



Exploring Intention in Using Quick Response Code Indonesian Standard: Technology Acceptance Model Approach

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Abstract

Purpose - This research examines the influence of people's intention to use QRIS by taking variables from the Technology Acceptance Model (TAM), namely perceived usefulness, perceived ease of use, perceived trust, attitude towards usage of QRIS and behavioral intention to use QRIS.

Methodology - This research method uses a quantitative approach with a sampling technique chosen through purposive sampling. Data collection was carried out by distributing questionnaires to QRIS users. Data analysis employed SmartPLS version 4 with a sample size of 100 respondents.

Findings - The results show a positive relationship but not a significant effect between perceived usefulness and perceived ease of use on behavioral intention to use QRIS. Meanwhile, perceived trust and attitude towards usage of QRIS exhibited a positive relationship and had a significant effect.

Originality - Trust is an influential variable and plays a significant role in using a technology such as QRIS.

1. Introduction

The COVID-19 pandemic has forced us to adapt to new communication and social interaction methods. Since then, we must think creatively to conduct various online activities while maintaining social distancing. However, this situation has led to the development of information and communication technology innovations, including the acceleration of digital payment transactions, which have made online transactions more convenient and secure (Queen, 2021). Along with the development of technology, a practical way of payment was finally found, called an electronic wallet (e-wallet).

The first emergence of digital wallets in Indonesia is one of the consequences of technological disruption that changed human habits of making payment transactions from paying cash to digital systems. Various payment system service providers (PJSP) offer various promos to attract consumer attention, such as cashback, multiple discounts, and super attractive offers, which in turn make consumers interested in installing various payment system services such as OVO applications, Gopay, Funds, Link Aja, I.Saku. Shopee pay, Octo Mobile, Doku, Sakuku. Various

promos have seduced consumers to be loyal to one or more of these PJSPs. Unfortunately, not only makes it a hassle to top up and complete mobile phone storage because many applications lined up on the mobile phone, the number of cashback decreases, discounts no longer exist, and the increasingly expensive fees charged for a top-up at the end, make lazy to use all of it. Unfortunately, the features believed to be mainstream shortly are expected to make other digital wallets increasingly irrelevant.

The QRIS unifies QRs from various Payment System Service Providers (PJSP) using QR Codes. QR Code is a series of codes that contain data/information, all merchant/user identities, payment amounts, and currencies that can be read with specific tools in the context of payment transactions. The payment system industry developed QRIS and collaborated with the Bank of Indonesia. QR codes make the financial transaction process easier, faster, and safer. All Payment System Service Providers employing QR Code Payments must implement (Farrell et al., 2022).

QRIS was developed using the Europay, Mastercard, and Visa (EMV) Co international standards. This standard was adopted to support better interconnection and open source and accommodate country-specific needs to facilitate interoperability between providers, instruments, and countries (Sihaloho et al., 2020). This standard has also been used in various countries such as India, Thailand, Singapore, Malaysia, Thailand, South Korea, and other countries (Farrell et al., 2022).

Along with that, QRIS innovations continue to be implemented for payments and transfers, cash withdrawals, and other transactions. It is because the QRIS application is already available in the mobile banking menu that we have long used before, without having to download or use a separate application, such as digital wallets that need to be installed, topped up, and full of various limitations. The increasing number of QRIS transactions in (Figure 1) proves the higher public interest in the payment system.

Since then, QRIS has been available in conventional and Sharia banks' applications. By having QRIS, we do not need the hassle of installing, topping up, or thinking about the remaining unused balance. In addition, the presence of QRIS also helps merchants receive payments from various QR-based payment service applications. With various advantages, it is unsurprising that the number of QRIS transactions continues to increase, from 5 million times with a transaction value of Rp. 365 billion in 2020 to 91.7 million QRIS transactions valued at Rp. 9.66 trillion in August 2022 (Ahdiat, 2022). Based on databoks.co.id, the used of QRIS every year during 2020 - 2022 climbed sharply, as shown in Figure 1. This data is irresistible to be studied, what the intention factors influence people to use QRIS. (Ahdiat, 2022).

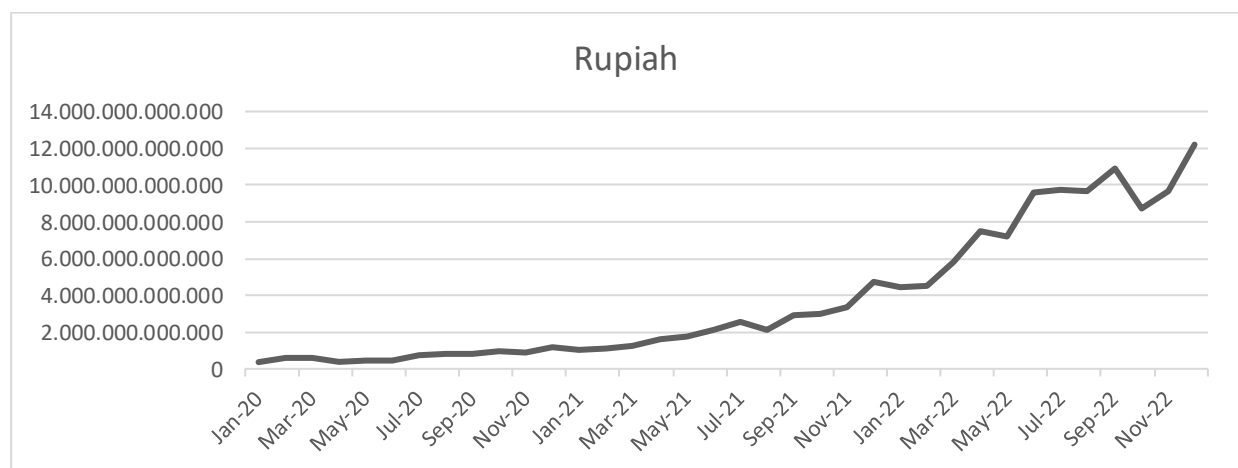


Figure 1. Data of QRIS Transaction in Rupiah.

The first theory that tried to explain and predict a decision to use technology tools is based on the field of Psychology. The theory of Reasoned Action (TRA) by (Ajzen, 1985) was the forerunner of the emergence of the Technology Acceptance Model (TAM), which coincided with the Theory of Planned Behavior (Ajzen, 1985). To develop the previous model that could be used to predict the actual use of any specific technology, Fred Davis adapted the TRA and proposed the TAM theory (Davis, 1980). He explained that the TRA is a psychological framework developed to explain human behaviour, particularly behaviour associated with decision-making. Meanwhile, TAM suggests that user intention can be explained by perceived ease of use, usefulness and attitude towards use. TAM is a model to describe individual attitudes towards using technology.

Several researchers gave their opinions on the intention to use QRIS. There are many factors affect customers to use banking transactions particularly by applying electronic system. Socio cultural, trusted, giving benefits and usefulness, easy to utilize, efficient are the variables which will be considered before adapting electronic money. Meanwhile, convenience or religious are not considered variables. Table 1 is a brief description of the results of previous studies.

Table 1. Previous Study

Previous Researchers	Result
(Wijaya & Mulyandi, 2021)	Socio-cultural aspects, security, and benefits influence millennials' interest in using electronic money. While the aspects of convenience and risk are not so influential
(Saksono & Untoro, 2023)	Intention to use was determined by perceived usefulness, perceived ease of use, and attitude toward usage.
(Dennis Shabri Alfani et al., 2023)	Trust support influences the intention to use mobile banking, but religious variables do not.
(Septi Mariani Tis'a Ramadhani et al., 2022)	Perceived usefulness, perceived ease of use, and trust directly and indirectly affect the intention to use BNI mobile banking.
(Hantono et al., 2023)	That perceived usefulness and attitude toward using did not affect the intention to use an accounting system; meanwhile, perceived ease of use influence.
(Pramuja et al., 2021)	Variables of QRIS, namely usability complexity, time constraints, ease of use and efficiency, showed appropriate consistency. That is because most respondents used QRIS as an electronic transaction system to help them make their transactions more quickly, efficiently and accessible.
(Edwin Zusrony et al., 2023); (Nada et al., 2021); (Sihaloho et al., 2020)	The perceived usefulness and perceived use variables positively and significantly influence the interest in using QRIS digital payments on MSME.

Source: processed data

The perceived risk variable positively and significantly affects the interest in using QRIS digital payments. In short, the success of QRIS implementation can be analysed using the TAM model, which integrates usefulness, ease of use, and trust in the decision to use QRIS. According to research held by (Subar, 2021), merchants who adopted QRIS in Surakarta in 2020 increased by 201.3% in a year. However, merchants' knowledge regarding the usage of QRIS needs to be improved, as evidenced by the fact that many merchants need to understand how to utilise QRIS. The results showed that the application of QRIS in the Surakarta area was not optimal yet. Previous research conducted by (Saputri, 2020) stated that the perceived usefulness factor significantly affects interest in using QRIS, while other perception factors do not affect consumer interest in using QRIS. This is different from research by (Kee, 2022), which says that ease of use, low-risk assumption, and convenience in use influence the intention to utilise E-wallets.

Research conducted by (Setiawan et al., 2022) has proven Davis's theory that attitude towards usage can be an intervening variable in the relationship between Perceived ease of use and perceived usefulness with behavior intention to use QRIS (Setiawan et al., 2022). However, he denied Davis's theory with his argument that partial perceived usefulness and perceived ease of use did not directly affect Behavior intention. Therefore, this research also wants to prove Davis's theory and re-test Setiawan's findings. Previous researchers employed the TAM method to implement the factors that affect the intention to use digital payment, e-wallet, and E-banking. However, less research focuses on the intention to use QRIS. Along with that, this research aims to determine the influence of people's intention in using QRIS by taking variables from the TAM, namely perceived usefulness, perceived ease of use, perceived trust, attitude towards usage QRIS, and behavioral intention to use QRIS. Based on the background above, the researcher suggested the conceptual framework of the variables taken in this study as in Figure 2. In this study, there are four hypotheses proposed, namely:

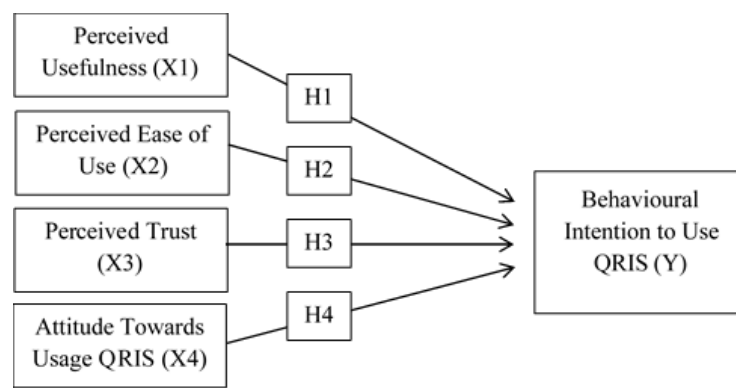


Figure 2. Conceptual Framework

2. Research Methods

This study used a quantitative method to test at how several things affect people's decisions to use QRIS. It focused on four variables: (1) Perceived usefulness is how useful people think using QRIS will be. (2) Perceived ease of use is how easy it is to use QRIS. (3) Perceived trust is how confident people are that QRIS is secure and reliable. (4) Attitude toward usage is how people feel about using QRIS. This study used statistics to understand how these factors affect people's decisions to use QRIS in their financial transactions.

The purposive sampling technique is employed with specific considerations and criteria that have been determined. Respondents are Indonesian Muslims aged 15 - 54 years, with a minimum of high school/relevant. Researchers use primary data, i.e., data obtained directly from respondents by distributing questionnaires made by researchers. The questionnaire was designed by using Google Forms and distributed via WhatsApp to many people who met the requirements as a sample, either personally or through WhatsApp groups in 13 regions of Indonesia. Google Forms and WhatsApp were chosen because both can cover all parts of Indonesia, making it easier to distribute questionnaires to samples throughout Indonesia.

The population of this study is QRIS users, with a total of 30.87 million people (Bank Indonesia, 2023). Due to the huge population, this study employed a sample that might represent the population. This study used a sample of 100 respondents who were rounded up from the sample calculation results using the Slovin method. The sample calculation used the Slovin formula as follows:

$$n = \frac{N}{1 + Ne^2}$$

Description: n = sample size; N = population size; e = error/error rate (10%)

Then from the calculation of the formula obtained:

$$n = \frac{30.870.000}{1+30.870.000(10\%)^2} \quad n = 99,9$$

Figure 3. Slovin Formula

In quantitative research, the use of reference variables, dimensions and indicators is very important to ensure accuracy and consistency of measurement, so that researchers can ensure that the questionnaire created is able to measure research variables comprehensively and produce valid and reliable data for further analysis. The dimensions and indicators of each variable are shown in Table 2 (see Appendix).

Furthermore, the data was tested and analyzed using SMART PLS version 4. The sample used is reinforced by (Kwong-Kay, 2013) and the recommended minimum sample size ranges from 100-300 in CB-SEM estimation. Moreover, (Chin, 2000) stated that the minimum sample size used by PLS-SEM is 30-100 sample sizes.

PLS uses the principal component analysis method in its measurement model, namely the variance extraction block, to see the relationship between indicators and their latent constructs by calculating the total variance consisting of standard, specific, and error variance. So that the total variance is high, the consequence of using PLS-SEM is that testing can be done without a solid theoretical basis, ignoring some assumptions (non-parametric) and prediction model accuracy parameters seen from the coefficient of determination (R-square). Therefore, PLS-SEM is appropriate for theory development-based research (Purwanto & Sudargini, 2021).

3. Results and Discussions

Respondents in this study are users of QRIS and Indonesian Muslim citizens. The sample observed in this study amounted to 100 Muslim respondents. Data is collected by distributing Google Forms, an online questionnaire through private groups and WhatsApp. Based on the data collection results, this study's respondents' characteristics are reflected in Table 3.

Table 3. Respondent Characteristics

Characteristics	Frequency	Percentage (%)
Gender		
Male	42	42%
Female	58	58%
Provincial Origin		
Aceh	2	2%
Bandung	1	1%
Banten	15	15%
DKI Jakarta	11	11%
West Java	15	15%
Central Java	19	19%
East Java	23	23%
East Kalimantan	2	2%
West Nusa Tenggara	2	2%
South Sulawesi	1	1%
Central Sulawesi	1	1%

Characteristics	Frequency	Percentage (%)
South Sumatra	2	2%
North Sumatra	6	6%
Age		
15 - 24 Years	40	40%
25 - 34 Years	36	36%
35 - 44 Years	9	9%
45 - 54 Years	15	15%
Income per month		
< Rp. 5,000,000	46	46%
Rp. 5,000,000 - Rp. 10,000,000	24	24%
Rp. 10,000,000 - Rp. 20,000,000	13	13%
> Rp. 20,000,000	17	17%
Last Education		
High School / Equivalent	25	25%
D3/Diploma	2	2%
S1/Bachelor's Degree	45	45%
Master/Postgraduate	22	22%
S3/Doctoral	6	6%

Source: processed data

Table 3 illustrates that the majority of the genders in this study are female, totaling 58%. Furthermore, in the category of provincial origin, the three largest groups of respondents came from East Java (23%), followed by Central Java (19%) and West Java and Banten (15%), respectively.

From the respondent data, it can also be concluded that the most respondents in this study are the group of young people (15-24 years) by 40%. It proves that respondents who are at that vulnerable age are generational individuals who are very close to so they can dominate in this study. Respondents with monthly incomes less than Rp.5,000,000 are the most significant percentage. Besides, the most significant number of education levels is S1/Bachelor degree.

Table 4. How often do you use QRIS as a payment method?

	Percentage (%)
Sometimes	73%
Every transaction or Payment	27%

Source: processed data

Based on Table 4, it can be concluded that 73% of respondents "Sometimes" used QRIS, which means that respondents can use it for certain payments occasionally. The rest is "Every transaction or payment" by 27%. It shows that QRIS has been widely used in many transactions, especially by the younger generation, who are very literate in technology.

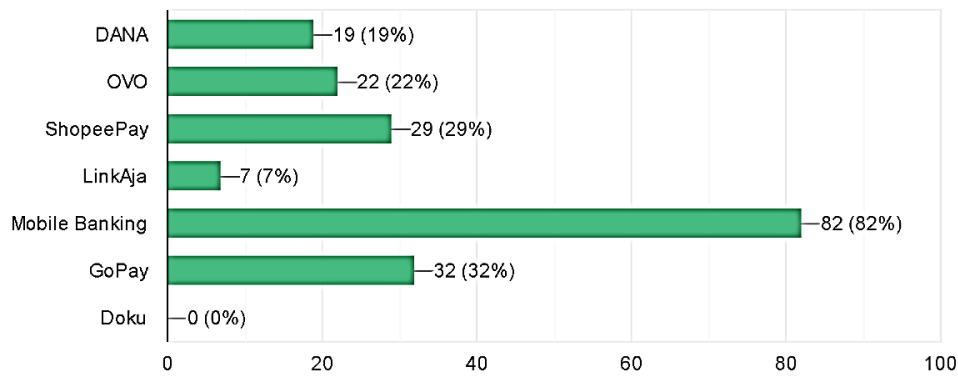


Figure 3. QRIS Payment Application Type Distribution Diagram Results

Figure 3 illustrates the distribution of QRIS payment application usage, highlighting that Mobile Banking is currently the most widely adopted platform, utilized by 82% of users. In comparison, the other prominent applications include GoPay, which is used by 32% of users, ShopeePay with a 29% user base, and OVO, accounting for 22% of the users. This significant preference for Mobile Banking underscores its dominance in the market. Additionally, it is noteworthy that Doku, despite being available, has not yet achieved widespread adoption among users.

Table 5. Is the QRIS payment system guaranteed according to Sharia principles?

	Percentage (%)
Yes, in accordance with sharia principles	63%
No, not yet fully in accordance with sharia principles	37%

Source: processed data

Table 5 shows that 63% answered that the QRIS payment system was guaranteed according to Sharia principles. However, quite a lot (37%) answered that the QRIS payment system must be fully by Sharia principles. Destianingsi (2021) explained that the Fatwa of the National Sharia Council of the Indonesian Ulama Council No.116/DSNMUI/IX/2017 concerning Sharia Electronic Money: from the perspective of Sharia law, using electronic money or e-money is allowed considered many benefits for the users, vendors, merchants and economic system and efficiency. However, 37% of the sample answered that using QRIS is not fully aligned with the Sharia principle. It might be due to a need for more socialization of QRIS, which is halal for transactions. Moreover, QRIS is a new transaction system, and socialization about QRIS has not been evenly distributed throughout all regions in Indonesia, but they might consider that the QRIS is regulated by the Bank of Indonesia and legal.

Data analysis is carried out through SmartPLS version 4 with two stages of the model: measurement model evaluation (outer model) and structural model evaluation (inner model). In the first stage, data analysis will be carried out using a measurement model (outer model) divided into two parts: validity and reliability testing. However, the validity test is divided into 2, namely convergent validity and discriminant validity.

The convergent validity test exhibited that most outer loading values are > 0.70 , which is valid. However, the indicators X^{1.3} (Technology that is useful and following Sharia); X^{3.1} (compliance to), X^{3.2} (Rules), and X^{4.3} (Fun ideas) are declared invalid because they have a value below 0.70. Therefore, those indicators were removed from the model. Several indicators were removed based on the model image; hence, testing could be carried out to the next stage when all indicators were confirmed valid. After re-evaluating the excluded indicators, the outer loadings of

all indicators are stated as valid. The results of further data processing exhibited the AVE value, which can be seen in Table 6.

Table 6. Average Variance Extracted (AVE) Value

Variables	AVE	Critical Value	Description
Perceived Usefulness (X ₁)	0.639	> 0.5	Valid
Perceived Ease of Use (X ₂)	0.804	> 0.5	Valid
Perceived Trust (X ₃)	0.879	> 0.5	Valid
Attitude Towards Usage of QRIS (X ₄)	0.646	> 0.5	Valid
Behavioural Intention to Use QRIS (Y)	0.792	> 0.5	Valid

Source: processed data

The AVE value is concluded to be good if > 0.5 (Ghozali, 2015). It can be seen in Table 6 that AVEs are valid, and they can be carried out to the next step. The next stage is to test the discriminant validity by looking at the cross-loading value. This value for each variable must be greater than 0.70 (Ghozali, 2015). To measure discriminant validity by comparing the value of indicators, it must be greater than the value of other variables' indicators.

Table 7. Discriminant Value Validity Cross Loading

Indicator	PU X₁	PEOU X₂	PT X₃	ATU X₄	ONE Y
X ¹ .1	0.801	0.715	0.446	0.437	0.488
X ¹ .2	0.859	0.795	0.405	0.480	0.485
X ¹ .4	0.732	0.502	0.471	0.524	0.511
X ¹ 2	0.658	0.841	0.411	0.514	0.492
X ² 2	0.700	0.885	0.403	0.413	0.478
X ³ 2	0.843	0.926	0.464	0.527	0.565
X ⁴ 2	0.790	0.931	0.462	0.508	0.563
X ³ .3	0.476	0.405	0.935	0.655	0.677
X ³ .4	0.560	0.505	0.940	0.632	0.708
X ⁴ .1	0.450	0.446	0.401	0.762	0.515
X ⁴ .2	0.493	0.381	0.687	0.816	0.637
X ⁴ .4	0.510	0.503	0.541	0.831	0.614
Y ¹	0.561	0.518	0.643	0.622	0.898
Y ²	0.582	0.556	0.626	0.631	0.883
Y ³	0.496	0.446	0.783	0.693	0.894
Y ⁴	0.579	0.579	0.566	0.675	0.886

Source: processed data

The cross-loading value in Table 7 describes the correlation between indicators are > 0.70 . It indicates good discriminant validity. The next stage, reliability testing, can be seen through the composite reliability and Cronbach's alpha measurement values. It is reliable or acceptable if they are above 0.70. These results can be seen in the Table 8.

Table 8. Cronbach's alpha and Composite Reliability values

Variables	Cronbach's alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Rule of Thumb	Result
Perceived Usefulness (X ₁)	0.715	0.713	0.841	> 0.70	Reliable
Perceived Ease of Use (X ₂)	0.918	0.925	0.942	> 0.70	Reliable
Perceived Trust (X ₃)	0.862	0.863	0.936	> 0.70	Reliable
Attitude Towards Usage of QRIS (X ₄)	0.726	0.734	0.845	> 0.70	Reliable
Behavioural Intention to Use QRIS (Y)	0.913	0.915	0.939	> 0.70	Reliable

Source: processed data

Table 8 provides Cronbach's alpha and Composite reliability values above 0.70. These mean that the variables are reliable or acceptable. Hence, it can continue to the next stage of analysis. The next step in the model evaluation is the structural model evaluation (inner model) test. Several component items become criteria for assessing the structural model (inner model), namely the R-Square and Significance Test. R-Square values of 0.75, 0.50, and 0.25 indicate strong, moderate, and weak models, respectively (Ghozali, 2015).

Table 9. R-Squares Value Results

Variables	R-Squares Value
BITU (Y)	0.674

Source: processed data

It can be seen in Table 9 that the R-Square value is 0.674. It can be concluded that the behavioural intention to use the (Y) variable is contributed by 0.674, or 67%, and consists of the PU, PEOU, PT, and ATU variables. This value is indicated in the moderate category. Moreover, other variables outside this study explain the remaining (33%).

Furthermore, the second structural model assessment criterion (inner model) is the significance test. This is the last data processing stage in structural model evaluation, which can be seen through bootstrapping. The significance value used (two-tailed) t-value is 1.65 (significance level = 10%), 1.96 (significance level = 5%), and 2.58 (significance level = 1%) (Ghozali, 2015). In this study, the significance test used a significance level of 5% with a value of 1.96. To decide the significance and results of hypothesis testing, we can see the bootstrapping output results of the path coefficients value from Table 10.

Table 10. Bootstrapping Output & Path Coefficients

Variables	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P Values	Result	Conclusion
Perceived Usefulness (X ₁) > BITU (Y)	0.075	0.099	0.114	0.654	0.513	Positive and Not Significant	Rejected
Perceived Ease of Use (X ₂) > BITU (Y)	0.146	0.153	0.177	0.824	0.410	Positive and Not Significant	Rejected
Perceived Trust (X ₃) > BITU (Y)	0.390	0.370	0.106	3.698	0.000	Positive and Significant	Accepted
Attitude Towards Usage QRIS (X ₄) > BITU (Y)	0.344	0.337	0.110	3.122	0.002	Positive and Significant	Accepted

Source: processed data

The hypothesis in a study can be accepted if the P-value value is < 0.05 (Yamin & Kurniawan, 2011). Based on Table 10, it can be concluded that Perceived Usefulness (X_1) has no influence on Behavioural Intention to Use QRIS (Y). Therefore, hypothesis 1 is rejected. This result is in line with research Rantung et al., (2020), (Karim et al., 2022), and Saripudin et al., (2023) who found that Perceived Usefulness has no significant effect on Behavioural Intention to Use QRIS. However, this result contradicts research conducted by Setyaningsih et al., (2023) and Syah et al., (2022) Perceived usefulness has a positive and significant effect on behavioural intention to use. To and Trinh, (2021) clarified that Perceived Usefulness positively and significantly affects behavioural intention to use M-wallets in Vietnam. This finding is plausible since the interference with internet connections and literacy related to the use of QRIS still needs to be improved. This can result in someone who initially uses QRIS, but when a problem occurs, they are reluctant to use it again. Such a thing is the cause of the decline in someone's interest in using QRIS as a means of payment. In addition, when consumers make purchases, the benefits they feel are not due to the usage of QRIS but instead having the benefits of the goods they have purchased. This finding aligns with the research by Halim, (2022).

Furthermore, it was found that the perceived ease of use variable shows a positive but insignificant; hence, hypothesis 2 is rejected. It occurs because there is a unidirectional relationship that does not influence the Behavioural Intention to use QRIS. The greater the level of perceived ease of use of a person, the higher the interest in QRIS. However, this contradicts the existing facts, as this study produced findings that some people felt the convenience provided by QRIS differed from what they felt. The convenience QRIS provides does not influence the intention to use QRIS because it makes them vulnerable to fraud. This QRIS feature still causes a lack of literacy for previous generations who think that using QRIS is only difficult, not to mention that they are used to transacting in cash; therefore, this means that the convenience provided by QRIS does not necessarily have an impact on one's intention to use it, depending on the conditions and seems complicated in using it. This study's findings align with research by (Pontoh et al., 2022) (Kurnia et al., 2023) conveyed that perceived ease of use does not affect Merchant Intention. Corroborating with previous researchers, (Syah et al., 2022) support this study, where perceived ease of use has an insignificant effect on the intention to use QRIS. In contrast with the research of (Setyaningsih et al., 2023) and (Primandari & Suprapti, 2022) who mentioned that perceived ease of use has a positive and significant effect on the intention to use.

The study found a positive relationship; the higher the trust a person feels towards a technology such as QRIS, the higher the behavioural intention to use QRIS. The QRIS has been governed by regulations made by the Bank of Indonesia. Accordingly, people feel safe and comfortable and have more trust when using QRIS. It can be concluded that the Perceived Trust variable adduced that there is a positive and significant relationship with intention to use; therefore, hypothesis 3 is accepted.

Conversely, the finding of (To and Trinh, 2021) revealed that trust does not significantly affect the intention to use M - wallets in Vietnam. However, Yudhayani et al., (2022) said that Brand Trust significantly affect behavioural intention to use QRIS. In addition, the result of this study is in line with (Mamesah et al., 2023) (Ariningsih et al., 2022) who argued that Perceived Trust has a significant effect on intention to use QRIS.

Hypothesis 4 can be confirmed since the statistical test exhibited that attitude towards using QRIS positively and significantly influences the intention to utilise QRIS. It indicates a unidirectional relationship: the higher the attitude of acceptance of QRIS, the higher the person's intention to use QRIS. The acceptance of technology by showing a positive attitude indicates their interest in using QRIS. Instead, if someone cannot accept the existence of technology, then they

will not employ it and still believe in doing the transaction by cash. This result is in accordance with research (Setiawan et al., 2022) that shows that attitude towards using QRIS affects behavioural intention. In addition, research by Rahayu (2022) shows that Attitude Towards Behavior significantly affects behavioural intention to use e-payments in Indonesia. Furthermore, (Chueh & Huang, 2023) asserted that attitude toward using digital equipment influences the intention to use digital systems. Final point to note is that the variables, perceived usefulness and perceived ease of Use, are not significant in influencing intention to use QRIS. Meanwhile, the other two independent variables, i.e., perceived trust and attitude towards usage of QRIS, significantly influence the intention to utilise QRIS.

4. Conclusions

It is worth noting that the variables of perceived usefulness (X_1) and perceived ease of use (X_2) do not appear to have a significant impact on the intention to use QRIS. This could be attributed to a potential lack of familiarity with QRIS despite its user convenience. Furthermore, the requirement to use QRIS may pose a challenge for some users despite its initial launch as a transaction convenience. Understandably, respondents may find implementing QRIS technology challenging due to various factors, such as their familiarity with cash payments and the perception that it is difficult. Furthermore, people may hesitate to use QRIS due to concerns about fraud and misuse. Therefore, it can be concluded that QRIS is a convenient and user-friendly payment method. The perception of trust and the attitude of acceptance towards the usage of QRIS significantly influence the behavioural intention to use QRIS. This implies that users feel secure in transactions when the initiator of QRIS adheres to various existing regulations, which is the main factor in technology. Confidence in using new technology, specifically non-cash payments, is closely related to the attitude of QRIS user acceptance. Accepting new technology means that users believe and have confidence in what they are using. This research is expected to enrich the theory of the TAM method and the decision-making theory. This research may have some limitations in the variables used; first, it only employed the TAM approach and did not consider other factors such as promotion or lifestyle. Second, data collection was only by distributing questionnaires. This may limit the ability to obtain more in-depth information about the obstacles faced in using QRIS or other personal factors that may be considered as reasons for not using QRIS. Since 33% of the intention to use QRIS is influenced by other factors, future research should add more variables such as promotion, lifestyle, recommendation, and social environment. In order to get more in-depth information regarding the usage of QRIS, it is suggested to be supported by the interview method.

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APPENDIX

Table 2. Variables, Dimensions, Indicators and Sources

Variables	Dimensions	Indicator	Statement	Source
Perceived usefulness (PU) (X ₁)	(1) Work more quickly (2) Makes job easier (3) Useful (4) Increase productivity	(1) Work is getting faster (2) Make work easier (3) Technology that is useful and in accordance with Sharia (4) Increase productivity	(1) Users feel that all transactions through QRIS are very fast in time (2) QRIS transactions are very effective and efficient (3) QRIS transaction system is usury-free (4) QRIS use increases business transactions	The variable dimensions were taken by researchers from Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology MIS quarterly
Perceived ease of USE (PEOU) (X ₂)	(1) Easy to learn (2) Easy to understand (3) Effortless (4) Easy to use	(1) Ease to learn (2) Ease to understand (3) Does not require a lot of time (4) Easy to use	(1) QRIS technology is easy to learn (2) Users understand the QRIS payment system (3) QRIS is very fast to operate (4) QRIS is very easy to operate	According to Davis (1989), aspects used for perceived ease of use (in Chawla & Joshi, 2019)
Perceived trust (PT) (X ₃)	(1) Competence (2) Benevolence (3) Communication (4) Privacy and Security	(1) Compliance to (2) Rules (3) Communication (4) Safe and trusted	(1) The QRIS system is supervised by Bank of Indonesia (2) QRIS guarantees refunds in case of problems (3) QRIS system is a trusted payment tool (4) QRIS system is a safe and convenient payment tool	of Deb, M., & Lomo-David, E. (2014). An empirical examination of customers' adoption of m-banking in India.
Attitude Towards Using QRIS (X ₄)	(1) A Good Idea (2) A Wise Idea (3) Fun Idea (4) Positive Idea	(1) Good ideas (2) Wise ideas (3) Fun ideas (4) Good ideas	(1) Using QRIS because it follows the digital payment trend (2) Using QRIS because it is considered safe (3) Using QRIS because of the promos provided (4) QRIS as a popular payment tool	Guritno, S., & Siringoringo, H. (2013). Perceived usefulness, ease of use, and attitude towards online shopping usefulness towards online airlines ticket purchase.
Behavioural Intention to Use (Y)	(1) Performance expectancy (2) Effort expectancy (3) Social influence (4) Facilitating conditions	(1) Capable technology (2) Easy (3) Reliable environment (4) Quality technology	(1) Interested in using QRIS because it is considered useful (2) Interested in using QRIS because it is easy to use (3) Interested in using QRIS because it is trusted (4) Interested in using QRIS because it is in accordance with technological developments	Venkatesh et. al. (2003) the dimensions of behavioral intention to use (in Chawla & Joshi, 2019)

Source: processed data