

STUDY OF GEN Z ACCEPTANCE ANALYSIS IN USING DIGITAL QUICK RESPONSE INDONESIA STANDARD (QRIS) AS A DIGITAL TRANSACTION TOOL

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Abstract: This study aims to clarify the relationship between perceived usefulness and perceived ease of use on behavioral intention, with the attitude towards using the QRIS application serving as a mediator. This study focuses on examining the adoption of QRIS as a digital transaction tool among Gen Z. This study utilizes a quantitative approach, involving a sample of 150 Gen Z participants from Central Java Province, chosen through purposive sampling and assessed via a questionnaire instrument. The findings suggest that the perceived usefulness and ease of use significantly impact Gen Z's intention to engage with the QRIS application. Further data suggest that the perceived ease of use does not have a significant impact on attitudes regarding the utilization of variables. This study investigates the application of QRIS technology as a digital payment system through the framework of the Technology Acceptance Model (TAM), focusing on individuals from Generation Z aged 18-25 in Central Java. The findings of the study reveal a favorable impact of perceived utility, perceived ease of use, and attitude towards usage on the behavioral intention regarding the QRIS application. The findings reveal a preference among Generation Z for utilizing digital payment transactions through the QRIS application.

Keywords: *Gen Z, Qris, TAM, Digital Transactions, Central Java*

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1. Introduction

The advancement of digital technology in Indonesia is expanding, particularly the pervasive utilization of the Internet in group dynamics, indicative of technological improvement. Indonesia exhibits the highest internet usage, with figures from the Indonesian Internet Service Providers Association (APJII) in 2020 indicating that internet users totaled 197 million, representing 73.7%. (Seputri et al., 2023). The advent of technology and information associated with cashless payments has led to the establishment of a digital economy, significantly influencing the financial sector, notably through the introduction of electronic money products (e-money) as a payment method in commercial transactions. The rise of online sales, such as e-marketplaces, has encouraged various changes in trends in how people shop, one of which is using electronic money. Based on data from databooks. metadata.co.id, in 2020, when COVID-19 hit the world and Indonesia, there was an increase in the use of electronic money (e-money)

by 41.6% and in 2021, total transactions using e-money reached 305 trillion rupiahs (Kusnandar, 2022).

QR Code (Quick Response Code) is a payment method for buying and selling transactions using e-wallet or mobile banking and developing payment methods and digital wallet services in Indonesia, including OVO, Go-Pay, Dana, Doku, LinkAja, ShopeePay, and others. Digital payment methods have more practical benefits and are safer in terms of payments.

The government supports launching the National Payment Gateway (GPN) regulation carried out by Bank Indonesia by creating a National Code standard known as the QRIS to make electronic money transactions easier (Saputri, 2020). Given these numerous conveniences, the business sector in Indonesia, particularly MSMEs, is compelled to adapt to contemporary digital business models, including implementing QRIS for transactional services. QRIS offers a more efficient non-cash payment option, allowing merchants to utilize a single standard QR Code instead of several QR Codes from various publishers.

The Technology Acceptance Model is a behavioral paradigm that analyzes users' intents to adopt information technology, grounded in their perceptions of its advantages and ease of use (Setiawan & Mahyuni, 2020). According to the research conducted by Santoso & Zusrony (2020), the Technology Acceptance Model has five structures or dimensions: 1. Perceived Ease of Use, defined as the perception of simplicity in use, serves as an indicator of technology for persons who recognize and comprehend computer operation. 2. Perceived Usefulness refers to an individual's assessment of a specific system's reliability and potential to enhance job and personal performance. 3. Attitude Toward Using refers to acceptance or rejection stemming from persons' utilization of technology in their professional activities; 4. Behavioral Intention of Use denotes an individual's propensity or willingness to engage in actions, which may fluctuate over time and relate to various behaviors. 5. Actual System Use constitutes an external psychomotor reaction quantified in individuals engaging in actual usage.

According to data from Bank Indonesia, representatives from the DKI Jakarta province indicate a 1.15 rise in QRIS users in 2023, with the total number of users in Jakarta reaching 5.6 million. The findings indicate that the primary users of QRIS as a payment method are individuals from Generation Z and Generation Y, primarily utilizing it for transactions related to transportation, prepared food and beverages, as well as telecommunications and information services. Data from the Indonesian Payment System Association, indicates that as of December 2022, QRIS was employed by about 28.76 million users, representing a 4.6% increase from November 2022 and a 92.5% growth relative to the start of the previous year (Ahdiat, 2023).

Researchers want to examine the degree of Generation Z's adoption of digital QRIS as a transaction tool using the Technology Adoption Model framework. TAM, proposed by Davis in 1989, clarifies the extent to which consumers adopt information technology systems. It is a crucial framework frequently utilized to elucidate the individual acceptability of such systems (Putra et al., 2021). Utilizing the data above, the researcher endeavored to formulate a hypothesis regarding the interrelationship among factors, including:

Research by Safira & Baridwan (2018), the variable behavioral intention to employ mobile banking is significantly influenced by the variable perceived utility. Research findings by Mayjksen & Pibriana (2020) indicate that the perceived usefulness variable significantly influences the behavioral intention variable. Based on previous research references, the initial hypothesis might be stated as follows:

H1: Perceived utility exerts a considerable beneficial influence on behavioral intention.

Prior research by Tasmil & Herman (2015) indicated that perceived utility significantly positively influenced users' attitudes about the TIX-ID application. Hermanto & Patmawati

(2017) conducted a study on the Accounting Software approach utilizing the TAM model, demonstrating that perceived utility positively influences attitudes towards usage. This finding aligns with the research conducted Suyanto & Kurniawan (2019) which demonstrates that perceived usefulness significantly positively influences the attitudes of FinTech users in MSMEs. According to prior research sources, the second hypothesis can be articulated as follows:

H2: Perceived usefulness exerts a substantial beneficial influence on the attitude towards usage.

Previous research demonstrates that the perceived ease of use variable positively affects the behavioral intention variable (Nursiah, 2017). Setyawati research (2020) demonstrates that perceived ease of use considerably and favorably affects students' behavioral intention to use GOPAY in Yogyakarta. Based on previous research references, the third hypothesis might be expressed as follows:

H3: The perceived simplicity of usage significantly positively influences behavioral intention.

Furthermore, the study conducted by Kristanto & Firdausy (2021) indicates that the perceived ease of use variable has a considerable beneficial impact on the attitude toward use variable. Further research demonstrates that the perceived ease of use variable positively influences the attitude toward usage variable. Based on previous research references, the fourth hypothesis might be expressed as follows:

H4: The perceived simplicity of usage significantly enhances the attitude towards utilization.

Research by Sinaga et al. (2021) demonstrates that the perceived ease of use dramatically influences users' behavioral intention to utilize the JAKET application. Research by Kristanto & Firdausy (2021) indicated that attitudes toward the use of variables positively and significantly influence repurchase intentions among TIX-ID application users. Based on previous research references, the fifth hypothesis might be stated as follows:

H5: The attitude towards usage significantly positively influences behavioral intention.

2. Research Method

This study employs quantitative methods through a QRIS survey as a digital transaction instrument. Research data employs primary data. Primary data is a source that directly provides information to data collectors (Sugiyono, 2018). Primary data was acquired directly from participants regarding perceived utility, perceived simplicity of use, behavioral intention, and attitude toward use. The study population comprises all Generation Z individuals aged 18 to 25 residing in Central Java province. The sampling strategy employs non-probability sampling via a purposive sampling method. Purposive sampling is a strategy that selects samples based on specific criteria relevant to the study (Sugiyono, 2018). Purposive sampling has the advantage of being able to produce richer and more informative data, as researchers can select individuals who best fit the research criteria and also allows researchers to save time and resources, as they focus on the most relevant respondents (Farah, 2017). The recommended sample size for research often ranges from 30 to 500 (Sugiyono, 2018). The researcher established a sample size of 150 respondents based on the fundamental feasibility of the sample. This study used a questionnaire instrument to gather data comprising both open and closed questions. The evaluation employs Likert Scale metrics that quantify all characteristics with values ranging from 1 to 5. This research uses SEM-PLS for data analysis, leveraging SmartPLS version 4 software for processing.

3. Results and Discussion

3.1. Results

1. Participant Profile

Table 1. Participant Information

Information	Frequency	Percentage
Gender		
Male	45	30%
Female	105	70%
Age		
18 - 20 Years	114	76%
21 - 23 Years	30	20%
24 - 25 Years	6	4%
Last education		
Senior high school	120	80%
Vocational school	30	20%
Duration of Use		
< 1 year	40	25,3%
> 2 year	112	74,7%

The total number of participants from Generation Z is 150 individuals. Female respondents included 105 individuals, accounting for 70%, while male respondents totalled 45, representing 30%. Additionally, among respondents aged 18-20, there were 114 individuals, constituting almost 76%. Respondents aged 21-23 included 30 individuals, representing 20%, while those aged 24-25 totaled 6 individuals, or 4%. The respondents' most significant level of education is high school graduates (80% or 120) and vocational school graduates (20% or 30). The duration of use of QRIS by respondents was mostly more than 2 years (74.7% or 112) and use was less than 1 year (25.3% or 38).

2. Outer Loading Factor Results

If the outer loading factor value surpasses 0.5 for each indication, it is considered robust (Hair et al., 2021). Ghazali (2014) asserts that the loading value is deemed sufficient when it ranges from 0.5 to 0.6. Figure 2 shows the external loading values for the research variable. Figure 3 illustrates that all research indicators employed in this work possess outside loading values exceeding 0.5, indicating a robust level of validation. The algorithmic path diagram below shows this study's conceptual foundation:

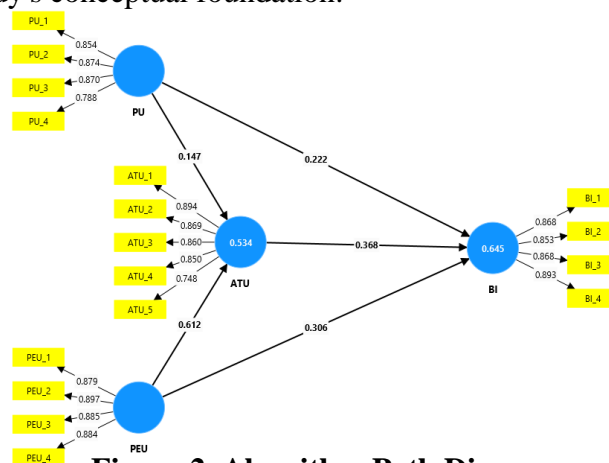


Figure 2. Algorithm Path Diagram

3. Assessment of Validity and Reliability

Convergent validity determines composite reliability and AVE in the preliminary assessment. In Table 2, the average AVE value exceeds 0.7, over the minimum threshold of 0.5, meeting the requirements (Hair et al., 2013). This study's discriminant validity assessment showed values between 0.876 and 0.936, confirming the recommendations (Hair et al., 2013).

Table 2. Constructs of Reliability and Validity

Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Attitude towards using	0.900	0.907	0.926
Behavior intention	0.894	0.897	0.926
Perceived ease of use	0.909	0.910	0.936
Perceived usefulness	0.870	0.876	0.910
Attitude towards using	0.900	0.907	0.926

4. R-Squared Test

The R-square assessment parameter has three levels: Robust models are 0.75, moderate models are 0.50, and weak models are 0.25 (Ghozali & Latan, 2015). Table 3 shows that R-Square is a moderate model with values from 0.534 to 0.645. The R-Square score for behavioral intention (KP) is 0.645, indicating how much-perceived utility (X1) and ease of use (X2) affect behavioral intention (Y). Perceived usefulness (X1) and perceived ease of use (X2) explain 54.5% of behavioral intention variance, whereas external factors account for the rest. The attitude towards utilizing variable explains 53.4% of the variance in the behavioral intention variable, while other influences account for 30%. Table 3 shows the R-square test.

Table 3. Results of the R-Squared Test

Variable	R-square	R-square adjusted	Category
Attitude Towards Using	0.534	0.528	Moderate
Behavior Intention	0.645	0.638	Moderate

3.2. Discussion

Hypothesis testing employs the bootstrapping function, which will be executed using SmartPLS version 4 software. Bootstrapping is a technique employed to assess the significance of a model (Qurniawati et al., 2023). The T-Statistics value indicates the significance of the coefficient path (Sarstedt et al., 2021).

Tabel 4. Results of Hypothesis Testing

Construct	Original Sample (O)	Sample Mean	Standart Deviation	T-Statistics	P Values	Result
ATU → BI	0.368	0.366	0.080	4.607	0.000	accepted
PEU → ATU	0.612	0.610	0.091	6.724	0.000	accepted
PEU → BI	0.306	0.302	0.097	3.144	0.002	accepted
PU → ATU	0.147	0.148	0.093	1.579	0.114	rejected
PU → BI	0.222	0.228	0.081	2.733	0.006	accepted

Table 4 presents the research results utilizing path coefficient analysis. Five hypotheses were tested, and all hypotheses were accepted except for the fourth.

The perceived usefulness variable significantly influences behavioral intention, evidenced by a path coefficient of 0.222, a P-value of 0.006 (below the 0.05 threshold), and a T-statistics value of 2.733. This indicates that H1 has been accepted. Behavioral intention refers to an individual's tendency to perform a specific action and serves as a valid predictor of actual behavior (Suyanto & Kurniawan, 2019). The outcomes of this study align with the studies conducted by Safira and Baridwan (2018) and Mayjeksén & Pibriana (2020).

The perceived ease of use has a significant effect on behavioral intention, evidenced by a path coefficient of 0.306, a P-value of 0.002 (below the 0.05 threshold), and a T-statistic of 3.144. This indicates the acceptance of H3. Individuals view information technology systems as user-friendly, which enhances their utilization, and conversely. Generation Z's opinion of the QRIS digital payment platform did not increase along with the perception of ease of use, which reflects that ease of use is not always directly proportional to increased interest, which is relevant to the statement made by Soleha & Hidayah (2022). The findings of this study align with Nursiah (2017) research, indicating that perceived ease of use positively influences behavioral intention.

A path coefficient of 0.147, a P-value of 0.114 (which above 0.05), and a T-statistics value of 1.579 show that perceived ease of use does not substantially affect attitude toward using the variable. The H4 application was refused. Through stakeholder interactions, Generation Z's opinion toward the QRIS digital payment platform does not increase with perceived ease of use. This study matches research by Suyanto & Kurniawan (2019), indicating that the variable perceived ease of use does not influence attitudes towards usage.

A path coefficient of 0.368, a P-value of 0.000 (below 0.05), and a T-statistic of 4.607 show that usage attitude affects behavioral intention. H5 appears to be recognized. This implies Generation Z prefers QRIS to streamline shopping. The implementation of the QRIS application can increase behavioral intentions, this is proven by the research of Sihombing et al., (2024), which found that behavioral intentions are influenced by ease of use and perceived benefits of QRIS, which is in line with the statement that the implementation of QRIS can increase behavioral intentions. Past study has demonstrated that attitudes regarding using variables positively affect behavioral intentions (Farokhah & Afiyah, 2016); Hermanto & Patmawati (2017).

Hypothesis testing showed that perceived usefulness and convenience of use greatly affected QRIS application behavior. Further data imply that perceived ease of use does not significantly affect variable use attitudes. QRIS technology is implemented for digital payment transactions using the Technology Adoption Model (TAM) paradigm in this research. The greatest path coefficient of 0.612 suggests that perceived ease of use is a key factor in QRIS program attitudes. Perceived ease of use is the main T-statistic at 6.724. Results show that Gen Z QRIS users in Central Java province's behavioral intentions are highly affected by perceived utility and convenience of use, determined by attitudes toward usage.

4. Conclusion

In the hypothesis testing, perceived utility and perceived simplicity of use strongly influenced behavioural intention toward the QRIS application. Additional data show that perceived ease of use does not significantly affect variable application attitudes. QRIS technology for digital payment transactions is highlighted in this study using the Technology Adoption Model (TAM) methodology. The association has the highest path coefficient of 0.612, showing that perceived ease of use is critical to QRIS program attitudes. The key T-statistic is 6.724 for perceived ease of use. In Central Java province, Gen Z QRIS app users' behavioural intentions are highly

influenced by perceived usefulness and convenience, moulded by attitudes toward usage. Future research suggestions are to explore other factors that may influence attitudes toward QRIS use to understand how integration with other technologies can improve perceived usefulness. Future research can also conduct longitudinal studies to monitor changes in perceptions and attitudes toward QRIS over time and evaluate the success of implementing this technology in the long term.

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