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The influence of behavioral intention, facilitating condition, and habit on use behavioral of QRIS: a study on mobile banking services

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Abstract

During the COVID-19 pandemic, banking services switched to digital services such as Quick Response Code Indonesia Standard (QRIS) services. This study analyses the influence of behavioural intention associated with the acceptance and use of technology on the use behaviour of QRIS mobile banking services. This study modified Theory of Acceptance and Use of Technology (meta-UTAUT) with the main variables being Hedonic Motivation, Performance Expectancy, Social Influence, Trust, Attitude, Facilitating Condition, Habit, and Behavioural Intention. This study applied a convenience sampling from the non-probability sampling approach with data collected online to bank customers in Indonesia. Data processing uses Structural Equation Modelling (SEM) by carrying out the stages of measuring and testing the proposed hypotheses. Based on the results of the analysis it was found that performance expectancy, social influence and attitude proved to have a significant positive influence on behavioural intention. Facilitating conditions have a significant positive effect on use behaviour. From the study results, it can be concluded that behavioural intentions and usage behaviour related to QRIS in mobile banking services can be influenced by factors related to social influence, and user needs, and are strongly supported by performance expectations and conditions that facilitate QRIS in mobile banking services. This study contributes to the literature by identifying the behavioural intention to contribute the development QRIS in mobile banking in Indonesia.

Keywords: Behavioral Intention, Use Behavior, Meta-UTAUT, QRIS

1. Introduction

Along with the times, there is an increase in customer needs. Today's technology has contributed to the business environment by introducing new mechanisms to improve the ability to provide customers with the best service and convenience (Walfajri & Winarto, 2021). One of the breakthrough technologies is mobile banking, where customers can carry out all financial service transactions anywhere at any time without having to come to the nearest branch, not bound by time constraints on working hours to increase efficiency, effectiveness, and productivity for customers (Hammound, 2018;Wang et al., 2003). Cash used in transaction activities has decreased by 72% compared to 2019 (Hendarsyah, 2016). The trend of electronic payments is currently increasing due to the pandemic, and most consumers prefer to use electronic payment methods (Maizal, 2021). In 2021, mobile banking's market size globally is \$692.5 million, and it is projected that in 2028 it will reach \$1,359.5 with an annual growth rate or CAGR of 11.9% over the forecast period.

In Indonesia, payments via digital payments are currently experiencing an increase and developing rapidly (Ayodya, 2020). Increased use of mobile banking until September 2021 for customers in Indonesia, there has been an increase of 46.74 or around Rp 28.685 trillion and will continue to increase at the end of 2021 to Rp. 39,130 (Sitorus, 2019). Bank Indonesia has recorded an increase in the total value of digital banking transactions by 38.38% to IDR 5,184.1 trillion in October 2022 (Hendarsyah, 2016). Developments Digital payment is increasing with a payment system online only through smartphones with a scan barcode (Hendarsyah, 2016). With this digital payment, consumers can avoid criminal acts that might occur in the process of financial transactions, then transactions become faster and easier so that consumers are very

comfortable using the services offered by banks (Alalwan, 2018). Currently, Bank Indonesia is in the process of developing the Quick Response Code Indonesia Standard (QRIS) service feature by expanding this service which can be carried out between countries. QRIS is a digital payment using a QR Code scan and can be scanned/recognized/read by the Payment System Service Provider. According to data from the Asosiasi Sistem Pembayaran Indonesia (ASPI) in January 2020, the number of QRIS transactions nationally had a total transaction of IDR 365 billion, reaching a total of 5 million times (Siregar et al., 2020). Then, in August 2022 there was a very large increase where QRIS users had a total transaction of IDR 9.66 trillion with a total of 91.7 million transactions. Then, the number of merchants throughout Indonesia that use QRIS is as many as 20 million merchants with a total of 90% being micro, small, and medium businesses (Sihaloho, 2020)

Based on these statistical data, there is an increase in the use of mobile banking services in Indonesia, so it is necessary to know and study the factors that can contribute to customer intentions and behavior toward this technology (Patil et al., 2020). This research recognizes the need to examine the factors that contribute to the behavior of Indonesian customers toward QRIS in mobile banking services, especially millennial customers in banking. The emergence of the millennial generation as a generation that uses fintech encourages banks to be able to adapt to technological developments, especially in mobile banking services (Fakhrurozi, 2018). Seeing Indonesia's considerable potential, namely in Indonesia's digital economy vision for 2020 - 2024 Go Digital has become an achievable vision. Bank Indonesia encourages the use of cheaper, faster, and easier non-cash payment instruments which is the vision of the 2025 Indonesian payment system (Siregar et al., 2020). Improvement of QRIS services in mobile banking must be increased in line with the increased use of QRIS in financial transaction services, which in QRIS implementation requires quite a long time, especially in small towns. This is because Indonesia's digital financial literacy level still needs to be higher (Ayodya, 2020). Thus, massive outreach and education are needed at all levels of society. Therefore, the purpose of this research is to review the model of customer intention and behavior towards technology by identifying the appropriate basic theories and constructs to seek and examine the behavior of using QRIS services on mobile banking in Indonesia and to validate the conceptual model developed by collecting data from the use of QRIS on mobile banking (Sihaloho, 2020; Hendarsyah, 2016). The findings that emerge from this research can be a significant concern for QRIS service providers in mobile banking so that banks can always realize a system of easy, safe, and efficient payment by improving and developing the QRIS payment system (Siregar et al., 2020).

QRIS

The integration system created by QRIS greatly benefits both consumers and merchants where financial transactions become more effective and efficient, the buying and selling process is made easier with QRIS because there is no need to manually calculate payment money, prepare returns, and face fraud such as counterfeit money (Tobing et al., 2021). Bank Indonesia and Asosiasi have issued standards QR codes for payments that make it easy for both business owners and consumers with a QR standard that can be used nationally that has been integrated with a mobile payment or mobile banking (Azzahroo & Estiningrum, 2021). Currently, there are 62 QRIS providers, consisting of 25 tires and 23 non-banks, which will continue to increase, including interconnection support at 4 national switches (Sihaloho, 2020). QRIS connects with sources of funds such as savings, debit cards, electronic money to credit cards. Payments using QRIS can be made without face-to-face contact between the consumer and the merchant by simply scanning the QR Code (Hendarsyah, 2016).

Mobile Banking

Mobile banking is cellular banking which refers to the availability and provision of banking services through the assistance of telecommunication devices (Kang, 2018). Mobile banking This takes advantage of advances in internet technology through bank-owned applications using the internet network as an intermediary between customers and banks without having to go to the bank directly (Bolon, 2015). Mobile banking Banks can provide convenience services in the activities of all customer transactions. The existence of bank mobile banking can provide convenience services in the activities of all customer transactions, from anywhere and anytime. In addition, mobile banking also acts as a customer relationship management (CRM) for banks in their marketing processes or activities (Zhou et al., 2010). Now, mobile banking has become a matter of great concern to the banking industry with the increasing usage and increasingly mobile consumer conditions online and more mobile on their daily activities (Fakhrurozi, 2018). The existence of mobile banking can facilitate banks by increasing efficiency, increasing the quality of banking services, reducing costs, and increasing competitiveness. Customers also experience efficiencies such as time optimization, being able to access information directly, and convenience (Hanafizadeh et al., 2014)

Meta-UTAUT

UTAUT or Unified Theory of Acceptance and Use of Technology is a model that explains an individual's acceptance of technology and its use of that technology (Dwivedi et al., 2019). UTAUT or Unified Theory of Acceptance and Use of Technology is a model that explains an individual's acceptance of a technology and its use of that technology(Nikolopoulou et al., 2021). UTAUT was developed through a review and consolidation of eight models to explain behavior in the use of technology that has been carried out by previous research, namely: Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model, Theory of Planned Behavior (TPB), a combined Theory of Planned Behavior and Technology Acceptance Model (combined TPB and TAM), Model of Personal Computer (PC) Utilization, Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT) (Dulle & Minishi-Majanja, 2011). UTAUT focuses on the organizational context which aims to provide specific explanations regarding the acceptance and use of technology (Alalwan et al., 2018a; Dulle & Minishi-Majanja, 2011; Patil et al., 2020; Zhou et al., 2010). UTAUT 2 is a model that has been developed from UTAUT. In early 2003, when UTAUT was first introduced by Venkatesh et al. (2012), UTAUT explains user intentions in using technology and usage behavior which only mentions four factors, namely performance expectancy, effort expectancy, social influence and facilitating conditions. Furthermore, this UTAUT 2 which was also proposed by Venkatesh et al. in 2021 focuses on several factors that study the acceptance and use of technology in the consumer context which adds three new factors: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value and habit. The UTAUT2 model is used for the data collection process and can be used as an introduction phase or process for adopting a new technology (Alalwan et al., 2018a; Farooq et al., 2017; Nikolopoulou et al., 2021). Limitations of the UTAUT model make for a re-examination of the model with a combination of meta-analysis techniques to find out some of these limitations so that there is a meta-UTAUT that has an important role in understanding consumer adoption of the use of technology such as mobile banking (Nikolopoulou et al., 2021). There is a meta-UTAUT model that has added four exogenous core variables namely performance expectancy, effort expectancy, social influence, and facilitating conditions, and two endogenous variables behavioral intention and use behavior (Patil et al., 2020).

Hedonic Motivation

Hedonic Motivation is a certain feeling of joy, excitement, or pleasure that comes from the application of technology (Venkatesh et al., 2012). As for several factors in hedonic motivation,

which is a determining factor in consumer adaptation to technology such as joy, fun, enjoyment, to excitement (Nikolopoulou et al., 2021).

H₁: Hedonic Motivation have a significant positive effect on the behavioral intention of customers.

H₂: Hedonic Motivation have a significant positive effect on the performance expectancy of customers.

Performance Expectancy

Performance Expectancy is a situation where technology can offer a certain advantage or benefit to consumers in carrying out a certain activity (Venkatesh et al., 2012). Performance Expectancy affects the use of a system that can provide convenience for sustainable use by utilizing the system. Based on research conducted by Patil et al. (2020) the usefulness of usability on the mobile payment system can not only improve the attitude of customers positively towards its use but can also increase its use of mobile payment.

H₃: Performance expectancy has a significant positive effect on the behavioral intention of customers.

Social Influences

Social Influence is a condition where a person considers the trust of others as an important thing for him in using a new technology or system (Patil et al., 2020). As for other people who are considered important in this case according to Phan et al. (2019) the people around them, namely friends, parents, family, to people in certain communities on social media who can influence other people in implementing a new system (Sitorus et al., 2019). Social influence is one of the most important factors in mobile banking used daily (Venkatesh et al., 2012).

H₄: Social influences have a significant positive effect on the behavioral intention of customers. **Trust**

Trust is one of the variables that have an important value on attitude or attitude because the creation of belief in something will impact adopting that thing (Patil et al., 2020). So, trust is an important factor for someone in dealing with a certain condition, where the results of these conditions have uncertain or unwanted results can occur (Venkatesh et al., 2012).

H₅: Trust has a significant positive effect on the attitude customers.

Attitude

Attitude is a condition in which consumers have a positive or negative evaluation of the behavior associated with a particular technology (Venkatesh et al., 2012). Attitude has been used in several previous studies to evaluate its effect on behavioral intention where it can be concluded that an individual's intention to use a technology can be based on their attitude towards using the system or technology (Patil et al., 2020).

H₆: Attitude have a significant positive effect on the behavioral intention of customers.

Facilitating Condition

Facilitating condition is an opinion or a person's perception of the resources and support obtained when carrying out a behavioral intention (Venkatesh et al., 2012). According to previous research conducted by Rahi et al. (2017) where facilitating conditions, it has a significant effect on behavioral intention, this is because when someone has the intention of using technology, of course, that person will pay attention to the facilitating conditions related to the use of the technology or system.

H₇: Facilitating conditions have a significant positive effect on customers' behavioral intention. **Habit**

Habit is a condition in which a person tends to perform a certain behavior automatically because they learn from that behavior. In using technology, a person's behavioral intention becomes a significant factor (Patil et al., 2020). In several previous studies, there were negative impacts of habit consumers when conducting transactions traditionally against the tendency of customers

to use mobile payment, therefore habit has a fairly important role against behavioral intention (Shafly, 2020; Tamba et al., 2022).

H₈: Habit has a significant positive effect on the behavioral intention of customers.

Behavioral Intention

Behavioral intention or a person's behavioral intention is part of the UTAUT2 model which is a factor of an individual's level of desire and effort to carry out the underlying behavior (Rahi et al., 2017). On the Meta-UTAUT model there is a significant relationship between behavioral intention and use behavior as research has been conducted by Patil et al. (2020) where this study explained that consumer intention to use mobile payments as an outcome variable.

H₉: Behavioral intention has a significant positive effect on the use behavioral customers.

2. Method

Data Collection

The data used in this research is primary data. The data collection method used to obtain preliminary data is a survey method, which is carried out by giving a questionnaire containing several questions along with the answer choices (Venkatesh et al., 2012). The selected questionnaire will contain questions and answer choices related to the indicators of each variable. Questionnaires will later be distributed to respondents who have been determined in the form of a Google Form. The data obtained will then be processed with the chosen analytical method. The technique used in this research is a non-probability sample. This technique using technique convenience *sampling* which is a sampling technique by collecting market research data from the available set of respondents. Certain criteria will be used, namely that there is no bias or no ambiguity, namely that the respondent has clear boundaries and there are no multiple and representative samples, that the response must represent the characteristics of the sample population, and that the resulting data must be the same (Nikolopoulou et al., 2021). Data processing in this study uses the method Structural Equation Model (SEM) with secondary data used in this study to support information from primary data collected from the results of literature studies originating from previous research, literature, and journals (Patil et al., 2020). **Population and Sample**

A population is a group of objects or subjects that match certain characteristics and have an equal opportunity to be selected as members of the research sample (Dulle & Minishi-Majanja, 2011). The population used is at least 5 times the number of questions available who are QRIS users on the service mobile banking in Indonesia (Ferdinand, 2022). The respondent specifications were selected based on characteristics such as age, gender, and frequency of using QRIS services mobile banking. The criteria used in this study are bank millennial customers who use QRIS for transactions on mobile banking services. According to Strauss & Howe (1991), the millennial generation has a birth span from 1982 to 2022. For specifications for millennial generation customers who are classified as active in using the service mobile banking are respondents who use QRIS on services mobile banking for payment transactions of more than 10 transactions in the last 1 year during the research period (Taherdoost, 2016). Millennials are the generational population that dominates the population in Indonesia, where in 2019, Indonesia's population reached 271 people with 31% of Indonesia's population being the millennial generation (Worldmeters, 2019). In addition, currently, the population classified as having a productive age is the population aged 15 years to 64 years, where the millennial generation is included in this age range.

Questionnaire Design

This study will use a questionnaire instrument with questions containing each variable's indicators. To determine The answers to the research questionnaire used a Likert scale of 5 is used to represent the five answer choices that will be adjusted to each indicator. Scale Likert in

this study contains from Strongly Agree with a score of 5 to Disagree with a score of 1 Strongly. The results of each indicator will be accumulated and processed at the data processing stage by disseminating Google Forms. This questionnaire is used as a medium to find out respondents' opinions.

In this study, a questionnaire will be distributed as research support which will be divided into several things as follows: (a) first part; this section is the introduction and opening section which contains data on the identity of the researcher, the aims and objectives of this study so that respondents get an overview of the research, and the contents of the questionnaire that will be distributed to respondents. (b) second part; this section contains an explanation of what respondents should do, such as how to fill out a questionnaire and the scale used in this study. In this section, some questions serve as initial screening so that the contents of this questionnaire will be by predetermined population criteria. (c) third Part; this section contains questions about the demographics of the respondents in the form of gender, age, occupation, number of transactions for each month, and other information related to the use of mobile *banking*. (d) fourth part; this section contains the core of the questionnaire which contains the derivatives of the measurable variables developed as measuring tools used in the questionnaire.

Data Analysis Methods

Method *Structural Equation Model* (SEM) is a technique multivariate which is done by combining aspects of factor analysis and regression to determine the relationship between the variables used (Hair et al., 2014). SEM was conducted to examine the relationship or influence between each variable in the study to find relationships between variables (Alalwan et al., 2018b). This SEM method aims to analyse data, namely research models that use complex and multiple variables and research that is adjusted to the sample size. SEM is a statistical method that describes the complex relationship of each variable, with the SEM test testing a series of relatively complicated relationships simultaneously (Hair et al., 2014). The advantages of using the SEM method, namely:

- 1) know the direct and indirect influence relationship between variables;
- testing the dependent variable with the independent variable; 2)
- testing the relationship of causality, validity, and reliability; 3)
- 4) measures various factors that cannot be measured directly with indicator variables.

The analytical method using SEM using Confirmatory Factor Analysis (CFA) which can explain the variables used in this study, where this approach is carried out to determine the degree of validity of each factor used in the measurement which aims to be able to represent the variables contained in this study (Alalwan et al., 2018b). In the SEM method this is done for test model fit to find out how much both approaches from the model built are then compared with the results of observations based on the data that has been collected (Sitorus et al., 2019). The method used was done with 3 compatibility tests viz absolute fit measures, incremental fit measures, and parsimonious fit measures. In the SEM method itself, two indicators are carried out namely-value and standardized *loading factor*. Analysis of the validity of the measurement model in the early stages of CFA was carried out by testing whether-value the standardized *loading factor* of the observed variables with a standard values*t-value* is less than 1.96 (<1.96) and value standard loading factor is greater or equal to 0.50 (\geq 0.50). Then for indicators of measuring the model's reliability is to use construct reliability (CR). Construct reliability (CR) describes a good reliability value in a model with a standard value greater than or equal to 0.7 (≥ 0.7) and a weight of variance extracted (VE) greater than or equal to $0.5 (\geq 0.5)$ (Hair et al., 2014).

3. Result and Discussion

A Pretest is done first before the main test is carried out to assess the research instrument used. The *pretest* tested the validity and reliability by distributing questionnaires online to a minimum of 30 respondents. The results of the data obtained from the questionnaire were then processed using SPSS software. They showed the results of the reliability and validity tests of each variable which can be seen in Tables 1 and 2. Validity and reliability testing was carried out on 26 research attributes from 7 variables in the form of questions on the questionnaire. This test determines whether the variables used can explain the research objectives. Attributes that can be used in the next data processing stage using the actual number of research samples are attributes that have been declared valid.

The validity test on the questionnaire must be tested first to determine the level of accuracy of each question on the questionnaire (Rahi et al., 2017). The indicators that explain a variable must be valid and can be used, so it must be tested for validity first. Validity test can be done by factor analysis based on 4 (four) item types: *Kaiser-Mayer-Olkin (KMO), Bartlett's Test of Sphericity, Anti-Image,* and *Factor loading.* According to Malhotra (2010), if the indicator test results meet the KMO value > 0.5, Sig <0.05, and factor loading > 0.5, then the indicator can be declared valid (Nikolopoulou et al., 2021; Patil et al., 2020; Venkatesh et al., 2012). The following are results of the validity test *pre-test* in this study are presented in Table 1 as follows.

Table 1

Pre-Test Validity Test Results

Variable	Indicator	KMO	Bartlett's	Anti-	Factor	Result
			Test	Image	Loading	
Hedonic Motivation	HM1	0,722	0,000	0,66	0,948	Valid
	HM2			0,764	0,904	Valid
	HM3			0,762	0,960	Valid
Performance Expectancy	PE1	0,692	0,000	0,667	0,888	Valid
	PE2			0,641	0,861	Valid
	PE3			0,79	0,818	Valid
	PE4			0,708	0,715	Valid
Social Influence	SI1	0,74	0,000	0,87	0,696	Valid
	SI2			0,729	0,858	Valid
	SI3			0,675	0,900	Valid
	SI4			0,772	0,821	Valid
Trust	TR1	0,731	0,000	0,821	0,912	Valid
	TR2			0,732	0,935	Valid
	TR3			0,667	0,959	Valid
Attitude	AT1	0,681	0,000	0,691	0,818	Valid
	AT2			0,643	0,862	Valid
	AT3			0,725	0,795	Valid
Facilitating Condition	FC1	0,559	0,000	0,583	0,881	Valid
	FC2			0,547	0,828	Valid
	FC3			0,683	0,589	Valid
Habit	HB1	0,679	0,000	0,706	0,907	Valid
	HB2			0,745	0,891	Valid
	HB3			0,615	0,960	Valid
Behavioral Intention	BI1	0,607	0,000	0,585	0,804	Valid
	BI2			0,731	0,604	Valid
	BI3			0,579	0,821	Valid

Source: Research Data (reprocessed)

The results of the data in Table 1shows the validity test of each variable tested, the results are shown from the KMO value, and all variables show a value above 0.5 so that it can be declared valid by distributing questionnaires to 30 respondents. analysis *factor loading* for each indicator, all other questions have met a value of > 0.5 and are declared valid.

The reliability test on the questionnaire was carried out to find out how far the questionnaire can consistently measure a variable used in research (Venkatesh et al., 2012). Reliability testing can use the coefficient parameters *Cronbach Alpha* to find out whether a research instrument is reliable enough. The coefficient value *Cronbach Alpha* which is the minimum value so that an instrument can be used is greater than or equal to 0.60 (Malhotra, 2010). Reliability test results in this study are presented in Table 2 as follows.

Table 2

Reliability Test Results Tre-Test		
Variable	Cronbach's Alpha	Result
Hedonic Motivation	0,898	Very Reliable
Performance Expectancy	0,827	Very Reliable
Social Influence	0,837	Very Reliable
Trust	0,927	Very Reliable
Attitude	0,746	Reliable
Facilitating Condition	0,611	Reliable
Habit	0,908	Very Reliable
Behavioral Intention	0,616	Reliable

Reliability Test Results Pre-Test

Source: Research Data (reprocessed)

In the reliability test in Table 2, the validity of each variable is tested, and the value *of Cronbach's Alpha* is above 0.6. These conditions show that the reliability of the scale used to measure each variable meets the standard.

In this study, there were 269 respondents with a total of 265 using mobile banking. In the process of distributing the questionnaire, a screening process was carried out to reduce the presence of respondents who needed to match the criteria. The selection of respondents was based on answers to the question "Have you ever used QRIS for mobile banking services in the last 1 year?", where respondents who answered "yes" could continue the process of answering questions on the questionnaire and respondents who answered "no" could stop filling in questionnaire and will be eliminated, so that the final results are 265 respondents to the sample data in this study.

From the total data obtained, there were 265 respondents, it was found that the most respondents were women, totaling 160 respondents (60.38%) and male respondents as many as 105 respondents (39.62%). In addition, other information obtained is the last education, domicile area, occupation, monthly income, and average monthly expenses in the past year. In this study, the focus was on respondents who belonged to the millennial generation, so there was no information related to the age of the respondents. Then, based on the education level, most respondents were in their last education, namely S1 with a total of 195 respondents (73.58%). For the most types of work in the results of this study, namely private employees with as many as 129 respondents (48.68%) with the highest income of Rp. 5,000,001 to Rp. 10,000,000, - and the largest average expenditure is Rp. 3,000,001.- to Rp. 5,000,000.-

Structural equation modelling (SEM) analysis was conducted using SEM-PLS. After collecting the data and fulfilling the required number of samples, the next step is to analyze the data using the estimated PLS model which uses the following research model on Figure 1.

Figure 1 *Research Model*



Figure II. Research Model

The Partial Least Square (PLS) based SEM method is used as a processing technique which has two stages to assess whether a research model used is appropriate. The assessment on the SEM-PLS consists of an outer model (evaluation of the measurement model) and an inner model (evaluation of the structural model).

Evaluation of Outer Loading Value

This outer loading measurement has criteria where the factor loading value is > 0.5 so that the construct is declared valid. The following is Table 3 which shows that all indicators used have been declared valid.

Table 3 *Outer Loading*

and Louding									
Hedonic Motivation		Performance	Expectancy	Social I	nfluence				
HM1	0,910	PE1	0,904	SI1	0,669				
HM2	0,888	PE2	0,885	SI2	0,830				
HM3	0,839	PE3	0,883	SI3	0,789				
		PE4	0,845	SI4	0,775				
Atti	Attitude		g Condition	Habit					
AT1	0,869	FC1	0,829	HB1	0,898				
AT2	0,873	FC2	0,859	HB2	0,841				
AT3	0,862	FC3	0,737	HB3	0,700				
Tr	ust	Behaviora	l Intention	Use Behavior					
TR1	0,959	BI1	0,821	UB1	0,824				
TR2	0,869	BI2	0,945	UB2	0,849				
TR3	0,957	BI3	0,951	UB3	0,873				

Source: Research Data (reprocessed)

Evaluation of Average Variance Extracted (AVE), and Composite Reliability

The Average Variance Extracted (AVE) and Composite Reliability values show that reliability can be seen from constructs that have Cronbach's Alpha values > 0.6, Composite Reliability values > 0.7, and Average Variance Extracted (AVE) values > 0.5. Thus, the results of this study can be seen in Table 4 as follows Table 4

Variable Reliability Value

	Cronbach's	Composite	Average Variance
	Alpha	Reliability	Extracted (AVE)
Hedonic Motivation	0,853	0,856	0,774
Performance Expectancy	0,902	0,903	0,774
Social Influence	0,770	0,765	0,590
Trust	0,920	0,807	0,721
Attitude	0,837	0,838	0,754
Facilitating Condition	0,740	0,768	0,656
Habit	0,759	0,847	0,668
Behavioral Intention	0,891	0,897	0,824

Source: Research Data (reprocessed)

Fornell-Larcker Criterion

In the Fornell-Larcker Criterion shown in table V there is a diagonal value which indicates the Average Variance Extracted (AVE) value with the AVE value in all variables > 0.5, then no variables are eliminated and the value below the diagonal in the table indicates Squared Inter- Construct Correlation (SIC). So, it can be concluded that the discriminant validity in this research model is fulfilled.

Table 5

Fornell-Larcker Criterion

Construct	Attitude	Behavioral Intention	Facilitating Condition	Habit	Hedonic Motivation	Performance Expectancy	Social Influence	Trust	Use Behavior
Hedonic	0.969								
Motivation	0,808								
Performanc									
e	0,600	0,908							
Expectancy									
Social	0.603	0.580	0.810						
Influence	0,095	0,389	0,810						
Trust	0,548	0,696	0,553	0,818					
Attitude	0,871	0,581	0,649	0,527	0,880				
Facilitating	0.607	0.460	0.550	0.301	0.750	0.880			
Condition	0,097	0,409	0,339	0,391	0,759	0,880			
Habit	0,713	0,594	0,567	0,576	0,709	0,503	0,768		
Behavioral	0 759	0.502	0.507	0.542	0.702	0.604	0.570	0.020	
Intention	0,738	0,302	0,397	0,342	0,702	0,004	0,379	0,929	
Use	0 709	0.603	0.600	0.517	0.818	0.820	0.545	0.574	0.849
Behavior	0,709	0,005	0,000	0,517	0,010	0,020	0,545	0,574	0,049

Source: Research Data (reprocessed)

Cross Loading

In the Cross Loading shown in Table 6, the loading factor values for all indicators in this study are greater than the loading factor values for the other constructs, which indicates that all indicators are valid for each construct.

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Table 6

Cross Loading

Original Article

Construct	Attitude	Behavioral Intention	Facilitating Condition	Habit	Hedonic Motivation	Performance Expectancy	Social Influence	Trust	Use Behavior
AT1	0,869	0,471	0,574	0,470	0,669	0,535	0,547	0,685	0,526
AT2	0,873	0,536	0,617	0,439	0,831	0,682	0,667	0,611	0,711
AT3	0,862	0,554	0,614	0,515	0,772	0,598	0,644	0,676	0,611
BI1	0,512	0,821	0,514	0,590	0,505	0,420	0,485	0,455	0,514
BI2	0,553	0,945	0,533	0,664	0,529	0,423	0,569	0,448	0,554
BI3	0,566	0,951	0,555	0,639	0,548	0,434	0,559	0,465	0,571
FC1	0,563	0,469	0,829	0,468	0,521	0,418	0,445	0,489	0,462
FC2	0,611	0,460	0,859	0,355	0,566	0,581	0,428	0,488	0,577
FC3	0,502	0,522	0,737	0,574	0,484	0,318	0,534	0,482	0,394
HB1	0,541	0,675	0,564	0,898	0,539	0,436	0,499	0,522	0,544
HB2	0,465	0,568	0,418	0,841	0,421	0,261	0,567	0,465	0,386
HB3	0,280	0,413	0,322	0,700	0,270	0,202	0,325	0,296	0,274
HM1	0,732	0,504	0,542	0,429	0,910	0,701	0,578	0,629	0,776
HM2	0,687	0,477	0,542	0,514	0,888	0,600	0,624	0,613	0,662
HM3	0,867	0,546	0,621	0,451	0,839	0,692	0,665	0,608	0,711
PE1	0,622	0,367	0,515	0,291	0,676	0,904	0,427	0,560	0,695
PE2	0,612	0,378	0,525	0,300	0,666	0,885	0,438	0,539	0,762
PE3	0.664	0.437	0.518	0.383	0.693	0.883	0.456	0.528	0.797
PE4	0,550	0,464	0,408	0,397	0,635	0,845	0,447	0,499	0,625
SI1	0,873	0,545	0,614	0,455	0,843	0,689	0,669	0,611	0,716
SI2	0,516	0,434	0,411	0,492	0,527	0,401	0,830	0,458	0,403
SI3	0,355	0,364	0,301	0,356	0,343	0,183	0,789	0,328	0,207
SI4	0,299	0,419	0,324	0,428	0,321	0,134	0,775	0,295	0,209
TR1	0,692	0,412	0,533	0,475	0,642	0,510	0,519	0,959	0,497
TR2	0,736	0,563	0,604	0,564	0,680	0,635	0,580	0,869	0,597
TR3	0,676	0,414	0,518	0,463	0,628	0,529	0,509	0,957	0,496
UB1	0,616	0,561	0,501	0,477	0,813	0,530	0,521	0,513	0,824
UB2	0,576	0,453	0,526	0,362	0,631	0,814	0,423	0,495	0,849
UB3	0.610	0.515	0.501	0.471	0.629	0.755	0.438	0.452	0.873

Source: Research Data (reprocessed)

HTMT

The Heterotrait-Monotrait correlation ratio (HTMT) is used as a modern tool to analyze the discriminant validity of the existing constructs in the measurement model (Henseler et al., 2015). If the HTMT value is used > 0.85, then the result has a potential problem of discriminant validity (Hair et al., 2014), where in the research in the following table it can be seen that there are no values above 0.85, so this indicates that there is no problem in discriminant validity. Table 7

Heterotrait-	Monotrait	correlation	ratio
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	Attitude	Behavioral Intention	Facilitating Condition	Habit	Hedonic Motivation	Performance Expectancy	Social Influence	Trust	Use Behavior
Attitude									
Behavioral									
Intention	0,694								
Facilitating									
Condition	0,875	0,736							
Habit	0,654	0,819	0,734						
Hedonic									
Motivation	1,025	0,665	0,811	0,623					
Performance									
Expectancy	0,801	0,523	0,662	0,439	0,760				
Social									
Influence	0,826	0,691	0,728	0,724	0,815	0,548			
Trust	0,860	0,552	0,724	0,621	0,789	0,660	0,651		
Use Behavior	0,862	0,709	0,762	0,621	0,977	0,965	0,630	0,662	

T-Value and P-Value Evaluation

In this test, the effect of exogenous variables on endogenous variables was searched by comparing the t statistic value with the t table value of 1.96, which was carried out by looking at the original sample. Exogenous variables significantly affect endogenous variables if the t statistic value $> t_{table}$. In contrast, exogenous variables that do not substantially impact endogenous variables occur if the t statistic value $< t_{table}$. Then, the next thing is to pay attention to the original sample value of the influence test results that have been done before. Exogenous variables that directly affect endogenous variables occur if the original sample has a positive sign. In contrast, exogenous variables that have the opposite effect on endogenous variables

occur if the actual sample value of the test results has a negative impact. If the relationship between these variables has a p-value <0.005, then the relationship can be stated as significant. Table 8 describes the variables that do not affect other variables, namely. Table 8

T-value and p-value

Variable	Original Sample (O)	T Values	p Values	Result
Attitude \rightarrow Behavioral Intention	0,250	2,604	0,000	Significant
Behavioral Intention \rightarrow Use Behavior	0,331	4,400	0,000	Significant
Facilitating Condition \rightarrow Use Behavior	0,356	5,447	0,000	Significant
Habit \rightarrow Use Behavior	0,089	1,294	0,196	Not Significant
Hedonic Motivation \rightarrow Behavioral Intention	0,081	0,678	0,498	Not Significant
Hedonic Motivation \rightarrow Performance Expectancy	0,759	19,649	0,000	Significant
Performance Expectancy \rightarrow Behavioral Intention	0,072	0,547	0,584	Not Significant
Social Influences \rightarrow <i>Behavioral Intention</i>	0,323	5,081	0,000	Significant
$Trust \rightarrow Attitude$	0,758	21,627	0,000	Significant

Source: Research Data (reprocessed)

Evaluation of R

This test is carried out to find out how much influence the exogenous variables have on endogenous variables using an R-value which has value of 0.75, so it can be categorized as substantial or decisive and if the R-value is 0.5, it can be said to be moderate, then for an R-value that is has a value of 0.25 included in the low category which can be seen in table 9. Based on Table 9, the highest R-value is obtained for the Attitude variable with a value of 0.574, which indicates that the Attitude variable contributes 57.4% in explaining Behavioral Intention. Table 9

Evaluation of R

Variable	R-square	
Attitude	0,574	
Behavioral Intention	0,422	
Performance Expectancy	0,577	
Use Behavior	0,459	

Source: Research Data (reprocessed)

Hypothesis Test Analysis

	Hypothesis	Original Sample (O)	p values	Result
H1	<i>Hedonic Motivation have a significant positive effect on</i> <i>the behavioural intention of customers.</i>	0,081	0,498	Rejected
H2	Hedonic Motivation have a significant positive effect on the performance expectancy of customers.	0,759	0,000	Accepted
Н3	Performance expectancy have a significant positive effect on the behavioral intention of customers.	0,072	0,584	Rejected
H4	Social influences have a positive effect on the behavioral intention of customers.	0,323	0,000	Accepted
Н5	<i>Trust has a significant positive effect on the attitude customers.</i>	0,758	0,000	Accepted

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			O	Original Article	
H6	Attitude have a significant positive effect on the behavioral intention of customers.	0,250	0,009	Accepted	
H7	Facilitating conditions have a significant positive effect on the behavioral intention of customers.	0,356	0,000	Accepted	
H8	Habit has a significant positive effect on the behavioral intention of customers.	0,089	0,196	Rejected	
Н9	Behavioral intention have a significant positive effect on the use behavioral customers.	0,331	0,000	Accepted	

Source: Research Data (reprocessed)

The results of this hypothesis testing show that of the 9 hypotheses, there are 6 hypotheses that can be accepted because they have p values > 0.05, so they can be declared significant with the appropriate original sample values. The following is a further explanation of the results of the significance analysis for each hypothesis:

 H_1 : Hedonic Motivation will have a significant positive effect on the customer's behavioral intention

The test results produced on this hypothesis at its p-value is 0.498, so the results are not significant, therefore, this hypothesis cannot be accepted. Whereas in research conducted by Shafly (2020), it was found that there was an important positive relationship between hedonic motivation and behavioral intention in using mobile banking, and in research conducted by Tamba et al. (2022), explaining that there was a significant influence between hedonic motivation and behavioral intention.

 H_2 : Hedonic Motivation will have a significant positive effect on customer performance expectancy

Hedonic Motivation has a significant positive effect on performance expectancy in using QRIS in mobile banking services. The feeling of happiness that a person feels when using QRIS on mobile banking services influences one's advantages in using the technology.

H3: Performance expectancy will have a significant positive effect on the customer's behavioral intention

The test results produced on this hypothesis are the effect of performance expectancy on behavioral intention with a p value of 0.548 so that the results are not significant, therefore this hypothesis cannot be accepted. Meanwhile, according to research conducted by Rahi et al. (2017) it was found that there is a positive influence from performance expectancy on the behavioral intention of customers in adopting the use of mobile banking and has a negligible effect on the use intention of customers in using mobile banking

H4: Social influences will have a significant positive effect on customer behavioral intentions Based on the results of hypothesis testing social influence will have a positive and significant effect because it has a p-value of > 0.05. Social Influence can be defined as the extent to which consumers or users consider that other people around them, such as family, friends, and so on are important in their lives and believe that the person must use certain technologies (Venkatesh et al., 2012). Social Influence is a significant attribute of behavioral intention in UTAUT, UTAUT 2 and Meta-UTAUT used by Y. Dwivedi et al. (2020). So, in this case when a person's environment is accustomed to using QRIS on mobile banking services, the surrounding environment can participate in using this technology due to the influence between one another. *H5: Trust will have a significant positive effect on customer attitudes*

Trust refers to someone's belief that they will fulfil their obligations and play an important role in using a technology, in this case, namely electronic financial transactions. Trust also has an important role in future actions between two or more parties in building a relationship. Thus, it can be concluded that trust can be a guarantee for someone to get a positive experience, where if consumers do not have and build trust in using QRIS in mobile banking, then they will not

get a convincing experience (Zhou et al., 2010). In this study, where trust has a significantly positive effect on customer attitudes, it can be shown that when someone already trusts QRIS in mobile banking services, it will affect one's mood in using the technology.

H6: Attitude will have a significant positive effect on the customer's behavioral intention

Attitude is the extent to which a person has positive or negative evaluations of the behavior in question. Attitude is always used in theory in adopting technology to evaluate its effect on behavioral intention. Some of these studies show a significant relationship to the use of technology. When a person has a positive attitude towards using this technology, it will affect one's desire to use QRIS in mobile banking services. In the research conducted by (Patil et al., 2020), a positive and significant relationship was found between attitude and customer behavioral intention in using mobile banking.

H7: Facilitating conditions will have a significant positive effect on customer use behavior

Facilitating conditions refer to consumer confidence in the resources and support available for them to carry out specific behaviors (Y. Dwivedi et al., 2020). In this study, it was found that facilitating conditions will have a significant positive effect on customer use behavior. This can indicate that if there is sufficient technology in the use of technology, such as the use of QRIS in mobile banking services, it can change a person's behavior to use this technology in his daily life and will recommend it to the surrounding environment. According to (Patil et al., 2020), this facilitating condition has a significant positive effect on customer behavior in using mobile banking, such as information, assistance, and knowledge.

H8: Habit will have a significant positive effect on customer use behavior

The test results produced on this hypothesis are looking for the influence of habit on use behavior at a p-value of 0.196 so the results are not significant, therefore, this hypothesis cannot be accepted. Based on research conducted by (Shafly, 2020), it was found that habit has a significant influence on use behavior.

H9: Behavioral intention will have a significant positive effect on customer use behavior

Based on the results of hypothesis testing, it was found that behavioral intention has a significant influence on customer use behavior in using QRIS in mobile banking services, where this proves that there is behavioral intention to use QRIS in mobile banking services in the future and the use of QRIS is considered influences behavior in using QRIS in mobile banking which is supported by research conducted by (Shafly, 2020), which proves that there is a significant positive relationship between behavioral intention and use behavior.

4. Conclusion

This study aims to determine the intention to use technology, namely the use of QRIS in mobile banking services using the Meta-UTAUT model based on research conducted by (Patil et al., 2020), then the results show that there is a significant influence on performance expectancy, social impact, attitude on behavior intention, then a substantial effect on facilitating conditions on use behavior and what is interesting is that there is a significant effect on behavioral intention on use behavior for the use of QRIS in mobile banking services.

5. References

- Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Algharabat, R. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services*, 40, 125– 138. <u>https://doi.org/10.1016/j.jretconser.2017.08.026</u>
- Ayodya, W. (2020). UMKM 4.0 (Strategi UMKM Memasuki Era Digital). PT. Elex Media Komputindo.

 Azzahroo, R. A., & Estiningrum, S. D. (2021). Preferensi Mahasiswa dalam Menggunakan Quick Response Code Indonesia Standard (QRIS) sebagai Teknologi Pembayaran. Jurnal Manajemen Motivasi, 17(1), 10. https://doi.org/10.29406/jmm.v17i1.2800

Bolon, N. T. (2015). Bijak Ber-eBanking. OJK.

- Dulle, F. W., & Minishi-Majanja, M. K. (2011). The suitability of the unified theory of acceptance and use of technology (utaut) model in open access adoption studies. *Information Development*, 27(1), 32–45. <u>https://doi.org/10.1177/0266666691038537</u>
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model. *Information Systems Frontiers*, 21(3), 719–734. https://doi.org/10.1007/s10796-017-9774-y
- Dwivedi, Y., Rana, N., Tamilmani, K., & Raman, R. (2020). A Meta-Analysis Based Modified Unified Theory of Acceptance and Use of Technology (Meta-UTAUT): A Review of Emerging Literature. *Current Opinion in Psychology*, 36. <u>https://doi.org/10.1016/j.copsyc.2020.03.008</u>
- Evan Sihaloho, J. (2020). Implementasi Sistem Pembayaran Quick Response Indonesia Standar Bagi Perkembangan UMKM di Medan. *Jurnal Management Bisnis*, 17(2), 288.
- Fakhrurozi, A. (2018). Faktor-Faktor Yang Mempengaruhi Minat Menggunakan Mobile Banking Pada Mahasiswa Universitas Muhammadiyah Surakarta.
- Farooq, M. S., Salam, M., Jaafar, N., Fayolle, A., Ayupp, K., Radovic-Markovic, M., & Sajid, A. (2017). Acceptance and use of lecture capture system (LCS) in executive business studies. *Interactive Technology and Smart Education*, 14(4), 329–348. <u>https://doi.org/10.1108/ITSE-06-2016-0015</u>
- Ferdinand, A. (2022). Structural equation modeling dalam penelitian manajemen. BP Undip.
- Hair, J. F., Anderson, R. E., & Black, W. C. (2014). *Multivariate Data Analysis* (Ed. 7th). Pearson.
- Hanafizadeh, P., Keating, B. W., & Khedmatgozar, H. R. (2014). A systematic review of Internet banking adoption. *Telematics and Informatics*, *31*(3), 492–510. https://doi.org/https://doi.org/10.1016/j.tele.2013.04.003
- Hendarsyah, D. (2016). Penggunaan Uang Elektronik dan Uang Virtual Sebagai Pengganti Uang Tunai di Indonesia.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <u>https://doi.org/10.1007/s11747-014-0403-8</u>
- Kang, J. (2018). Mobile payment in Fintech environment: trends, security challenges, and services. *Human-Centric Computing and Information Sciences*, 8(1). <u>https://doi.org/10.1186/s13673-018-0155-4</u>
- Nikolopoulou, K., Gialamas, V., & Lavidas, K. (2021). Habit, hedonic motivation, performance expectancy and technological pedagogical knowledge affect teachers' intention to use mobile internet. *Computers and Education Open*, 2, 100041. https://doi.org/https://doi.org/10.1016/j.caeo.2021.100041
- Patil, P., Tamilmani, K., Rana, N., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of Information Management*, 54, 102144. <u>https://doi.org/10.1016/j.ijinfomgt.2020.102144</u>
- Phan, D., Narayan, P., Rahman, R., & Hutabarat, A. (2019). Do financial technology firms influence bank performance? *Pacific-Basin Finance Journal*, 62, 101210. https://doi.org/10.1016/j.pacfin.2019.101210

<u>()</u>

- Rahi, S., Ghani, M. A., & Alnaser, F. M. I. (2017). Predicting customer's intentions to use internet banking: The role of technology acceptance model (TAM) in e-banking. *Management Science Letters*, 7(11), 513–524. <u>https://doi.org/10.5267/j.msl.2017.8.004</u>
- Shafly, N. A. (2020). Penerapan model utaut2 untuk menjelaskan behavioral intention dan use behavior penggunaan mobile banking di kota malang.
- Siregar, R. T., Silitonga, H. P., & Putri, J. A. (2020). Strategi Pengembangan Usaha Mikro Kecil dan Menengah (UMKM) di Kota Pematangsiantar. *Jurnal Konsep Manajemen Dan Bisnis*, 134.
- Sitorus, H. M., Govindaraju, R., Wiratmadja, I. I., & Sudirman, I. (2019). Examining the role of usability, compatibility and social influence in mobile banking adoption in Indonesia. *International Journal of Technology*, 10(2), 351–362. <u>https://doi.org/10.14716/ijtech.v10i2.886</u>
- Tamba, G. M. P., Suroso, A. I., & Fahmi, I. (2022). Customer Perceptions Analysis of Branchless Banking Bank XYZ in Disruption Era of Digitalization. *International Journal of Research and Review*, 9(5). <u>https://doi.org/10.52403/ijrr.20220538</u>
- Tobing, G. J., Abubakar, L., & Handayani, T. (2021). Analisis Peraturan Penggunaan QRIS Sebagai Kanal Pembayaran Pada Praktik UMKM Dalam Rangka Mendorong Perkembangan Ekonomi Digital. Acta Comitas, 6(03), 491. https://doi.org/10.24843/ac.2021.v06.i03.p3
- Venkatesh, V., Thong, J., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36, 157–178. <u>https://doi.org/10.2307/41410412</u>
- Walfajri, M., & Winarto, Y. (2021, September 24). Digital banking tumbuh di tengah pandemi, masyarakat kian sering bertransaksi online.
- Wang, Y., Lo, H., & Hui, Y. V. (2003). The antecedents of service quality and product quality and their influences on bank reputation: evidence from the banking industry in China. *Managing Service Quality: An International Journal*, 13(1), 72–83. <u>https://doi.org/10.1108/09604520310456726</u>
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, 26, 760–767. https://doi.org/10.1016/j.chb.2010.01.013