Satisfaction as an Organism or mediation between the Stimulus and Response, which ultimately results in a sustainable use intention response.

Other results show that Trust has a positive and significant effect in mediating Perceived Ease of Use and Continuance Intention. The use of QRIS as a payment method is now often an option for the community because of the ease of access offered. However, of course, there are still user concerns about the possibility of risk. Therefore, user trust in using QRIS is also taken into account (Subagio & Rachmawati, 2020). Although Trust comes from Organism in the SOR model, Trust mediates Perceived Ease of Use, which comes from TAM, and Continuance Intention, which comes from ECM. This again proves the Stimulus-Organism-Response Model, which explains that there is a stimulus (stimulus) that affects the individual (organism) so that it produces a response (response).

Then, the last indirect effect test showed that Satisfaction had a positive and significant effect. The success of Satisfaction in mediating Perceived Ease of Use on Continuance Intention was also found in previous studies (Hermawan & Paramita, 2021; Monica & Briliانا, 2020; Olivia & Marchyta, 2022). The results of this study are in line with the proposed Technology Acceptance Model (TAM), which explains that Perceived Ease of Use is a factor in system acceptance. Creating ease of use for QRIS users will create a satisfied attitude. This satisfied attitude will then show the final behavior as described in the Expectation-Confirmation Model (ECM), which in this case is the intention to use QRIS sustainably. These results are also in line with the theory described in the SOR Model.

## CONCLUSION

This research was conducted to determine the Continuance Intention of using QRIS as a digital payment method by implementing the Stimulus-Organism-Response Model and the Expectation-Confirmation Model (ECM). The results of this study indicate that the response Continuance Intention is influenced by Trust and Satisfaction, supported by stimulus from Perceived Usefulness and Perceived Ease of Use. Perceived Usefulness and Perceived Ease of Use as a stimulus affect Trust and Satisfaction. Likewise, Trust and Satisfaction also affect the Continuance Intention.

In indirect effect testing, Trust does not mediate between Perceived Usefulness on Continuance Intention, but Trust can mediate between Perceived Ease of Use on Continuance Intention. In other tests, Satisfaction can mediate between Perceived Usefulness on Continuance Intention and Perceived Ease of Use on Continuance Intention. These results show that the convenience offered by QRIS significantly impacts the use of QRIS as a transaction method

This research contributes to a theoretical foundation that expands the literature related to factors that influence the Continuance Intention in digital payments and can serve as a reference for future research that integrates technology and psychological models in digital payments. In addition, this research also contributes to QRIS, suggesting that they always pay attention to the usefulness, ease of use, trust, and satisfaction provided to QRIS users.

This study still has shortcomings and limitations, as it did not use all variables in the TAM and ECM models, and the scope of research location is still limited to Samarinda City. So that future researchers with similar research can add other variables to the TAM and ECM models and expand the scope to a wide range of locations.

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