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Analysis of Factors Influencing the Intention to Use QRIS As a Payment Tool in Central Kalimantan Province

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ABSTRACT

In recent years, the Quick Response Code Indonesian Standard (QRIS) has emerged as a digital payment system in Indonesia. Central Kalimantan has witnessed a substantial increase of 91% in the number of merchants adopting this system in 2021 compared to previous years. However, the significant growth of merchants with QRIS options has not yet had the expected increase in usage frequency. This research aims to identify the factors influencing the utilization of QRIS as a payment method and to formulate recommendations to enhance its adoption. Employing a quantitative method, this study modifies the Technology Acceptance Model (TAM) by including external variables such as Subjective Norm, Perceived Security based on preliminary research to understand their impact on Behavioral Intention to use. Data calculation and analysis were conducted using the SmartPLS 3 tool. The findings reveal that Attitude Toward Using exerts a significant influence on Behavioral Intention to Use. While Subjective Norm, Perceived ease of use and Perceived Usefulness significantly affect usage intention through Attitude Toward Using, this study highlights the potential for increased QRIS adoption by leveraging community figures or influencers in socialization efforts. Furthermore, enhancing perceived usefulness through merchant promotions and user education is crucial for fostering positive attitudes towards QRIS usage.

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1. INTRODUCTION

As technology has rapidly developed in recent years, the user of smartphones in Indonesia has become one of the fastest-growing trends in the last decade. Between 2011 and 2021, it was recorded that smartphone ownership in Indonesia increased by 68% nationally, comparing data from 2011 at 39.11% to data from 2021 at 65.87% [1].

The rise in smartphone usage has evidently influenced the introduction of updates in public services, one of which is the ability to access transactions right at your fingertips. The innovations in payment systems that have evolved are also followed by the banking sector implementing various innovations to simplify transactions by developing a range of payment methods such as E-banking, SMS-Banking, and mobile banking. Additionally, the emergence of Fintech companies like GOPAY, OVO, SHOPEEPAY, DANA, and others with digital wallet (e-wallet) services, have facilitated easier transactions. These innovations have made it possible for the public to make payments without

needing to carry cash, simply by using their smartphones. Data from 2012 to 2017 shows a significant increase in the use of smartphones for payments, with 2017 marking the year when transactions through smartphones surpassed those made through bank accounts.[2][3]

With the proliferation of Fintech companies introducing QR formats, the Indonesian government, through Bank Indonesia, has established a QR standard known as the Quick Response Code Indonesian Standard (QRIS). This standard aims to nationalize the use of QR codes, commonly abbreviated as QRIS (pronounced 'CRIS'), to unify the various QR codes from different Payment System Service Providers (PSSPs) that utilize QR Code technology [4].

Bank Indonesia, as the regulator, has a blueprint for the Indonesian Payment System (SPI) 2025, one of its objectives being to support the integration of the national digital economic and financial system. This ensures the central bank's function in the circulation of money, monetary policy, and financial system stability, as well as supporting financial inclusion [4]. This goal can be achieved by promoting the dissemination of QRIS to all merchants in Indonesia as part of the infrastructure. This is evident in the historical data from 2020 to the end of 2022, which shows that the number of merchants using QRIS has reached 23.9 million [5].

One of the provinces in Indonesia that has also supported the availability of QRIS Merchant infrastructure is Central Kalimantan. Throughout the year 2021, it experienced the second-largest growth in the number of QRIS merchants in Indonesia, with an addition of 63,375 merchants in August 2021, which is a 91% increase compared to the year 2020. As seen in the economic report of Central Kalimantan, the trend of merchant growth continues to rise monthly, with the largest increase occurring at the end of the third quarter of 2022 and the beginning of the fourth quarter of 2022 [6].

Despite the increase in the number of QRIS merchants over the course of a year (from the first quarter of 2022 to the first quarter of 2023), this did not lead to a corresponding rise in transactions using QRIS. According to the economic report of Central Kalimantan in May 2023, the number of QRIS transactions has been on a downward trend since the first quarter of 2022, with the only increase occurring in the third quarter of 2022. Following that, the trend continued to decline, with a decrease of 10.00% in the first quarter of 2023 [6]. The same pattern is also seen in the nominal value of QRIS transactions in Central Kalimantan Province, this is reflected with the transaction amounts shown in Figure 1. Although there was an increase of up to 90.00% in the first quarter of 2023 and the third quarter of 2023, the trend is still fluctuating.

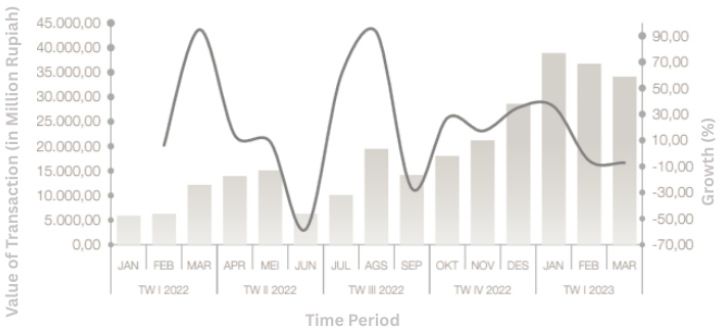

Figure 1. Graph of Nominal Transactions using QRIS for Central Kalimantan Province, Bank Indonesia, 2023. [6]

Observing this situation, it becomes apparent that the rising number of QRIS merchants in the area is not the sole indicator for increasing the rate of QRIS transaction usage among the people of Central Kalimantan. To understand the acceptance of a new system, an analysis must be conducted. This study will perform an analysis to identify the factors that influence the intention of the Central Kalimantan community to engage in transactions using QRIS.

This research was conducted to find out what factors influence the intention to use QRIS as a means of payment in Central Kalimantan Province and What recommendations can be given to increase the use of QRIS as a means of payment in Central Kalimantan Province. This research will be limited to respondents who live in Central Kalimantan province and focus on identifying factors that influence the intention to use QRIS as a means of payment in Central Kalimantan province using the TAM Model.

2. LITERATURE REVIEW

2.1. QRIS (Indonesia Standard QR Code)

QRIS is the QR Code Payment standard for the Indonesian payment system, developed by Bank Indonesia and the Indonesian Payment System Association (ASPI) [4]. QRIS enhances the trend of cashless payments from Fintech apps (OVO, Gopay, Anda, LinkAja, Paytren, Mobile Banking, etc.) as each merchant only needs one QRIS code for all payment applications, including payments using mobile banking apps, the common forms of QRIS are illustrated as shown in Figure 2.

Figure 2. QRIS [4]

2.2. Literature Review

This study begins by reviewing existing methodologies employed in previous research on the adoption of digital payment technologies, particularly those relevant to the current research context. Study is by de Luna et al. (2019) titled Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. Conducted in Spain, this research compares the factors influencing consumer adoption of various mobile payment systems, including SMS (Short Message Service), NFC (Near Field Communication), and QR (Quick Response). The study utilizes the Technology Acceptance Model (TAM), augmented with additional variables such as Subjective Norms and Perceived Security. The findings indicate that QR-based mobile payments are primarily influenced by Perceived Usefulness, followed by Subjective Norms, Perceived Ease of Use, Attitude, and Perceived Security. According to studies by Zulfariansyah et al. (2024), the implementation of QRIS in Samarinda has brought significant benefits to all stakeholders involved. However, technical and non-technical challenges remain, which need to be addressed to enhance the acceptance and usage of QRIS among merchants. The study suggests that improving infrastructure and providing targeted, intensive education to people on QRIS usage could help overcome these challenges. Additionally, offering incentives to the most active QRIS users may encourage more merchants to adopt the system. The long-term benefits of QRIS implementation include cost reduction, simplified payment processes, and increased efficiency [7].

2.2. TAM Model

Prior research has explored user acceptance through various theoretical lenses, each model highlighting different factors influencing technology adoption. Among these, the Theory of Reasoned Action (TRA) stands out as a cognitive framework for understanding human behavior within specific situations. This theory provides the foundation for the Technology Acceptance Model (TAM), which specifically addresses technology adoption [8]. TAM is a model introduced by Davis in 1989, The model is depicted in Figure 3. where perceived usefulness (PU) and perceived ease (PE) of an individual are linked to determining the attitude (ATU) towards a certain technology and ultimately determining the intention to use, resulting in the attitude to adopt that technology (BIU) [10].

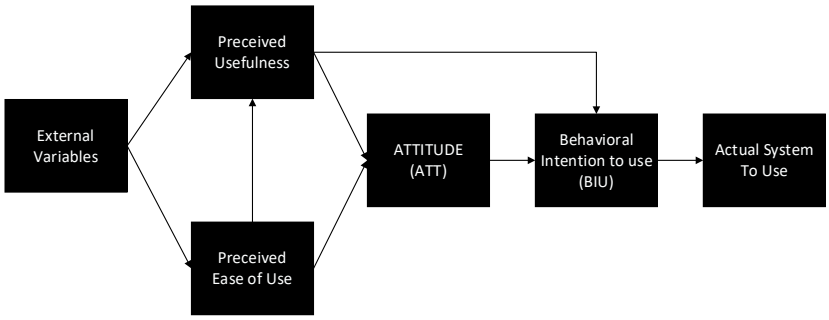

Figure 3. TAM Model by Davis 1989

2.3. Perceived Ease of Use (PE)

Perceived Usefulness (PU) is a measure of the individual's belief that using a technology can improve their work performance. Perceived usefulness is defined as "the extent to which the use of the system can enhance job performance" [11]. For example, according to a quote from a journal [12], the use of online shopping technology will increase access to a lot of information about products and enhance facilities for comparing products with products. In the study[10], it was found that the variable (PU) had a direct positive impact on the variables (ATU) and (BIU), indicating that the usefulness of technology also reflects an individual's attitude towards the use of technology and the attitude in adopting the technology.

2.4. Perceived usefulness (PU)

Perceived Ease of Use (PE) is a measure or level of view to what extent an individual believes that using a technology will be free from difficulty or extra effort, a technology that is considered easier to use is more likely to be accepted by its users. In the study conducted[12], it was found that the variable (PE) had an impact on the variables (PU) and (ATU), which means that with the level of view that the application is easy to use.

2.5. Attitude Toward Using (ATU)

Attitude Toward Using (ATU) is the level of assessment or feeling of users towards the desire to use a particular system [13], in the TAM model this is influenced by the usefulness and ease of use of a system [14].

2.6. Behavioral Intention to Use (BIU)

Behavioral Intention to Use can be interpreted as the strength or drive of an individual's intention to perform a certain behavior [13], in this case, the drive related to using QRIS. The TAM model concludes that Behavioral Intention to Use depends on the Attitude and perceived benefits towards technical and System matters [14].

2.7. External Variable

External Variable is defined as something that can influence user behavior and can define a condition for the basis in the design of system development. The main external variables in the TAM model are perceived usefulness and perceived ease of use, which are adopted from the previous model, the Theory of Reasoned Action (TRA) model [15].

The presence of social influence and security concerns significantly impacts users' intention to adopt mobile payment systems, particularly in regions with low digital penetration such as Central Kalimantan, where individuals rely heavily on trusted references and assurance of secure transactions. For this reason, Subjective Norms and Perceived Security were included as external variables in this study, Previous studies by de Luna [10], demonstrates that subjective norms positively influence perceived ease of use, usefulness, and intention to use, while perceived security plays a crucial role in overcoming risk-related barriers to the adoption of mobile payments.

The TAM model has evolved or been modified based on the objectives of the research being conducted. For instance, in the study by de Luna [10], the TAM model was modified with the addition

of the variables Subjective Norms and Perceived Security. Subjective Norms can be interpreted as Individuals tend to use new technology because they have references to a person or group that they follow, or individuals want to use a technology to behave according to the desires of the person or group that serves as a reference [10]. For Perceived Security In electronic payment systems, both individuals who have used and those who have never used electronic payments pay considerable attention to the risks and security in the process[16]. Therefore, both government regulations and public awareness campaigns regarding the security of transaction systems must be given due consideration.

3. RESEARCH METHOD

3.1. Conceptual Framework

This study employs a quantitative research method by distributing surveys to respondents residing in Central Kalimantan. The research framework begins with observing the problem or phenomenon related to the intention to use QRIS and seeking references from the internet and literature studies on related cases in other regions. The study then identifies and formulates the problem, focusing on factors influencing the intention to use QRIS beyond just infrastructure or the number of merchants.

The Technology Acceptance Model (TAM) is used as the research model. The study is quantitative, requiring data on community tendencies towards QRIS usage, which is collected through a questionnaire containing questions related to variables and research indicators. The questionnaire data is analyzed using SmartPLS to draw conclusions. This study has certain limitations that should be acknowledged which present opportunities for future research.

3.2. Research Model

3.2.1. Research Hypothesis

The factors hypothesized in this study are derived from various previous research or literature reviews and will be modelled through a modified TAM model by adding external factors, based on preliminary research consider external variables, namely subjective norms and perceived security. Among 30 respondents, 60% cited a lack of knowledge, unfamiliarity, and no prior experience with QRIS as reasons for not using it. Additionally, respondents indicated they would be more likely to use QRIS if people around them, including family, adopted it, and perceived security, 53% expressed concerns about data security and felt safer using conventional payment methods.

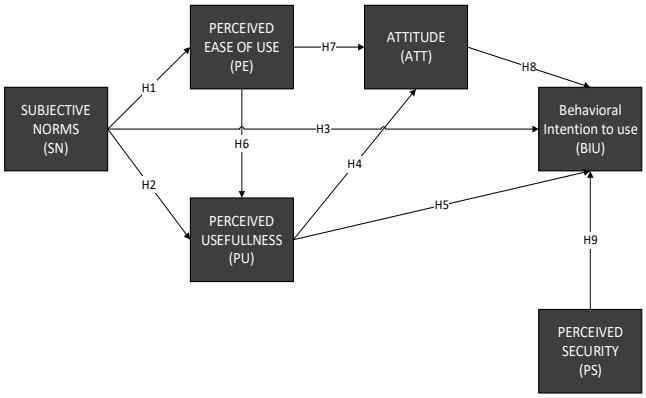

Figure 4. Research Model (TAM by Davis 1989 Modified) [10]

Referred to the conceptual model depicted in Figure 4, the discussion of definitions for each hypothesis as follows:

Table 1. Table of Hypothesis

Hypothesis Code	Hypothesis
H1	Subjective Norm has an influence on Perceived Ease of Use.
H2	Subjective Norm has an influence on Perceived Usefulness.
H3	Subjective Norm has a direct influence on Behavioral Intention to Use.
H4	Perceived Usefulness has an influence on Attitude Toward Using.
H5	Perceived Usefulness has an influence on Behavioral Intention to Use.
H6	Perceived Ease of Use has an influence on Perceived Usefulness.
H7	Perceived Ease of Use has an influence on Attitude Toward Using.
H8	Attitude Toward Using has an influence on Behavioral Intention to Use.
H9	Perceived Security does not have an influence on Behavioral Intention to.

Table 1 presents nine hypotheses derived from the proposed model, where the independent variables include Subjective Norms and Perceived Security, the mediating variables consist of Perceived Ease of Use, Perceived Usefulness, and Attitude, while the dependent variable is Behavioral Intention to Use.

3.2.2. Research Variable

The variables used in this research are as follows:

1. Subjective Norm (SN)
   Subjective Norm is defined as the extent to which an individual perceives that important others believe they should use a particular system or take action [12].
2. Perceived Usefulness (PU)
   Perceived Usefulness is the individual's belief that using an information technology system will provide benefits in daily life [17].
3. Perceived ease of use (PE)
   Perceived ease of use is the belief that using the system will be easy and not require significant effort [17].
4. Perceived Security (PS)
   Perceived Security is the level of confidence in new technology, especially in terms of payment systems, both from the security aspect of usage and the presence of security assurances [16].
5. Attitude Toward Using (ATU)
   Reflects the condition that mirrors positive or negative feelings directed through behaviour, which can depict how an individual views new technology as good or bad, beneficial or harmful, or as something that increases pros or cons [16].
6. Behavioural Intention to use. (BIU)
   Behavioural Intention to Use Is the condition reflecting a respondent's willingness to use and be motivated in engaging with a new system. [18].

3.2.3. Research Indikator

Table 2. Table of Research Indicator.

Variable	Indicator
Subjective Norm (SN)[2]	Recommendations from local people (SN1). Environmental Influence (SN2).
Perceived Usefulness (PU)[2]	Transactions Become More Effective (PU1). Additional Benefits Obtained (PU2).
Perceived ease of use (PE)[2]	Ease of Learning (PE1). Ease of Use (PE2). Presence of Instructions (PE3).
Perceived Security (PS)[2]	Feeling of Security in Use (PS1). Confidence in Sharing Information (PS2).
Attitude Toward Using (ATU) [2]	Positive Perception When Using (ATU1). Perception of Benefit When Using (ATU2).
Behavioral Intention to use (BIU) [2]	Trust in the Payment System (BIU1). Plans to Reuse soon (BIU2).

These indicators measure aspects examined in the study and provide a clear understanding of their role in the research framework, as presented in Table 2.

- SN1 (Recommendations from local people): Users are more likely to adopt the system if they receive recommendations from people in their surroundings.
- SN2 (Environmental influence): External factors, such as societal trends and technological adoption within the community, encourage users to engage with the system.
- PE1 (Ease of learning): Users find the system easy to learn.
- PE2 (Ease of use): Users encounter minimal difficulties in operating the system.
- PE3 (Presence of instructions): The availability of guidance or instructions helps users understand how to use the system effectively.
- PS1 (Feeling of security in use): Users feel safe while using the system.
- PS2 (Confidence in sharing information): Users trust that the system protects their personal and sensitive information
- ATU1 (Positive perception when using): Users hold a favorable perception of the system
- ATU2 (Perception of benefit when using): Users believe that utilizing the system provides tangible benefits.
- BIU1 (Trust in the payment system): Users trust the payment mechanism integrated into the system.
- BIU2 (Plans to reuse soon): Users intend to use the system again in the near future.

3.2.4. Data Analysis Technique

This study utilized a questionnaire with a Likert scale ranging from 1 to 5, where the scale is defined as follows: 1 for Strongly Disagree, and the highest value, 5, for Strongly Agree.

STS	= Strongly Disagree	S	= Agree
TS	= Disagree	SS	= Strongly Agree
KS	= Neutral		

In this study, the technique used for sampling is Probability Sampling, which is a sampling technique that gives an equal opportunity to every member of the population to be selected as a sample member [19]. To determine the sample size, a formula is used. The Slovin's formula is a general equation that can be used to estimate the population when the characteristics of the population are unknown.

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

N represents the population size in Central Kalimantan, which is 2,686,000 [20]. The sample size is 400 respondents from citizens on Central Kalimantan. In this study, Structural Equation Modelling (SEM) is used to analyze whether each independent variable has a significant influence on the dependent variable. This technique is employed to comprehensively explain the relationships between the variables in the study. SEM is utilized to analyze or verify a model by conducting a series of tests.

In the measurement model phase, the validity and reliability will be tested. This study collects data by distributing questionnaires to respondents, where each variable is represented through statements corresponding to indicators. To determine the validity and reliability levels of these indicators, the researcher uses the SmartPLS program.

3.2.5. Quality of Research Instrument

- **Validity Test**

This convergent validity test is conducted to determine whether the indicators used in this study are valid or not by ensuring that the loading factor values obtained from the PLS algorithm calculation. For the initial stage of research development, a loading factor of 0.5 to 0.6 is considered sufficient. However, a loading factor is said to be high if a component or indicator correlates more than 0.70 with the construction being measured [21].

- **Reliability Test**

Reliability indicates the extent to which results, or measurements can be trusted or relied upon and provides relatively consistent measurement results after several measurements are taken. To measure the reliability level of research variables, the alpha coefficient or Cronbach's alpha and composite reliability are used. A measurement item is said to be reliable if it has an alpha coefficient value greater than 0.6 – 0.7 [21].

- **Hypothesis Test**

The next step is the estimation of path coefficients, which are the estimated values for the path relationships in the structural model obtained by the bootstrapping process with values considered significant if the t statistic value is greater than 1.968 (significance level 5%) or greater than 1.650 (significance level 10%) for each of its path relationships [3].

4. RESULTS AND DISCUSSION

4.1. Descriptive Analysis

This section will explain the analysis of each indicator from each variable obtained from the questionnaire questions. The measures used in this writing are the mean and standard deviation.

4.1.1. Description of Subjective Norm Data.

The respondents' answers to the questions posed for the Subjective Norm variable have an average range between 4.507 to 4.493, with a total average value of 4.5 and a standard deviation of 0.507. This indicates that overall, the respondents tend to perceive a supportive social role in using QRIS.

4.1.2. Description of Perceived Usefulness Data

The respondents' answers to the questions posed for the Perceived Usefulness variable have an average of 4.507, with a total average value of 4.507 and a standard deviation of 0.502. This indicates that overall, the respondents perceive a benefit in using QRIS as a payment tool.

4.1.3. Description of Perceived Ease of Use

The respondents' answers to the questions posed for the Perceived Ease of Use variable have an average range of 4.461, with a total average value of 4.489 and a standard deviation of 0.541. This indicates that overall, the respondents perceive ease in operating and using QRIS.

4.1.4. Description of Perceived Security Data

The respondents' answers to the questions posed for the Perceived Security variable have an average range between 2.27 to 2.37, with a total average value of 2.32 and a standard deviation of 1.01. This indicates that there is a spread of answers from 1 to 5, where, on average, the respondents disagree that security-related issues influence their intention to use QRIS for transactions.

4.1.5. Description of Attitude Toward Using Data

The respondents' answers to the questions posed for the Attitude Toward Using variable have an average range between 4.51 to 4.48, with a total average value of 4.50 and a standard deviation of 0.514. This indicates that overall, the respondents feel comfortable and find it useful to conduct transactions with QRIS.

4.1.6. Description Behavioral Data Description Intention to use

The respondents' answers to the questions posed for the Behavioral Intention to Use variable have an average range between 4.49 to 4.5, with a total average value of 4.49 and a standard deviation of 0.514. This indicates that overall, the respondents perceive ease in operating and using QRIS.

4.2. Validity and Realibility Test

4.2.1. Validty Testing

In the validity testing using the Loading Factor calculation method, According to Santosa [3], a Loading Factor is considered high if a component or indicator correlates more than 0.70 with the construct being measured.

Table 3. Validity Test Results (Loading Factor)

Latent Variables	Indicator	Loading Factor	Validity
Attitude Toward Using	ATU1	0.981	valid
	ATU2	0.981	valid
Behavioral Intention to use	BIU1	0.992	valid
	BIU2	0.992	valid
Perceived Ease of Use	PE1	0.983	valid
	PE2	0.982	valid
Perceived Security	PS1	1.000	valid
Perceived Usefulness	PU1	0.990	valid
	PU2	0.990	valid
Subjective Norm	SN1	0.900	valid
	SN2	0.907	valid

Table 3 represented that the validity testing results for each latent variable indicate that all Loading Factor values exceed 0.70, demonstrating validity.

4.2.2. Realibility Testing

The reliability testing was conducted as presented in Table 4 using Cronbach's alpha and composite reliability tests. A measurement item is considered reliable if it has an alpha coefficient value greater than 0.6 – 0.7 [12].

Table 4. Cronbach's Alpha Test Results

Latent Variables	Cronbach's Alpha	Threshold	Testing Result
Attitude Toward Using	0,961	0,7	Reliable
Behavioral Intention to use	0,984		Reliable
Perceived Security	1		Reliable
Perceived Ease of Use	0,965		Reliable
Perceived Usefulness	0,981		Reliable
Subjective Norm	0,776		Reliable

4.2.3. Composite Realibilty Testing

Composite Reliability Testing, found that all Composite Reliability values are above the threshold value (0.7) as shown in table 5, indicating that the testing of variables using Composite Reliability is proven to be reliable.

Table 5. Reliability Test Result

Latent Variables	Composite Reliability	Threshold	Testing Result
Attitude Toward Using	0,981	0,7	Reliable
Behavioral Intention to use	0,992		Reliable
Perceived Security	1		Reliable
Perceived Ease of Use	0,983		Reliable
Perceived Usefulness	0,99		Reliable
Subjective Norm	0,899		Reliable

4.3. Hyphothesis Testing

Hypothesis testing was conducted using the bootstrapping method in the SmartPLS 3 application, with a p-value setting of <= 0.005 and an error rate threshold of 5% to determine whether a hypothesis can be accepted or not when its value is above that threshold. Meanwhile, to observe the magnitude of the impact or significance between variables, one can look at the path coefficient values. The path coefficient values range from -1 to 1, where values from -0.1 to -1 indicate a negative

relationship between variables, while values from 0.1 to 1 indicate a positive relationship between variables. The closer the value is to 0, the less significant the relationship between the variables [22].

Table 6. Path Coefficient Test Result

Direct Path	Path Coefficient	P-Values	Testing Result
Subjective Norm -> Perceived Usefulness	0.217	0.000	significant
Subjective Norm -> Perceived Ease of Use	0.646	0.000	significant
Subjective Norm_ -> Behavioral Intention to use	0.003	0.884	Not significant
Perceived Usefulness -> Behavioral Intention to use	0.115	0.537	Not significant
Perceived Usefulness -> Attitude Toward Using	0.598	0.000	significant
Perceived Security -> Behavioral Intention to use	-0.025	0.112	Not significant
Perceived Ease of Use -> Perceived Usefulness	0.751	0.000	significant
Perceived Ease of Use -> Attitude Toward Using	0.394	0.000	significant

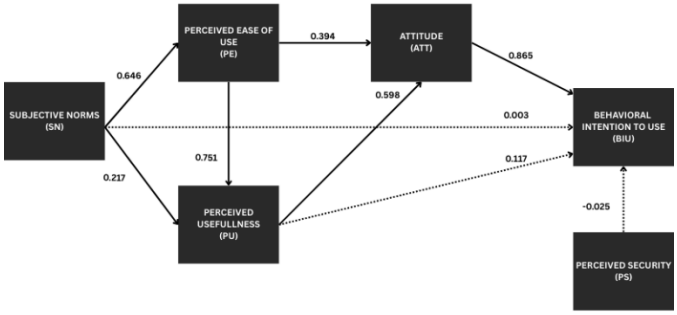

Figure 5. Research Path Diagram

Based on the values of the path coefficient test and p-value presented in Table 6, the results of the hypothesis testing are as follows:

- h1: The Subjective Norm factor is declared to have an influence on Perceived Ease of Use (accepted).
- h2: The Subjective Norm factor is declared to have an influence on Perceived Usefulness (accepted).
- h3: The Subjective Norm factor is declared to have no influence on Behavioral Intention to Use (rejected).
- h4: The Perceived Usefulness factor is declared to have an influence on Attitude Toward Using (accepted).
- h5: The Perceived Usefulness factor is declared to have no influence on Behavioral Intention to Use (rejected).
- h6: The Perceived Ease of Use factor is declared to have an influence on Perceived Usefulness (accepted).
- h7: The Perceived Ease of Use factor is declared to have an influence on Attitude Toward Using (accepted).
- h8: The Attitude Toward Using factor is declared to have an influence on Behavioral Intention to Use (accepted).
- h9: The Perceived Security factor is declared to have no influence on Behavioral Intention to Use (rejected).

4.4. Discussion

From the data analysis using the SMART PLS 3 application, out of the 9 proposed hypotheses regarding the Factors Affecting the Intention to Use QRIS in Central Kalimantan, 7 were accepted and 3 were rejected. The Subjective Norm factor significantly impacts Perceived Ease of Use and Perceived Usefulness, suggesting that social expectations influence how users view the technology, but not enough to directly motivate them to use it. This aligns with previous research but contradicts the finding that Subjective Norm directly influences Behavioral Intention to Use, this is in line with the research results by [23] which states that external influences, especially those from trusted authority figures, contribute to the formation of individual intentions and technology adoption

behavior, Research conducted in West Kalimantan Province also illustrates that social factors (subjective norms) play a role in the intention to use electronic payments. [24].

Perceived Usefulness strongly impacts Attitude Toward Using but does not directly affect the intention to use the technology, differing from past studies [10], but however, this finding aligns with other studies conducted by Vatresia, which suggest that the low perceived usefulness leads to an insignificant effect of perceived usefulness on the attitude to use the System [25]. Increasing public awareness and involving community figures can help promote QRIS use. Perceived Ease of Use significantly influences both Perceived Usefulness and Attitude Toward Using, highlighting that ease of use is crucial in forming a positive attitude and feeling of usefulness. Efforts to increase QRIS adoption should include making it available at all merchants and promoting it through government and business support as the social force, The results of this study are consistent with research conducted by TAM conducted by Andriani [26], which indicates that ease of use has a positive influence on perceived usefulness. A system that is easier to use enhances users' perception of the benefits obtained from technology.

Attitude Toward Using strongly predicts Behavioral Intention to Use, suggesting that a positive attitude leads to a higher likelihood of using the technology, it's in line with research by Rosdwiantya that the higher technology accepts positive attitude, the greater the intention to use the technology [27]. Promoting a positive attitude through education, socialization, and promotions at merchants can increase QRIS use. Lastly, Perceived Security does not significantly influence the intention to use, contrasting with previous research that found it to be important.

5. CONCLUSION

This study examines three main variables from the TAM model: Perceived Ease of Use, Attitude Toward Using, and Perceived Usefulness, along with two additional factors: Subjective Norm and Perceived Security. The main factor influencing the intention to use technology is Attitude Toward Using. While Subjective Norm and Perceived Usefulness don't directly affect the intention, they do influence Attitude Toward Using. Community leaders and influencers can shape this attitude, and promotions at merchants can boost Perceived Usefulness, leading to a more positive attitude toward using QRIS. Ultimately, a positive attitude is crucial for users deciding to adopt new technology.

Based on the results of the analysis, discussion, and conclusions that have been outlined, the researcher has several implications and suggestions that can be taken into consideration for the dissemination and application of QRIS for both companies and government, as well as for future research needs, including:

1. This study illustrates that the Subjective Norm variable influences other variables that have a direct impact on the intention to use QRIS / Behavioral Intention to Use. Therefore, to increase the use of QRIS, the role of community figures or influencers needs to be considered in the socialization of QRIS, and things related to improving attitudes in the use of QRIS by increasing the aspect of perceived usefulness, such as promotions at merchants when making payments with QRIS or announcements on how to use QRIS.
2. this study has certain limitations that should be acknowledged which present opportunities for future research, and therefore further research is needed to analyze more deeply the factors that have not been used in this study to measure the internal motivations of the community.

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