

Analysis of the use of QRIS as financial technology among millennials: a case study at Warkop Kita 2 and Warkop Agam

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Article Info

Article history:

Received : Oct 26, 2025

Revised : Nov 11, 2025

Accepted : Nov 21, 2025

Keywords:

Financial Technology (Fintech);
Millennial Generation;
Quick Response Code
Indonesia Standard (QRIS);

ABSTRACT

This study specifically analyzes the adoption of QRIS as financial technology among millennials at Warkop Kita 2 and Warkop Agam Multatuli Branch in Medan City, involving a total of ten informants consisting of two business actors (merchants) and eight millennial users who actively use QRIS in daily transactions. Using a descriptive qualitative approach through interviews, observations, and documentation, the data were analyzed using the Miles and Huberman interactive model, which includes data reduction, data display, and conclusion drawing/verification. The study findings reveal that the adoption rate of QRIS among millennials is relatively high, driven by practicality, transaction speed, ease of use, and perceived security, which aligns with the digital lifestyle of millennials and supports the development of a cashless culture in urban areas. However, challenges such as limited digital literacy among some users, unstable internet connectivity, and insufficient educational socialization efforts for both consumers and merchants hinder optimal utilization. This research contributes empirical evidence from real transaction settings in small business environments, highlights behavioral and contextual factors influencing fintech adoption, and provides policy recommendations related to improving digital literacy, merchant training, and infrastructure strengthening to support a more inclusive digital economic transformation in Indonesia.

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1. INTRODUCTION

In today's era of globalization, the swift development of information and communication technology worldwide has significantly impacted many areas of human life. The ease of communication provided by technological innovation has driven major transformations across multiple sectors. Education and training are among the fields that have experienced significant changes. Likewise, the business sector has been greatly affected, as evidenced by the substantial growth of e-business. (Hariyani et al. n.d.)

Advancements in technology have become an essential aspect of everyday modern life, particularly in payment systems. These systems play a vital role in facilitating the function of money

as a medium of exchange in economic transactions involving both individuals and institutions. As civilization and information technology continue to evolve, payment systems have undergone continuous transformation. Digital payments refer to transactions conducted electronically via the internet. Initially, digital payment emerged as a concept of carrying out transactions using credit cards. (Pradita Putri, Muhammad Iqbal Fasa, and Suharto 2022)

One of Bank Indonesia's key objectives is to accelerate and expand the implementation of non-cash or electronic transaction programs within regional governments, while also promoting digital transformation in the financial sector. The adoption of cashless payment systems offers significant advantages by enhancing financial efficiency and productivity across the national economy, thereby stimulating real-sector activities and contributing to overall economic growth. (Anggreani, Wolor, and Marsafiyati 2023)

Digital technology has emerged as a groundbreaking innovation that drives change in various economic activities. Its influence extends across numerous sectors, including business, agriculture, and particularly finance. One of the most significant technological innovations in the financial sector is financial technology, or commonly referred to as fintech. Fintech refers to financial innovations that combine modern technology to improve financial services. According to Clayton, this innovation aims to provide users with greater convenience, practicality, comfort, and cost-effectiveness (Nanda 2025). A major milestone in Indonesia's journey toward integrating digital payment systems was the introduction of QRIS in August 2019. Beyond solving the issue of system fragmentation, QRIS brings various advantages to Millennials and Gen Z groups that dominate the use of digital payment platforms and has significantly shaped their lifestyle and economic activities. (Sihaloho, Ramadani, and Rahmayanti 2020)

Millennials, or Generation Y, are a rapidly developing group recognized for their strong engagement with information technology. As stated by Horovitz, this generation consists of individuals born between 1980 and 2000. They are known for their diversity, technological literacy, and proficiency in online communication, which allows them to remain socially connected in the digital era. The adoption of QRIS within the millennial generation has had a notable influence on their transaction behavior. By allowing payments to be made merely through scanning a QR code via a linked payment app, QRIS removes the necessity of carrying physical cash or cards. This system matches the millennial preference for convenience and efficiency. Moreover, QRIS facilitates quicker transactions, minimizes potential payment errors, and ultimately improves the overall user experience. (Tutiasri et al. 2021)

QRIS plays an important role in fostering a more inclusive and accessible financial ecosystem. It serves as a convenient payment option, especially for Millennials and Gen Z consumers. With automatic transaction recording, merchants are able to track and manage their sales in real time.

Consequently, users benefit from a clearer and more detailed view of their payment history. The use of QRIS continues to expand across sectors, being adopted not only by large enterprises but also by MSMEs, street vendors, and mobile traders. This is largely because one QR code can accept payments from a variety of digital payment platforms, simplifying the process for both businesses and consumers. (Siagian 2025)

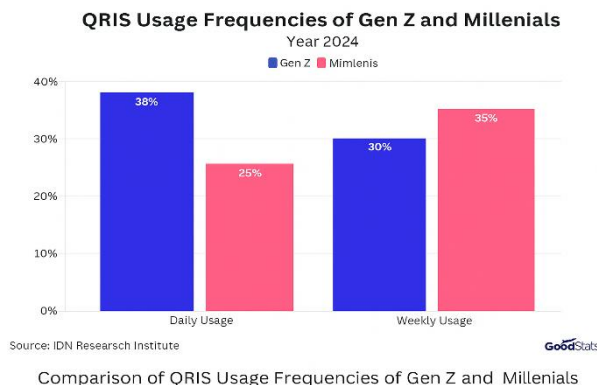


Figure 1. QRIS Usage Among Millennials
Source: IDN Research Institute

Findings from the IDN Research Institute validate that both Generation Z and Millennials widely adopt QRIS as a preferred payment method in their daily lives. Around 38% of Gen Z use QRIS every day, while 25% use it weekly. Among Millennials, 35% report weekly usage.

This data suggests that QRIS has become deeply embedded in the consumption and financial habits of younger generations. The frequent use underscores their dependency on digital payment systems that are both fast and efficient. It also reflects their confidence and comfort in using QRIS as a modern financial tool. From a broader digital economy viewpoint, the high level of QRIS adoption among Millennials represents a strong opportunity to enhance financial inclusion and accelerate the digitalization of financial transactions.

Nevertheless, despite its rapid progress, QRIS implementation still faces several challenges in urban regions. One of the main issues is the lack of sufficient education and awareness among merchants and consumers. Many MSME owners particularly those in densely populated areas do not yet fully understand the benefits, operational mechanisms, and security aspects of QRIS. Therefore, continuous education campaigns and comprehensive training programs remain essential to maximize the effectiveness of QRIS adoption in major cities. (Hutabarat et al. 2024)

Furthermore, despite the generally advanced technological infrastructure in urban environments, challenges such as network congestion during busy hours and varying connection quality across city areas may still hinder QRIS performance. These technical limitations can disrupt transaction smoothness and call for greater efforts from service providers to maintain consistent system reliability and accessibility in all urban regions. At the same time, the implementation of QRIS in cities holds substantial promise, particularly among millennials. Known for their tech-savvy nature and openness to digital innovation, this generation readily embraces new financial technologies. (Hoefnagels and Migchels 2013).

2. METHOD

This research employed a descriptive qualitative approach to gain an in-depth understanding of the social phenomenon concerning millennial behavior in utilizing Financial Technology (Fintech) through the Quick Response Code Indonesian Standard (QRIS). This research design was considered appropriate because it enables the researcher to explore and interpret participants' real experiences, perspectives, and meanings holistically, especially related to the use of QRIS as a digital payment method that is perceived to be practical, efficient, and secure in today's rapidly evolving digital environment (Sugiyono, 2019). This approach is also relevant as it focuses on naturally occurring situations and subjective viewpoints that cannot be captured through numerical measurements.

The research involved ten informants consisting of two merchants and eight millennial consumers who actively used QRIS in their daily transactions. A purposive sampling technique was applied to determine the informants based on specific considerations, such as being within the age range of 18 to 40 years, having used QRIS for at least three months, conducting QRIS-based transactions a minimum of twice a week, and voluntarily agreeing to participate. For business owners, additional requirements included accepting QRIS as one of their official payment methods and frequently interacting with customers who make QRIS-based transactions, ensuring the relevance and richness of the data gathered.

The process of selecting the informants began with preliminary observations at the research sites to identify potential participants, followed by screening based on predetermined criteria, personal communication, explanation of research goals and procedures, and the collection of informed consent. The study was conducted at Warkop Kita 2 and Warkop Agam, Multatuli Branch, in Medan City, which were chosen because they are popular social spaces among millennials and are known to have high levels of digital transaction activity. These locations were therefore considered suitable for representing QRIS usage within an urban and digitally adaptive environment. To strengthen the analysis, demographic information was also recorded, including age, gender, educational or occupational background, duration of QRIS usage, and transaction frequency, allowing the researcher to better interpret variations in participants' experiences.

Data were collected over a period of approximately four to six weeks using in-depth semi-structured interviews, non-participant observation, and document analysis. Each interview lasted between 20 and 45 minutes and aimed to obtain comprehensive information regarding participants'

motives, perceived convenience, security perceptions, benefits, and challenges related to QRIS use. Observations were conducted to examine how QRIS transactions were carried out in real practice, while documentation such as photographs, screenshots, digital transaction records, and relevant literature served as supporting evidence. The data collection process was carried out continually, enabling the researcher to ensure consistency, accuracy, and clarity of the information obtained.

To ensure data credibility, source triangulation and technique triangulation were implemented by comparing interview results with observations and documentation, and through member checking to confirm the accuracy of interpretations with the informants.

The data were analyzed using the interactive model of Miles and Huberman (1994), which consists of four stages: data collection, data reduction, data display, and conclusion drawing (Moleong 2019). Research ethics were strictly observed by obtaining informed consent prior to data collection, safeguarding the confidentiality and anonymity of all participants, allowing them to withdraw at any stage without obligation, and ensuring that all obtained data were used exclusively for academic purposes. Through this methodological approach, the study is expected to produce a clear, detailed, and factual description of millennial QRIS usage patterns, including the supporting and inhibiting factors as well as the implications for daily financial practices, and to contribute valuable insights for future digital financial service development.

3. RESULTS AND DISCUSSION

3.1 Implementation of Financial Technology (Fintech) Based on QRIS Among Millennials

The implementation of Financial Technology (Fintech) through QRIS among millennials can be described based on several main aspects identified in this research, as presented below:

Table 1. Implementation of QRIS Usage by the Millennial Generation

Implementation Aspect	Meaning	Field Application
Convenience and Transaction Speed	QRIS simplifies digital payments through a single QR code scan.	Millennials prefer QRIS because it is faster, more practical, and aligns with their instant digital lifestyle.
Security and Transparency	Every transaction is automatically recorded, minimizing errors and financial losses.	Users feel more secure due to digital transaction records and reliable data protection systems.
Efficiency and Accessibility	A single QRIS code can be used across multiple digital payment platforms.	Small business owners can receive payments from various e-wallets without additional equipment.
Digital Literacy and Trust	QRIS cultivates a new habit of cashless transactions in a digital society.	Millennials are becoming increasingly aware of the importance of safe and efficient financial technology.

The study found that millennials perceive QRIS as highly convenient in their daily transactions. Payments can be made instantly by scanning a QR code without carrying cash or cards, which fits their need for efficiency and simplicity.

“Using QRIS is much faster and simpler—just scan, and the payment goes through immediately.” (Informant 1, 2024)

This finding supports Hasibuan (2022), who revealed that non-cash payment systems such as QRIS are more time-efficient than cash-based transactions. It also aligns with Hutabarat et al. (2024), who observed that QRIS has become an integral part of the digital routines of young consumers, shaping their economic habits toward a more cashless lifestyle.

Security and accountability are major factors that foster users' trust in QRIS. All transactions are digitally recorded within authorized applications, enabling users to verify payment histories anytime and reducing the likelihood of human error or fraud.

“It feels safer using QRIS because all the transactions are automatically saved in the app I can check them anytime.” (Informant 3, 2024)

This observation corresponds with Anggreani, Wolor, and Marsosiyati (2023), who highlighted that QRIS promotes transparency and trust in digital transactions. Moreover, it reflects the Islamic ethical principles of *amanah* (trustworthiness) and *ʿidq* (honesty), as discussed by Firmansyah and Rusydi (2024), where financial dealings must be transparent, fair, and free from manipulation.

From an efficiency standpoint, QRIS enables business owners to process payments from multiple e-wallets such as OVO, GoPay, DANA, and ShopeePay through a single standardized code. This feature shortens transaction time and minimizes operational costs.

“QRIS is great; one code works for all apps, so we don’t need multiple payment devices at the cashier.” (Business Owner, 2024)

This aligns with (Putri 2020), who emphasized that the implementation of QRIS under PADG No. 21/18/PADG/2019 was designed to unify digital payment systems under a national standard, thereby enhancing transaction efficiency and financial inclusion. Field observations at *Warkop Kita 2* and *Warkop Agam Multatuli* further revealed that QRIS improves service speed during peak hours and increases business professionalism.

Repeated use of QRIS helps millennials develop better digital financial literacy. They gradually learn how to manage transactions safely and understand the importance of protecting personal data. However, a small segment of users still faces difficulties, such as limited understanding of security features or handling failed transactions due to poor network connectivity.

This supports (Hutabarat et al. 2024), who found that limited education and socialization about QRIS among small business owners and consumers remain significant obstacles. Therefore, consistent digital literacy campaigns are crucial to ensuring more equitable and effective utilization of QRIS across all social groups.

3.2 Sharia-Based and Ethical Implementation Strategies

QRIS implementation among merchants is not only aimed at facilitating transactions but also at embedding ethical business values such as honesty, transparency, and fairness. Prices displayed in applications match those at the physical store, with no hidden or inflated costs. Promotions are conducted through social media with an educational focus, emphasizing the benefits of secure and efficient non-cash transactions rather than excessive marketing.

This practice aligns with (Firmansyah and Rusydi 2024), who asserted that Sharia-compliant fintech must avoid elements of *gharar* (uncertainty) and uphold *adl* (justice) and *sidq* (truthfulness) in all economic activities.

3.1 Supporting and Inhibiting Factors of QRIS Implementation

The following table presents various supporting and inhibiting factors in the implementation of QRIS among the millennial generation based on the research findings and field observations, as outlined below:

Table 2. Supporting and Inhibiting Factors of QRIS Implementation

Category	Factors	Description/Source
Supporting Factors	High digital adaptability among millennials	Millennials are quick to adopt new financial technologies (Hutabarat et al., 2024).
	Government and Bank Indonesia support	Policy and regulation encourage cashless transactions (Indonesia, 2020).
	Public trust in digital payment security	Increasing confidence in Fintech systems (Anggreani et al., 2023).
	Enhanced operational efficiency	Automated transaction records reduce manual errors (Hasibuan, 2022).
Inhibiting Factors	Unstable internet connectivity	Causes delays and transaction failures.
	Limited digital literacy	Some users and MSMEs lack understanding of QRIS use (Hutabarat et al., 2024).
	Lack of socialization and education	Lower-income groups have limited exposure to QRIS benefits.
	Minimal promotional incentives	Few marketing efforts or cashback programs for new users.

One of the main supporting elements is the high level of digital adaptability among millennials. This generation demonstrates strong technological literacy, making them quick to adopt financial innovations such as QRIS. This finding aligns with *Hutabarat et al. (2024)*, who emphasized that young people are generally more open to technology-based changes.

Moreover, strong government and Bank Indonesia support has served as a significant driver in promoting non-cash transactions. Through regulations and national programs, Bank Indonesia actively encourages the expansion of QRIS adoption across various economic sectors.

Another supporting factor is the growing public trust in digital payment security. Users increasingly feel confident that QRIS offers safety and transparency due to its automated transaction records and secure data systems (*Anggreani et al., 2023*).

In addition, enhanced operational efficiency contributes to the positive reception of QRIS. Automated recording minimizes manual bookkeeping for merchants, saving time and reducing errors (Hasibuan 2022). The ability of a single QRIS code to connect multiple digital wallets also simplifies payment processes and improves business performance.

Despite these advantages, several obstacles hinder the optimal implementation of QRIS. One of the most common issues is unstable internet connectivity, which often results in delayed or failed transactions especially in areas with limited network infrastructure.

Another challenge is limited digital literacy among certain users and small business owners. Some individuals remain unfamiliar with QRIS procedures or skeptical about its safety (Hutabarat et al., 2024).

The study also highlights the lack of socialization and educational outreach to lower-income communities, preventing broader awareness and understanding of the benefits of digital transactions.

Lastly, minimal promotional incentives, such as cashback or fee discounts for new users, have slowed down the adoption process. The absence of attractive marketing programs makes it harder to attract first-time users, particularly those who are still accustomed to cash-based transactions.

Overall, the success of QRIS implementation largely depends on digital infrastructure, user literacy, and policy support. Addressing these inhibiting factors can further enhance public adoption and help establish QRIS as an inclusive and sustainable digital payment system in Indonesia.

4. CONCLUSION

The findings of this study reveal that millennials in Medan have widely embraced QRIS as a digital payment solution that is perceived to be practical, fast, efficient, and secure, making it highly compatible with their technology-oriented lifestyle while also enhancing transaction effectiveness and financial management for both users and business owners through transparent automated recording systems. The successful adoption of QRIS is supported by strong digital readiness and user trust in its security features; however, several challenges still hinder its optimal utilization, including unstable internet connectivity, uneven levels of digital literacy, and the relatively low adoption rate among MSMEs, which collectively limit the system's full potential.

ACKNOWLEDGEMENTS

With sincere gratitude, the author would like to express the highest appreciation to Allah SWT for His blessings and guidance, which have enabled the completion of this scientific work. The author also wishes to extend heartfelt thanks to the academic supervisor for the valuable guidance, advice, and support provided throughout the preparation of this research. Special thanks are also conveyed to the Faculty of Economics, Universitas Potensi Utama, for the facilities and assistance that made this study possible, as well as to all research informants who willingly shared their time, data, and insights. The author's deepest gratitude is dedicated to beloved parents and family for their endless prayers, encouragement, and unwavering support. Finally, sincere appreciation is also extended to friends and everyone who contributed both morally and materially to the successful completion of this work.

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