DETERMINING FACTORS OF BEHAVIORAL INTENTION TO USE QRIS AT TRADITIONAL MARKET IN PURWOKERTO

.

ABSTRACT

Aims: **This research aims to identify variables that are determinants or factors that influence behavioral intentions to use QRIS (Quick Response Code Indonesian Standard) in the Purwokerto traditional market**

Study design: Mention the design of the study here.

Place and Duration of Study: Sample: Department of Medicine (Medical Unit IV) and Department of Radiology, Services Institute of Medical Sciences (SIMS), Services Hospital Lahore, between June 2009 and July 2010.

Methodology: *This study used a convenience sampling technique to choose 100 participants. The research approach included employing multiple linear regression analysis.*

Results: .The results of the analysis suggest a positive effect on the inclination to utilize QRIS concerning performance expectations, social influence, and facilitating conditions. Conversely, the study demonstrates that effort expectations do not significantly affect the intention to embrace QRIS.

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Keywords:

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1. INTRODUCTION

The development of information technology has led to changes in people's behavior in conducting transactions, and payments have evolved to become non-cash. Digital payments are increasing because they are faster and more convenient. Bank Indonesia, as the financial policy authority, and ASPI (Indonesian Payment System Association), in pursuit of the Payment System 2025 vision and addressing the challenges of interconnected payment systems in 2019, formulated an initiative for a Quick Response Code-based Payment Standard (QRIS). This initiative was established through the issuance of Bank Indonesia Member of the Board of Governors Regulation No. 21/18/PADG/2019[1]. The implementation of this regulation commenced in January 2020, mandating that all non-cash payments be conducted through the QRIS system.

The implementation of the QRIS application in traditional markets in Purwokerto began in 2020. However, in practice, there have been challenges related to internet connectivity and the lack of literacy among the population regarding the use of QRIS applications in business transactions, leading to some reluctance in its adoption[2]. According to research findings[3] , the acceptance of QR codes in business transactions has not been widespread and should be improved through better strategies and involvement of the banking sector to ensure the program functions as expected. The research suggests increasing the number of merchants offering QR code payment methods to help the public become more familiar with and accustomed to digital payment business transactions.

Comment [ع ب ير2]: A sufficiently clear definition of the QRIS system must be added

Digital payment systems can be considered relatively new, and therefore, providers of QRIS payment system services in Purwokerto need to understand the factors influencing

the intention to use it.Given this situation, there are obstacles associated with the willingness to use QRIS for payment transactions. The UTAUT (Unified Theory of Acceptance and Use of Technology) model, as introduced by [4]Venkatesh , offers an explanation for the factors that influence the intention to adopt QRIS (Quick Response Code Information System) technology. This model highlights four primary independent variables that are interrelated and influence the readiness to embrace technological systems. These variables encompass performance expectancy, effort expectancy, social influence, and facilitating conditions.

2. LITERATUR REVIEW

Unified Theory of Technology Acceptance and use of Technology **(UTAUT)"**

The UTAUT model, created by Venkatesh and colleagues in 2019[4], introduced four primary factors that affect the inclination to utilize technology: performance expectancy, effort expectancy, social influence, and facilitating conditions.

Behavioral intention refers to how strongly a user desires to adopt a system continuously or the subjective level of one's willingness to engage in a specific behavior [4]. Behavioral intention has two dimensions: the first dimension is the intention, which measures how much users intend to keep using the system for their activities. The second dimension is persistence, defined as users' intentions to continue using the system.

Performance Expectations:
In the UTAUT model, as defined by Venkatesh et al. [4], performance expectations represent an individual's belief that using a system will help and improve their work effectiveness.
The use of technology systems is expected to expedite work processes and increase users' productivity in their tasks. Performance Expectations consist of three sub-variables: usefulness, speed, and productivity.

Effort Expectation:
Effort expectancy refers to the level of ease and complexity users experience when using a new system or technology. If the use of a technology system is easily understood and applied, it reduces the effort and time required. Conversely, if the use of the system is difficult, it necessitates a high level of effort to use it[4] . Effort expectancy has two dimensions:
a) Complexity refers to how difficult it is to learn the technology.
b) Ease of use measures the level of ease users experience when using the technology application.

Social Influence:
Social influence, [4], refers to the influence of family, friends, and trusted individuals who recommend the use of a particular system or technology based on their opinions. Social influence has two dimensions
a) Social factor relates to the social aspects influencing technology use.
b) Close referents' impact measures the level of influence exerted by individuals close to the user regarding the use of the technology.

Facilitating Conditions:
Facilitating conditions encompass the level of resources, backing from the organization, and the technical foundation offered by an entity to facilitate the utilization of a system, as outlined in the work by Venkatesh and colleagues in 2019. These facilitating conditions consist of three distinct aspects:

a) Resources relate to the availability of external resources like the internet and communication tools like smartphones that affect technology use.
b) Information refers to the availability of external data and information sources when using technology.

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Performance Expectancy on Behavior Intention
Performance expectancy is the belief of consumers that the use of a new system will simplify their tasks and enhance productivity [4]*. The use of digital payment systems is expected to expedite transactions because they no longer require cash, thus accelerating money circulation and increasing transaction productivity. The greater the public's trust in the system's ability to simplify tasks and enhance productivity, the higher their interest in using the system.*
Previous research has found evidence that a higher level of performance expectancy leads to a greater intention to use electronic money [5]*. Performance expectancy influences the behavior of QRIS-using SMEs in digital payments in Jambi City* [6]*. Performance expectancy also affects the intention to use mobile banking*[7] *. Research has shown that the high level of trust in technology systems to simplify and enhance performance will influence the intention to use QRIS.*
Hypothesis 1 of this study is:
H1. Performance expectancy has effect on behavioral intention.
Effort expectancy on behavior Intention
The use of new technology systems requires efforts to understand their usage and comprehend the complexity of the benefits and efficiency of usage, as well as the ease of conducting payment transactions in businesses, both for purchasing products and selling products. The greater the ease of technology usage and the complexity of its utility, the higher the interest in using digital payment QRIS [5]–[8]. The research hypothesis is
H2 Efforst expectations has effect on behavior intention.

Social Influence on Behavior Intention
Social influence is defined as an individual's level of trust in using something new because others have already adopted the system (Venkatesh et al., 2019). Users will share their experiences regarding how to use the system, its ease of use, and its benefits, and they will provide recommendations to those close to them, such as family and friends. The more that individuals in one's immediate social circle have used the system with the technology, the more it encourages interest in using that system. This is because they trust those closest to them who share their experiences with the use of the new system. The research findings [5], [9] suggest that the interest in using digital payment is influenced by the social environment. The research hypothesis is
H3. Social influence affects behavior intention.

Facilitating conditions on Behavior Intention
Behavioral intention to use QRIS is indeed influenced by facilitating conditions, as outlined in the UTAUT model by Venkatesh et al[4]. These facilitating conditions encompass the availability of resources, support, and infrastructure that can ease the adoption and use of QRIS or any other technology.The use of digital payment systems requires the availability of supporting facilities such as internet access, smartphones, laptops to facilitate transactions, guidance on system usage, knowledge of the system's benefits, and compatibility with other systems. The presence of close individuals ready to help in case of difficulties with system usage also affects the interest in using it. Research results [8], [10] show that the availability of facilities that support the use of technology systems, such as the availability of resources (internet connectivity, IT features), compatibility of electronic devices with Shopee's sales

application, and the availability of usage guidelines or tutorials, serves as a reason for using Shopee. The research hypothesis is
H4 Facilitating conditions effect on Behavior Intention.

III RESEARCH METHODS

This research falls under the category of causal-comparative research with a quantitative approach. The study's population consists of the residents of Purwokerto who engage in transactions at traditional markets. The sample size includes 100 individualsselected using convience sampling methods. Data was collected through the distribution of questionnairesonline. With SPSS version 26, multiple linear regression analysis was used to examine the data that had been gathered.

Comment [ع ب ير4]: It must be clarified how to determine the study sample size, as well as specify the type of sample used and add the equation used to determine the sample size

IV . RESULT AND DISCUSSION

A. Respondence characteristic

Based on the research questionnaire distributed online with total of respondents, data on respondent characteristics based on gender, age, educationwere obtained, as shown in Table 1

Table 1 “Characteristics Respondents”

Respondent Characteristics	Category	Number	Procentage
Gender	Female Male	65 35	65% 35%
Age	15-20 20-25 25-30 30-35 35-40 More than 40	5 8 12 14 27 34	5% 8% 12% 14% 27% 34%
Education	Elementary School Junior High School Senior High school Diploma Bachelor’s Degree	10 15 45 10 20	10% 15% 45% 10% 20%

Comment [ع ب ير5]: The demographic characteristics of the study sample were not discussed in explanation, nor should the explanation after the table be discussed briefly

B. Validity Test and Reliability test

Table 2 Validity Test

	R value
Performance Expectation	

QRIS applications make it easier for me in buying and selling transactions	0,861
QRIS applications improve the efficiency/speed of my buying and selling transactions.	0,937
QRIS applications enhance my productivity in buying and selling.	0,917
QRIS applications enable me to get the ideal price.	0,830
Aplikasi QRIS memungkinkan saya mendapat harga ideal	0,830
Effort Expectancy	
I find it easy to understand how to use QRIS applications.	0,917
I find it easy to become skilled in using QRIS applications.	0,915
I don't have difficulty when making transactions with QRIS.	0,898
I find it easy to learn how to operate payments with QRIS.	0,888
Social Influence	
My families and friends influence me to use QRIS aplicationns	0,881
People who serve as role models form suggest using QRIS Aplications	0,904
Friends and my families are trying to persuade me ti use QRIS Aplication	0.886
My social environment has been using QRIS application	0,779
Faciliatingcondisstions	
The resources needed to use this application are already availabe	0,854
I have knowledge abaout how to use application QRIS	0,892
This application works well and is compatible with other systems.	0,905
I easaly get assistant if I ecounter difficulties using to digital payment	0,653
Behavior Intention	
I intend to use the QRIS application in shopping	0,922
I am likely to use the QRIS application during transactions	0,911
I intend to utilize the QRIS application in my upcoming transaction.	0,942

The results of the validity test for all statement expressions in each variable indicate that the Pearson correlation values at a significance level of 0.05 surpass the table correlation value, which is 0.1654. Therefore, the statements in each variable can be considered to have good validity and are suitable to be used as research instruments.

Table 3 Reliabilty Test

Variable	Cronsbach'Alpha Value
"Performance Expectancy	0.838
Effort Expectancy	0.841
social influence	0.928
facilitating conditions	0.928
Behavior Intention"	0.906

The results of the reliability testing can be presented in a table, and the variables considered in this research have a Cronbach's Alpha value more than 0.7. Therefore, it can be concluded that all the variables are reliable.

C. Classic Assumption Tests

The results of the normality test using the Kolmogorov-Smirnov test statistic produced a value of 0.099 at a significance level of 0.125, which exceeds the alpha value of 0.05. This suggests that the data follows a normal distribution.

The results of the multicollinearity test indicate that there is no multicollinearity present. This is supported by the tolerance values, which are greater than 0.1 for performance expectancy (0.357), effort expectancy (0.329), social influence (0.430), and facilitating conditions (0.347), as well as the VIF (Variance Inflation Factor) values, which are less than 10 for performance expectancy (2.803), effort expectancy (3.403), social influence (2.324), and facilitating conditions (2.883).

Furthermore, the results of the heteroscedasticity test using the Gletjser test suggest that the regression equation is free from heteroskedasticity. This conclusion is drawn from the fact that the independent variables do not have a significant impact on the absolute residual when the significance level is higher than 0.05 (alpha), specifically with p-values of 0.811, 0.201, 0.341, and 0.249.

D. Multiple Linear Regression Analysis

Table 4 Multiple Linear Regression Test

Variable	Koefisien Regression	t value	Signifikansi
constanta	0,251		
Performance Expectancy	0,276	2,759	0,007
Effort Expectancy	0,118	1,077	0,284

social influence	0,281		3,119	0,002
facilitating conditions	0,299		2,688	0,008
Adjusted R Square	0,655	F Value	47,943	0,000

The goodness of fit test, with a significance value of the F-test less than 0.05 and the F-statistic exceeding the required F-table value, is an indicator of the model's sufficiency. In Table 5, the calculated F-value is 47.943 with a significance level of 0.000, which is less than 0.05. This indicates that the model is suitable for multiple linear regression analysis.

The adjusted coefficient of determination R-squared, which shows a value of 0.655, implies that 65.5% of the interest in using the model is determined by the variation in the variables of performance expectancy, effort expectancy, social influence, and facilitating conditions. The remaining 34.5% is influenced by other variables not included in this research model. This suggests that while these four variables play a significant role in explaining the intention to use QRIS, there are other factors not considered in this study that also contribute to the outcome.

Hypothesis Testing

- H1: The hypothesis that performance expectancy significantly influences Behavior Intention QRIS is accepted because the significance level of 0.007 is less than the alpha value of 0.05.
- H2: The hypothesis that effort expectancy significantly influences Behavior Intention QRIS is not accepted because the significance level of 0.284 is higher than the alpha value of 0.05.
- H3: The hypothesis that social influence significantly influences Behavior Intention QRIS is accepted because the significance level of 0.002 is less than the alpha value of 0.05.
- H4: The hypothesis that facilitating conditions significantly influence Behavior Intention QRIS is accepted because the significance level is 0.008.

Performance Expectancy effect on behavior Intention

The analysis of this research affirms that performance expectancy has a significant impact on the behavioral intention to use QRIS. Businesses and consumers alike are motivated to adopt QRIS because they expect that the use of this technology will streamline transaction processes, elevate performance, and enhance productivity during transactions. This finding underscores the importance of performance expectations as a driving factor in the adoption of QRIS. The use of QRIS is expected to expedite transactions, eliminate the need for consumers to carry cash, and allow merchants to receive funds directly in their savings accounts, eliminating the need for cash for change. This also helps reduce the risk of counterfeit money circulation and errors in giving change.

These findings are consistent with previous research studies by [5]–[8], [11], [12], which have all demonstrated that performance expectancy plays a significant role in influencing the behavioral intention to use technology.
Acceptance and Use of Technology (UTAUT), which posits that technology usage intention is influenced by performance expectancy (Venkatesh et al., 2019), further reinforces the importance of performance expectancy in shaping intentions to use QRIS.

Effort Expectancy effect on Behavior Intention

Based on the results of hypothesis testing, it is evident that effort expectancy does not have a significant influence on the intention to use QRIS. This suggests that both businesses and consumers do not perceive a significant impact from factors such as the ease of learning how to use the application, the required skill level to use the application, and the effort needed to adopt a new technological system on their intention to use QRIS. This finding aligns with previous research studies by [8], [9], [12] which have also found that Effort Expectancy does not significantly affect Behavior Intention.

However, it's important to note that these results do not align with the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2019), which posits that Effort Expectancy does influence Behavior Intention. Additionally, these findings differ from other research studies conducted by [6], [7], [10], [11], [13], which have found that effort expectancy has a significant impact on behavior intention.

These discrepancies highlight the complexity of technology adoption and the potential variations in how users perceive and evaluate the ease of using a particular technology. It's essential to consider the specific context and user characteristics when interpreting the influence of effort expectancy on behavioral intention in different studies.

Social influence effect on Behavior Intention

Based on the hypothesis testing, it is evident that social influence significantly affects behavior intention to use QRIS. This finding aligns with the Unified Theory of Acceptance and Use of Technology (UTAUT)[4] , which suggests that behavior intention is influenced by the social environment. It can be explained that the social environment, including family, friends, and important individuals around businesses and consumers who have already used the application and shared their experiences regarding its advantages and benefits, influences the intention to use QRIS. Additionally, the fact that many people in their immediate social environment, such as where they live and work, have already adopted QRIS usage, also fosters
interest in using the application.

These results are consistent with studies by [9], [11], [14], which have stated that social influence significantly affects the behavior intention to use.

Facilitating conditions effect on Behavior Intension

The hypothesis testing results demonstrate that facilitating conditions significantly influence thebehavior intention to use QRIS. This indicates that the availability of facilities to operate the system, such as internet connectivity, smartphones, knowledge to use the system, and the presence of individuals ready to assist in case of difficulties, affects the intention of both businesses and consumers to use the QRIS system. The research finding that adequate facilitating conditions do not significantly influence usage intention aligns with the Unified Theory of Acceptance and Use of Technology (UTAUT) b[4], which suggests that facilitating conditions do indeed influence usage intention.

This result is also consistent with the findings of the research conducted by[8][10], which found that facilitating conditions have an impact on Behavioral Intention. Therefore, it reinforces the idea that the presence of appropriate facilitating conditions can positively influence users' intentions to adopt and use technology, such as QRIS in this context.

Conclusion

Comment [ع ب يير6]: The word recommendations must be added in addition to the conclusion, so it becomes the conclusion and recommendations

This study offers valuable evidence indicating that performance expectancy, social influence, and facilitating conditions have a significant impact on the behavioral intention to use QRIS. However, it does not find a significant influence of effort expectancy on the intention to use QRIS.

The results of this research contribute to a deeper understanding of the factors that influence the intention to use a new system, with a particular emphasis on performance expectancy, effort expectancy, social influence, and facilitating conditions. This knowledge is crucial for businesses, policymakers, and technology developers seeking to promote the adoption of QRIS and similar technologies, as it highlights which factors play a pivotal role in shaping users' intentions. It also underscores the importance of considering these factors in the design and implementation of such systems to encourage their successful adoption.

By shedding light on the significance of these factors, the research provides valuable insights that can inform strategies for promoting the adoption and acceptance of new technological systems, such as QRIS. This understanding can be used to design more effective interventions, policies, and educational initiatives to encourage the use of such systems and enhance their benefits for both businesses and consumers.For the government and the banking sector, it is essential to intensify the promotion and awareness of QRIS usage among all segments of the population. This can involve collaboration with schools, universities, and local governments to achieve the vision of digitalizing payments by 2025. Increased efforts in educating and familiarizing the public with QRIS technology can

contribute to its widespread adoption and usage, promoting a cashless society and advancing digital payment systems.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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Comment [ع ب ير7]: It is necessary to arrange references in a scientific manner, either according to the order of the years or in alphabetical order

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