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Analysis of Factors That Influence Use Behaviour of Using Qris Payments for Umkm in Bekasi

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Abstract. The adoption of digital payment systems, such as Quick Response Code Indonesian Standard (QRIS), has become increasingly important for Micro, Small, and Medium Enterprises (UMKM) in Indonesia. This study investigates the factors influencing QRIS use behavior among UMKM in the Bekasi region, using a modified Unified Theory of Acceptance and Use of Technology (UTAUT) model with the addition of a Trust variable. A quantitative approach is employed, with data collected through an online questionnaire targeting 400 UMKM business actors. The results confirm the significant influence of Performance Expectancy, Effort Expectancy, Social Influence, Trust, Behavioral Intention, and Facilitating Condition on QRIS adoption. The findings contribute to the understanding of mobile payment adoption among UMKM and provide valuable insights for QRIS providers and policymakers. The study highlights the importance of considering user perceptions and trust in promoting the widespread adoption of QRIS, which can potentially enhance the growth and competitiveness of UMKM in Indonesia. Future research should explore the long-term impact of QRIS on UMKM performance and investigate the potential moderating effects of demographic and business characteristics on QRIS use behavior.

Keywords: QRIS, Information system, QR Code, Payment, UMKM

1. Introduction

Indonesia is one of the largest internet user countries in the world. We Are Social notes that the number of internet users in Indonesia has reached 205 million in January 2022. This means an increase of 73.7% of Indonesia's population has used the internet. The use of the internet in the era of digital transformation is a common thing to support everyday life. This can be proven by the increasing number of internet users every year. Figure 1 is an evidence of the increase number of internet users increasing every years. (We Are Social 2022)

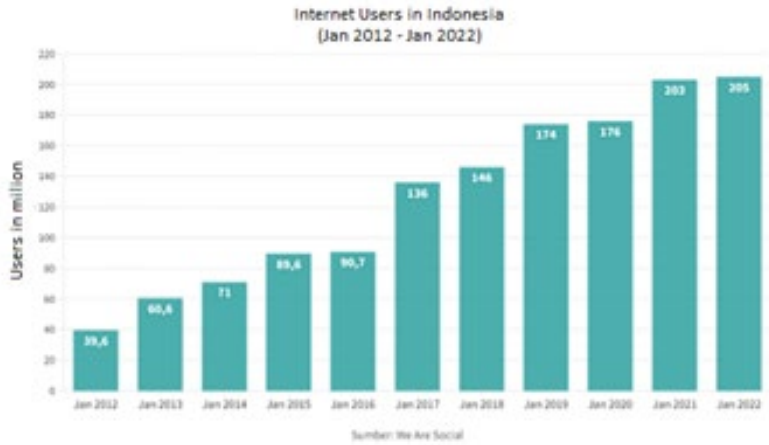

Fig.1: Trends in the Number of Internet Users in Indonesia

The use of the internet for everyday life has many advantages. Because with the use of the internet we can do many things with only 1 device. With the development of internet-based technology, we can carry out one of the habits of daily life, namely payment. Currently, payments can be made only by using a smartphone that has an internet connection.

In 2014 Bank Indonesia created a new movement, namely the Non-Cash National Movement (GNNT) to switch to non-cash payments. This step was taken by Bank Indonesia to start getting used to the public switching to non-cash payment instruments that have been provided such as cards, checks, demand deposits, debit notes, and electronic money for every economic activity (Bank Indonesia 2020a). In collaboration Bank Indonesia with the Asosiasi Sistem Pembayaran Indonesia (ASPI). As one of BI's efforts to develop digital payments, in 2019 Bank Indonesia presented a new payment standard in the form of a QR Code which is named QRIS (Quick Response Code Indonesia Standard). This is also expected to create a sense of security, fast and easy in buying and selling activities. Payment using QRIS is used as a solution for payment method. (Bank Indonesia 2020)

Through the official QRIS website, we can see that currently there are many QRIS users all over Indonesia. There are 416 Regencies and 98 Cities in Indonesia with 172,100 Merchants joining the total transactions of IDR 712,914,899,156 from all merchants using the QRIS feature for payments.(Indonesia 2023)

Implementing QRIS payments is crucial for UMKM as it directly benefits them. According to Bank Indonesia's official website, QRIS enables UMKM to enhance their sales by accepting payments from various applications, streamlining transactions with a single QR code across all payment platforms. Additionally, QRIS payments streamline operations by cutting management and financial recording costs. With QRIS, UMKM no longer need to handle small change or make cash deposits, as all transactions are systematically recorded, simplifying financial management. Furthermore, QRIS offers heightened security in non-cash transactions, alleviating concerns about counterfeit money or cash loss for UMKM. (Bank Indonesia 2023)

In 2021 there are 274 thousand more UMKM in the Bekasi City area that are registered. Figure 2 shows that there are 274,143 registered UMKM in Bekasi City. However, not all of these UMKM have adopted QRIS as a payment alternative. (Jabar 2023)

UMKM IN REGION BEKASI

Id	Province Code	Province Name	City Code	City Name	UMKM Total	Year
158	32	JAWA BARAT	3275	KOTA BEKASI	274143	2021

Fig.2: UMKM in Bekasi City

With a total of 274,143 registered UMKM in the Bekasi area. In Figure 3, we will see several types of UMKM in the Bekasi area. In the figure, we can see that the highest type of UMKM is those engaged in the culinary/Food & Beverage sector with 183.157 UMKM (Jabar 2024). We can see that by comparing the data on registered merchants using QRIS, which stands at 172,100, it proves that the number of UMKM in Bekasi still exceeds the total number of merchants registered in QRIS.

Table 1. Categories of UMKM

Province Name	City Name	UMKM Categories	Total UMKM	Year
JAWA BARAT	KOTA BEKASI	ACCESSORIES	638	2021
JAWA BARAT	KOTA BEKASI	BATIK	638	2021
JAWA BARAT	KOTA BEKASI	EMBROIDERY	91	2021
JAWA BARAT	KOTA BEKASI	CRAFT	22792	2021
JAWA BARAT	KOTA BEKASI	FASHION	22245	2021
JAWA BARAT	KOTA BEKASI	CONVECTION	13584	2021
JAWA BARAT	**KOTA BEKASI**	**CULINARY**	**98097**	**2021**
JAWA BARAT	**KOTA BEKASI**	**FOOD**	**71749**	**2021**
JAWA BARAT	**KOTA BEKASI**	**BEVERAGE**	**13311**	**2021**
JAWA BARAT	KOTA BEKASI	SERVICE	30997	2021

On conditions in the field. There are still several factors that can hinder transactions using QRIS for UMKM. We can see this from the fact that there are still a number of UMKM that have not implemented QRIS as a payment alternative so that we still use cash as the main payment when making transactions. Mr. Anto, who is one of the UMKM entrepreneurs with the name UMKM Ketoprak Eggs Mr. Anto, feels he lacks confidence in technology-based payments. This could be because he once felt cheated when offered a QR code based payment. He was even made a new bank account by one of the unscrupulous salesmen of one of the banks which forced Mr. Anto to deposit one hundred thousand rupiah. Of course, this means that Mr. Anto still does not use the QR payment method in his business. Differently from Pak Khairul, the owner of the Sari Minang UMKM Restaurant. When the author conducted an interview with Mr. Khairul and his wife, they stated that until now they had no intention of using QRIS as a means of payment for the UMKM they run. The main reason they don't use QRIS is because they don't have employees and feel that paying using QRIS will hinder their work when they serve customers. Apart from that, they also do not have deeper knowledge about QRIS because they lack interest in using QRIS even though they often get input from their relatives and those closest to them.

Based on the statements above, the main question of this research is, what factors can help enhance the intention of UMKM players, especially in the Bekasi area, to adopt QRIS as a sales and payment transaction tool. This research will be conducted quantitatively by modifying the UTAUT model and adding the Trust factor. This research is divided into several sections: Part II reviews previous studies related to the theory applied in this research, Part III describes the research methodology used, and Part IV discusses the results of the data analysis. Lastly, Part V summarizes the conclusions drawn from the research and suggests directions for future studies based on its findings.

2. Literature Review

2.1. Information System

Information Systems is a mixture of several technologies that have the goal of supporting system operations and management. The system is an important tool and is needed in a company or organization. The existence of an integrated system will have a positive impact if all the elements involved in it work together and achieve the goals that have been determined. development of information systems is needed because it allows the process of recording, storing, processing data to be more efficient and effective (Tarigan and Buana 2020)

Information systems have the goal of providing information for making decisions, providing information for use in planning, controlling, and evaluating that can support an operation in an organization or company. (Hariyanto 2018)

2.2. Quick Response Indonesian Standard (QRIS)

In developing financial technology products for development in Indonesia, Bank Indonesia collaborated with ASPI (Indonesian Payment System Association) by creating an Indonesian standard QR Code or commonly known as QRIS (Quick Response Indonesian Standard). QRIS is a payment standard using the QR Code which has the motto UNGGUL which means universal, gampang, untung and langsung (Bank Indonesia 2019). This development was carried out to leave payments using physical money or debit cards and replace them with smartphones which can make it easier for merchants and consumers to make payment transactions (Zaborovskaya et al. 2021)

2.3. Financial Technology

Financial Technology (Fintech) is a concept that combines information technology and the financial industry to produce more effective, efficient and modern products or services. Fintech aims to help increase the accessibility and affordability of financial services for the community, as well as speed up and simplify the process of financial transactions (Marginingsih 2019). The presence of Fintech has had a significant impact on the financial industry. Fintech has created a more innovative and diversified financial environment, by enabling new financial service providers to enter the market and provide a more diverse and more affordable product and service. Fintech also reduces operational costs in the financial industry, so it can provide services at a lower cost. This provides benefits for consumers, because they can obtain financial services at a more affordable cost (Rumondang 2019).

2.4. Mobile Payment

Mobile payment is a payment method that uses cellular-based cellular intermediaries to conduct online transactions and conduct offline transactions using cellular devices, including wireless handsets, personal digital assistants (PDAs), radio frequency (RF) devices. , and near field communication (NFC)-based devices. (Chen and Nath 2008)

2.5. UTAUT (Unified Theory of Acceptance and Use of Technology)

UTAUT (Unified Theory of Acceptance and Use of Technology) is a model that integrates eight theories of technology acceptance (Viswanath Venkatesh, Michael G. Morris 2003)UTAUT has four main constructs, namely performance expectancy refers to the extent to which users expect that the use of technology will improve their performance, effort expectancy refers to the extent to which users expect that the use of technology will be easy to use, social influence refers to the influence of others, and facilitating conditions refers to the degree to which technological and organizational conditions facilitate the use of technology. performance expectancy, effort expectancy, social influence has an influence on Behavioral Intention which has an influence on Use Behaviour. Meanwhile, facilitating conditions have a direct influence on Use Behavior. The relationship between these variables is also influenced by several variables, namely gender, age, experience, and voluntariness of use (Abrahão, Moriguchi, and Andrade 2016; Suroso and Sukmoro 2021)

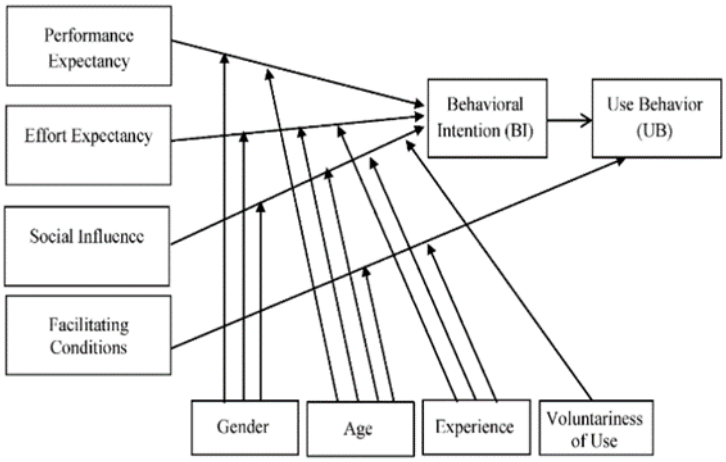

Fig.3: UTAUT

2.6. Performance Expectancy

Performance expectancy is the extent to which an individual believes that using a system will help them achieve goals or benefits in specific activities. (Patil et al. 2020; Viswanath Venkatesh, Michael G.

Morris 2003) In this study, the perception of Performance Expectancy serves as a measure to assess users' feelings in assisting and utilizing QRIS as a payment transaction tool in UMKM.

2.7. Effort Expectancy

Effort expectancy refers to an individual's perception of the ease of using a technology or system. (Patil et al. 2020; Viswanath Venkatesh, Michael G. Morris 2003) In this research, the perception of expectancy acts as an evaluation tool to gauge users' perceptions regarding the ease of utilizing QRIS as a payment transaction tool in UMKM.

2.8. Social Influence

Social influence is the condition in which an individual perceives the importance of others using a specific system or technology. (Patil et al. 2020; Viswanath Venkatesh, Michael G. Morris 2003) In this research, the perception of Social Influence serves as a measuring tool to assess users' feelings influenced by social factors in making QRIS a payment transaction tool in UMKM.

2.9. Facilitating Condition

Facilitating conditions refer to the condition in which an individual believes in the resources, technical infrastructure, and organizational support that facilitate a technology or system. (Rafferty and Fajar 2022; Viswanath Venkatesh, Michael G. Morris 2003)In this study, the perception of facilitating conditions serves as a measuring tool to assess users' feelings based on the availability of resources, infrastructure, and organizational support for QRIS technology as a payment transaction tool in UMKM.

2.10. Trust

Trust is a variable that refers to the extent to which an individual believes in another party to fulfill an expectation in a given situation, especially in payment or financial transactions. Digital payment transactions tend to be uncontrollable because there is no direct contact with the object or money, but rather digits that represent digital money stored on a hardware device (smartphone) that relies on system updates (Rafferty and Fajar 2022). In this study, the addition of the trust variable is due to issues of trust in the payment system using QRIS observed during interviews with UMKM entrepreneurs. In previous research, the trust variable had a significant positive impact on use behavior (Lonardi and Legowo 2021).

2.11. Previous Research

The research conducted by (Patil et al. 2020) aimed to understand consumer adoption of mobile payment in India by extending the Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. Three newly added constructs - personal innovativeness, anxiety, and trust - were identified as significant indirect determinants of consumer use behavior through attitude and behavioral intention. Meanwhile, the final new extension, grievance redressal, emerged as a significant direct determinant of Indian consumer use behavior towards mobile payment alongside performance expectancy and behavioral intention. Below is the research model used in the conducted study.

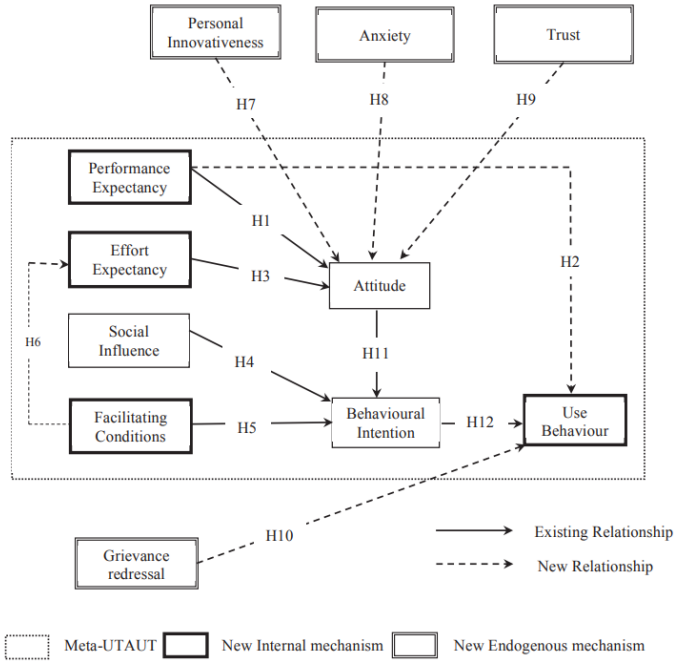

Fig.4: Research Model (Patil et al. 2020)

The research conducted by (Lonardi and Legowo 2021) analyzed factors that could help generate public interest in using QRIS for the establishment of a Cashless Society in Jakarta. This study revealed that both Trust and Behavioral Intention play a direct role in shaping customer usage behavior. Among these factors, Behavioral Intention has the most pronounced direct influence on Usage Behavior, whereas Effort Expectancy, Performance Expectancy, Privacy Risk, and Perceived Security have indirect effects on customer usage behavior. Below is the research model used in the conducted study.

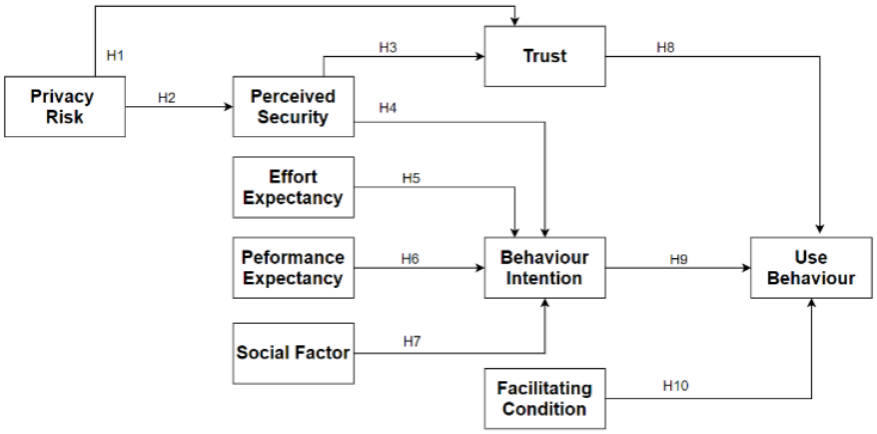

Fig.5: Research Model (Lonardi and Legowo 2021)

The research conducted by (Rafferty and Fajar 2022) .This research aims to understand the perspective of UKM retailers towards QR code-based payments to create an integrated non-cash ecosystem throughout Indonesia. In this study, the trust variable has a positive and significant impact on UKM retailers in adopting QRIS payments to create an integrated non-cash ecosystem across Indonesia. Below is the research model used in the conducted study.

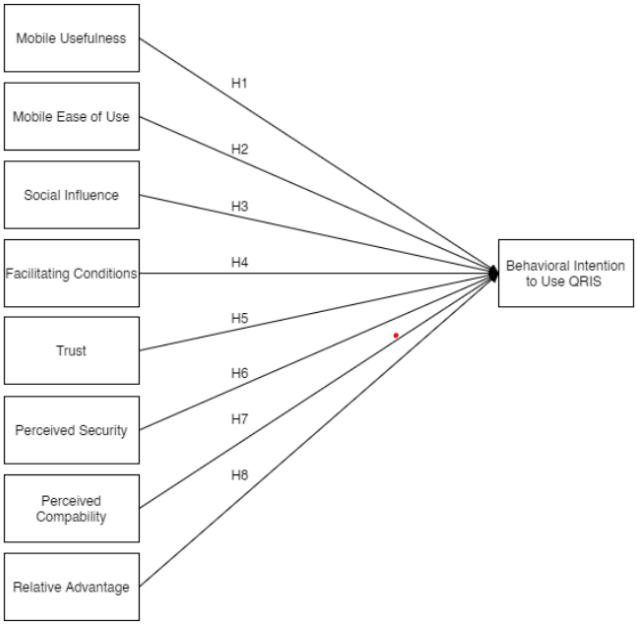

Fig.6: Research Model (Rafferty and Fajar 2022)

3. Methodology

3.1. Framework

In this study the method to be used is quantitative with a framework like Figure 7

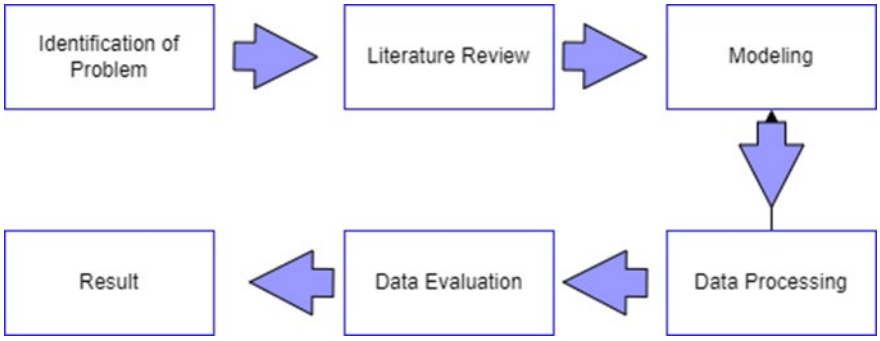

Fig.7: Framework

3.2. Modeling

The research model that will be used in this study is to use the basic model UTAUT (Unified Theory of Acceptance and Use of Technology) by adding the Trust variable which has an influence on the Use Behaviour construct (Khalilzadeh, Ozturk, and Bilgihan 2017)).

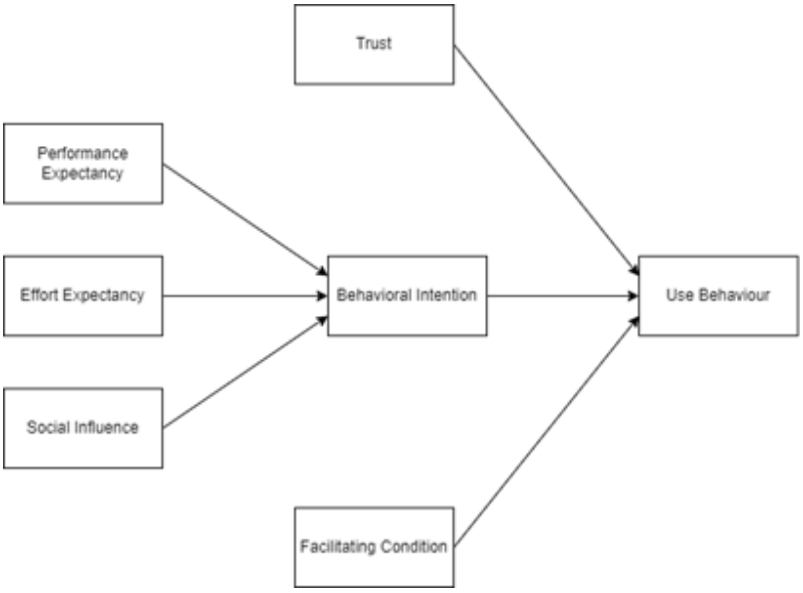

Fig.8: Research Model

3.3. Hypothesis

The are the Hypothesis for this study.

Table 2. Hypothesis

No	Hypothesis
H1	Performance Expectancy has a positive effect on Behavioral Intention
H2	Effort Expectancy has a positive effect on Behavioral Intention
H3	Social Influence Expectancy has a positive effect on Behavioral Intention
H4	Trust has a positive effect on Use Behaviour
H5	Behavioral Intention has a positive effect on Use Behaviour
H6	Facilitating Condition has a positive effect on Use Behaviour

The following are the research instruments that will be used in this research:

Table 3. research instruments.

Variable	Code	Indicators	Question of Questionnaire
Performance Expectancy (Abrahão, Moriguchi, and Andrade 2016; Viswanath Venkatesh, Michael G. Morris 2003)	PE1	Useful	I am confident that sales using QRIS payments are very beneficial for day-to-day sales activities.
	PE2	Performance	Using QRIS payments makes it easier for me to conduct sales transaction payments.
	PE3	Efficiency	Paying with QRIS saves me time when selling, allowing me to engage in other activities while selling
Effort Expectancy (Abrahão, Moriguchi, and Andrade 2016; Viswanath Venkatesh, Michael G. Morris 2003)	EE1	Easy to Understand	I easily understand the payment system using QRIS for my business sales
	EE2	Easy to Learn	I easily master the payment system using QRIS for my business sales
	EE3	Easy to Use	I easily use the payment system using QRIS for my business sales
Social Influence (Abrahão, Moriguchi, and Andrade 2016; Viswanath Venkatesh, Michael G. Morris 2003)	SI1	Influence People	My close related person influence me to use QRIS as a payment tool for my business
	SI2	Peoples's Thinking	My close related person think I should use QRIS as a payment tool for my business
	SI3	People's Help	My close related person can help me use QRIS as a payment tool for my business
Facilitating Condition (Viswanath Venkatesh, Michael G. Morris 2003)	FC1	System Availability	I have the tools to conduct sales transactions using QRIS
	FC2	Knowledge	I have the knowledge to conduct sales transactions using QRIS
	FC3	Compatible	I can use QRIS through my smartphone
Trust (Khalilzadeh, Ozturk, and Bilgihan 2017)	T1	Trust to Entity	I trust the QRIS Company (Bank Indonesia)
	T2	Trust to Entity Security	I trust in the security of payment transactions using QRIS
	T3	Trust to Entity Responsibility	I trust that the QRIS company will be responsible for my payment transactions
Behavioral Intention (Viswanath Venkatesh, Michael G. Morris 2003)	BI1	User plain to use the system	I intend to use QRIS as a payment tool for my business
	BI2		I will definitely use QRIS as a payment tool for my business
	BI3		I plan to use QRIS in the coming months
Use Behaviour (Abrahão, Moriguchi, and Andrade 2016; Viswanath Venkatesh, Michael G. Morris 2003)	UB1	User intensity of system use	I often use QRIS as a payment tool for my business
	UB2		I will use QRIS as a payment tool for my business in the near future
	UB3		I may always use QRIS as a payment tool for my business
	UB4		I am satisfied using QRIS as a payment tool for my business

3.4. Data Collection

Data collection in this research will be carried out by distributing questionnaires using the Google form. Questions on the questionnaire will be questions related to variables that have been determined by the research model. The number of samples will be determined using the Slovin formula. The number of samples to be taken will be determined using the slovin formula with a margin of error of 5%. Sample selection will be conducted among owners or workers of UMKM in the Food & Beverage category in the Bekasi region. This is because the number of UMKM in the food & beverage category in Bekasi, which amounts to 183,157, aligns with the introduction stating that the number of merchants joining QRIS is lower compared to the number of UMKM in the food & beverage category in the Bekasi region

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

183.157 / 1 + 183.157(0.05)^2 = 400

From the formula above, UMKM total in Bekasi (N) is 183.157 with a margin of error (Ne) of 5% so that the number of samples to be taken is 400 samples (Tejada and Punzalan n.d.).

3.5. Data Analytic

In this study, the data analysis used was SEM, which is one of the statistical models used to explain the relationship between several variables. This model combines factor analysis and multiple linear regression analysis to test hypotheses about the relationship between variables. To perform data processing calculations, you will use the Smart PLS 3 with application. The detailed version of Smart PLS application is V. 3.2.9. SEM testing usually consists of two stages: testing the measurement model (outer model including Validity Testing and Reliability Testing) and testing the structural model (inner model including R Square, Path Coefficient, and T-Statistic) (Ullman 2015)

4. Result & Discussions

4.1. Sample Criteria

In this study, the author conducted quantitative research by distributing questionnaires online or through door-to-door methods to UMKM currently engaged in selling. The results of distributing questionnaires to 400 respondents indicate the demographic sample as follows.

Table 4. Demographics result of survey respondents.

Demographic	Category	Number	Percentage
Actor	UMKM Owner	183	45,8%
	UMKM Worker	217	54,2
Gender	Male	225	56,3
	Female	175	43,8
Age	18 – 25	79	19,8%
	26 - 30	146	36,5
	31 – 35	97	24,3%
	36 - 40	44	11%
	>40	34	8,5%

4.2. Validity and Reliability Testing

In this test, to state that the variable relationship is valid, it can be seen from the outer loading value of the variable which exceeds the value of 0.7 and has an Average Variance Extracted value which exceeds 0.5. Reliability Test aims to assess the level of trust or reliability of the measuring instrument. In reliability testing, there are two general measuring tools that are often used, namely Cronbach's Alpha and Composite Reliability (CR). Construct reliability can be measured using two methods, namely Cronbach alpha (α) and Composite Reliability (CR). The rule of thumb for both reliability criteria is that their values should be above 0.70 (Hair, Howard, and Nitzl 2020)

Table 5. Validity and Reliability Result

Variable	Code	Loading Factor	CR	Cronbach's Alpha	AVE	Status
Behavioral Intention	BI1	0,849	0.820	0.820	0,735	Valid
	BI2	0,840				
	BI3	0,882				
Effort Expectancy	EE1	0,868	0.844	0.844	0,762	Valid
	EE2	0,882				
	EE3	0,869				
Facilitating Condition	FC1	0,857	0.805	0.805	0,719	Valid
	FC2	0,849				
	FC3	0,837				
Performance Expectancy	PE1	0,911	0.881	0.881	0,808	Valid
	PE2	0,928				
	PE3	0,856				
Social Influence	SI1	0,821	0.823	0.823	0,738	Valid
	SI2	0,873				
	SI3	0,883				
Trust	T1	0,828	0.773	0.773	0,687	Valid
	T2	0,806				
	T3	0,853				
Use Behaviour	UB1	0,758	0.795	0.795	0,617	Valid
	UB2	0,835				

	UB 3	0,749				
	UB 4	0,796				

Based on the data in the table, we can see that all variables have an outer loading value above 0.7. For the Composite Reliability value and Cronbach's Alpha value, each variable also has a value above 0.7. And the AVE value for each variable also exceeds 0.5. From these results, all variables in validity and reliability testing were declared valid and reliable.

4.3. Structural Model Evaluation

The structural model analysis assesses the R-Square value, indicating the influence of exogenous variables on latent variables. Two endogenous latent variables, Use Behavior (UB) and Behavioral Intention (BI), are included in the research model. R-Square indicates how much the variability of endogenous variables is explained by related exogenous variables, with a significance level of 0.05. Below are the R-Square results for this study.

Table 6 R-Square

Variable	R-Square
Behavioral Intention (BI)	0,57
Use Behaviour (UB)	0,58

The results in Table 6 show that the Behavioral Intention (BI) variable has an R-Square value of 0.57, and the Use Behavior variable has an R-Square value of 0.58. This means that the Behavioral Intention variable can explain 57% of its own variability, while the Use Behavior variable can explain 58% of its own variability. It suggests that the exogenous variables in this study are explained by the Behavioral Intention and Use Behavior variables. However, there is still 43% of Behavioral Intention and 42% of Use Behavior variability unexplained by the exogenous variables in the research model.

Next, the structural model is tested by examining the p-values. This is done by running the bootstrapping process. The p-value results must be less than 0.05 to indicate significance.

Table 7 P-Value

Variable Relation	P Value	Basic Value	Result
Performance Expectancy (PE) -> Behavioral Intention (BI)	0,000	0,05	Significant
Effort Expectancy (EE) -> Behavioral Intention (BI)	0,000	0,05	Significant

Social Influence (SI) -> Behavioral Intention (BI)	0,000	0,05	Significant
Trust (T) -> Use Behaviour (UB)	0,000	0,05	Significant
Behavioral Intention (BI) -> Use Behaviour (UB)	0,000	0,05	Significant
Facilitating Condition (FC) -> Use Behaviour (UB)	0,001	0,05	Significant

Based on data in Table 7 show that there are 6 important connections between variables: (1) Performance Expectancy (PE) to Behavioral Intention (BI), (2) Effort Expectancy (EE) to Behavioral Intention (BI), (3) Social Influence to Behavioral Intention (BI), (4) Trust to Use Behavior (UB), (5) Behavioral Intention (BI) to Use Behavior (UB), and (6) Facilitating Condition (FC) to Use Behavior (UB).

4.4. Hypothesis Testing

In the hypothesis testing process, what we need to look at is the value of the T-Statistic and the value of the P-Value. if the T-Statistic value exceeds 1.96 and the P-Value value is lower than 0.05, then the hypothesis can be accepted.

Table 8 Hypothesis Testing

No	Hypothesis Testing	*Original Sampel (O)*	*Sample Mean (M)*	T-Statistic	Basic Value T-Statistic	P-Value	Basic Value P-Value	Result
H1	*Performance Expectancy (PE) -> Behavioral Intention (BI)*	0,256	0,257	4,156	1,96	0,000	< 0,05	Accepted
H2	*Effor Expectancy (EE) -> Behavioral Intention (BI)*	0,373	0,372	6,021	1,96	0,000	< 0,05	Accepted
H3	*Social Influence (SI) -> Behavioral Intention (BI)*	0,229	0,229	4,736	1,96	0,000	< 0,05	Accepted

H4	*Trust (T) -> Use Behaviour (UB)*	0,2	0,202	4,083	1,96	0,000	< 0,05	Accepted
H5	*Behavioral Intention (BI) -> Use Behaviour (UB)*	0,449	0,449	7,106	1,96	0,000	< 0,05	Accepted
H6	*Facilitating Condition (FC) -> Use Behaviour (UB)*	0,207	0,207	3,457	1,96	0,001	< 0,05	Accepted

From the data in table 3 we can see that all hypotheses have a T-Statistic value greater than the standard value of 1.96 and a P-Value value smaller than 0.05. This states that all hypotheses from this research can be accepted.

4.5. Verification of Research Hypothesis Result

H1: Performance Expectancy has a significant effect on the Behavioral Intention variable. This proves that payment transactions using QRIS are considered to provide positive benefits for users in daily buying and selling transaction activities. In this way, users will always use QRIS as a means of payment continuously (Lonardi and Legowo 2021). With these results, QRIS provider companies must pay attention to the consistency and quality of the QRIS product itself and provide several new features that are useful for users to use in their daily activities.

H2: Effort Expectancy has a significant effect on the Behavioral Intention variable. This proves that using QRIS as a payment tool is easy to use, thus influencing users not to mind using QRIS as a payment tool. (Lonardi and Legowo 2021)

H3: Social Influence has a significant effect on the Behavioral Intention variable. This proves that people closest to them are able to influence users to intend to use QRIS as a means of payment. Someone will recommend a tool or system if the tool or system has benefits for the user. (Lonardi and Legowo 2021; Patil et al. 2020)

H4: Trust has a significant effect on the Use behavior variable. This proves that trust is an important point to influence users' interest and confidence in using QRIS as a means of payment. Users will use payment instruments issued by companies that users trust rather than payment instruments issued by companies they do not trust (Lonardi and Legowo 2021; Patil et al. 2020; Rafferty and Fajar 2022). In this case, it is important for QRIS companies to provide guarantees to customers to strengthen user trust.

H5: Behavioral Intention has a significant influence on the Use Behavior variable. This can be proven that the intentions of the perpetrator/user greatly influence the behavior of the user. In this research, Behavioral Intention has the largest t-statistical value, which proves that this variable greatly influences user behaviour (Lonardi and Legowo 2021; Patil et al. 2020). In this case, the QRIS Company must maintain the QRIS system so that it remains useful, easy to use, and can be disseminated on a massive scale.

H6: Facilitating Conditions have a significant influence on the Use Behavior variable. This can be proven that user behavior in using QRIS as a means of payment can be influenced by the supporting and available facilities. If a tool/system often experiences system downtime or has problems, it will cause user behavior not to use the tool/system. From the QRIS company side, it must be able to maintain the system so that it can continue to be used by users so that the behavior of using QRIS as a means of payment is realized. (Lonardi and Legowo 2021; Patil et al. 2020)

4.6. Contribution

The study contributes to the understanding of factors influencing QRIS use behavior among UMKM in the Bekasi region of Indonesia. By employing a modified UTAUT model with the addition of a Trust variable, the research confirms the significant influence of Performance Expectancy, Effort Expectancy, Social Influence, Trust, Behavioral Intention, and Facilitating Condition on QRIS adoption. The findings provide valuable insights for QRIS providers, policymakers, and researchers, highlighting the importance of considering user perceptions and trust in promoting the widespread adoption of QRIS as a standardized digital payment system. However, the authors could further emphasize the practical implications of their findings and provide more specific recommendations for QRIS providers and policymakers. They could also discuss the potential impact of QRIS adoption on the growth and competitiveness of UMKM in Indonesia.

5. Conclusion

This study contributes to the growing body of knowledge on mobile payment adoption, specifically in the context of QRIS use behavior among UMKM in the Bekasi region of Indonesia. By employing a modified UTAUT model with the addition of a Trust variable, the research confirms the significant influence of Performance Expectancy, Effort Expectancy, Social Influence, Trust, Behavioral Intention, and Facilitating Condition on QRIS adoption. These findings provide valuable insights for QRIS providers and policymakers, emphasizing the importance of considering user perceptions and trust in promoting the widespread adoption of QRIS as a standardized digital payment system.

To enhance QRIS adoption among UMKM, providers should focus on improving the performance, ease of use, and reliability of the system while fostering trust among users. Policymakers can leverage these findings to develop targeted interventions and support mechanisms that address the identified factors influencing QRIS adoption. Such efforts can potentially contribute to the growth and competitiveness of UMKM in Indonesia by facilitating efficient and secure digital payment transactions.

However, the study has some limitations, such as the cross-sectional nature of the data and the focus on a specific geographic region. Future research should employ longitudinal designs, expand the scope to other regions in Indonesia, and conduct comparative studies with other mobile payment systems. As QRIS continues to evolve and gain traction among UMKM, it is crucial to maintain an ongoing research agenda that addresses the dynamic nature of digital payment adoption and its implications for the development of the UMKM sector in Indonesia.

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