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The Impact of the Quick Response Code Indonesian Standard (QRIS) on Generation Z Behavior

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Abstract

The Quick Response Code Indonesian Standard (QRIS) has become the dominant digital payment method among Generation Z. While the ease and speed of transactions offered by QRIS foster efficiency, they also raise concerns regarding declining financial awareness and an increasing tendency toward impulsive buying. This study aims to explore how the ease of using QRIS influences impulsive buying behavior and expenditure awareness among Generation Z. A qualitative method with a case study approach was employed, utilizing semi-structured interviews with eleven Generation Z informants. Data were analyzed using the Miles and Huberman interactive analysis technique, which encompasses data reduction, data display, and conclusion drawing. The findings indicate that the frictionless payment process, the lack of psychological friction during cashless transactions, and aggressive promotions on digital payment applications drive unplanned purchases among the informants. Conversely, some informants developed personal strategies, such as tracking expenses and setting daily transaction limits, to maintain control over their finances. These findings are expected to serve as a foundation for further research on digital financial literacy among Generation Z.

Keywords: QRIS, Generation Z, Impulsive Buying, Expenditure Awareness, Economic Sociology.

1 Introduction

The transformation of digital payment systems in Indonesia has significantly altered public consumption patterns, particularly among Generation Z, who have grown up as digital natives. The Quick Response Code Indonesian Standard (QRIS), introduced by Bank Indonesia in 2019, has become one of the most widely adopted innovations due to its ability to unify various payment system service providers into a single QR code standard.

Previous research on Generation Z's preferences for using QRIS shows that efficiency, convenience, speed, accuracy, and attractive promotions are the main reasons this generation chooses QRIS as a transaction tool, while the obstacles faced are mostly related to poor networks and unsupported devices, as well as the uneven adoption of QRIS by business owners (Astiansyah & Damayanti, 2024). These findings are in line with other research stating that convenience and trust are the main preferences for students in using QRIS M-Banking (Rifaldi et al., 2023), as well as research showing that efficiency, speed, and accuracy are driving factors for QRIS usage among students (Safitri et al., 2024).

Although the ease of QRIS provides many benefits, it also has the potential to cause consequences that have not been widely studied, namely a decrease in awareness of the amount of money spent when transacting non-cash. Unlike cash payments, which involve the physical process of counting and handing over money, QRIS transactions only require a code scanning process in a matter of seconds, thus potentially reducing the 'psychological friction' that usually makes a person think twice before buying something. This condition raises questions about the extent to which the ease of QRIS contributes to impulsive buying behavior in Generation Z.

Based on this description, this study aims to explore the experience of Generation Z in using QRIS, specifically regarding the link between transaction ease and impulsive buying tendencies, expenditure awareness, and the self-control strategies they apply. This research is expected to enrich studies on the psychological and behavioral impacts of digital payment technology adoption, as well as serve as input for payment service providers and stakeholders in designing features that support user financial literacy.

2 Literature Review

2.1 QRIS and Digital Payment Adoption among Generation Z

QRIS was introduced by Bank Indonesia in 2019 as a national standard that unifies QR code-based payments from various payment service providers into a single code (Bank Indonesia, 2019). Research on its adoption has largely drawn on the logic of technology acceptance, in which perceived usefulness and perceived ease of use explain why people adopt a new technology (Davis, 1989). Studies of young Indonesian users follow this pattern: ease of use, knowledge, and social media exposure are associated with Generation Z's interest in adopting digital payment technology (Suliah & Pabulo, 2023), while efficiency, speed, accuracy, convenience, trust, and promotions are the reasons students most often give for preferring QRIS (Astiansyah & Damayanti, 2024; Rifaldi et al., 2023; Safitri et al., 2024). Implementation studies in the banking sector, in turn, treat QRIS as part of the wider development of financial technology in payment systems (Ashari, 2023).

Most of this literature asks why users adopt QRIS. It says much less about what adoption does to the way users spend, which is the gap this study addresses.

2.2 Payment Mechanisms and the "Pain of Paying"

Behavioral research suggests that the way people pay affects how much they spend. Prelec and Loewenstein (1998) argue that paying produces a psychological discomfort, the "pain of paying", that acts as a brake on consumption, and that this discomfort is strongest when payment is salient and closely tied in time to what is being bought. Payment methods that blur this link weaken the brake. Feinberg (1986) described credit cards as stimuli that facilitate spending, and Soman (2001) showed that payment mechanisms differ in how vividly the outflow of money is rehearsed and how immediately it is felt, which in turn shapes spending decisions. Experimental evidence also indicates that consumers may be willing to pay more when using a debit card than when using cash (Runnemark et al., 2015).

Paying with QRIS can be seen as an especially low-salience case of this mechanism: no notes are handed over, no change is counted, and the transaction is completed by scanning a code. This is the sense in which the introduction speaks of reduced "psychological friction". Evidence on QR payments specifically remains limited, so the proposition is treated here as an exploratory question rather than an established finding.

2.3 Impulsive Buying, Promotions, and Social Influence

Impulsive buying is commonly described as a sudden and powerful urge to buy immediately, often accompanied by emotional or hedonic motives (Rook, 1987). Whether the urge is acted upon depends partly on normative judgments about what is appropriate in a given social setting (Rook & Fisher, 1995), and ultimately on the capacity for self-control, since impulsive purchasing is a typical form of self-regulation failure (Baumeister, 2002). Promotions and discounts, which previous studies list among the reasons young people prefer QRIS (Astiansyah & Damayanti, 2024), can therefore be expected to matter as situational cues that make acting on an urge more attractive.

From the perspective of economic sociology, payment behavior is not only an individual decision. Economic action is embedded in networks of social relations (Granovetter, 1985), and money carries social meanings and is handled according to shared expectations (Zelizer, 1994). For Generation Z, peer habits and the visible spread of cashless payment among friends and merchants may therefore shape not only whether QRIS is used but also how freely money is spent with it.

2.4 Expenditure Awareness, Self-Control, and Financial Literacy

Financial literacy is closely linked to the quality of financial decision making (Lusardi & Mitchell, 2014), and self-regulation depends in part on monitoring one's own behavior (Baumeister, 2002). If digital payment removes the natural cue that tells people how much they have spent, awareness of expenditure must come from somewhere else, for example from checking balances, reviewing transaction history, recording expenses, or setting spending limits. Whether and how young users build such practices is still little studied in the Indonesian QRIS context.

Taken together, this body of work suggests a working framework for interpreting the findings of this study: the ease of QRIS may reduce psychological friction and expenditure awareness, which can increase impulsive buying tendencies; promotions and peer norms may amplify this effect, while personal self-control strategies may offset it.

3 Method Research

This research uses a qualitative method with a case study approach to deeply explore the subjective experiences of Generation Z in using QRIS. Data collection was carried out through semi-structured interviews based on twenty guide questions covering aspects of usage intensity, preferences, impulsive buying behavior, expenditure awareness, trust in security, and social environmental influence.

The research informants consisted of eight students and young workers aged 19–24 who belong to the Generation Z category and are accustomed to using QRIS in daily transactions, selected using purposive sampling techniques. It must be emphasized that the interview data presented in the Results and Discussion sections is illustrative (simulation), prepared for the purpose of drafting the article, and must be replaced with authentic field interview data before this manuscript is used for scientific publication purposes.

Data were analyzed using the Miles and Huberman interactive analysis technique, which includes data reduction, data display, and conclusion drawing, performed repeatedly until reaching the point of saturation (Astiansyah & Damayanti, 2024). To maintain data validity, the researchers applied triangulation by comparing answers between informants and referring to relevant literature studies.

4 Results and Discussions

4.1 Informant Date

All eleven informants in the study have been using QRIS routinely for approximately one to three years, both for eating, snacking, online shopping, and transportation payments.

No	Informant initials	Age (years)	Duration Of QRIS Use
1	MHM	21	3
2	ST	20	3
3	D	20	3
4	A	20	3
5	SA	20	2
6	MA	21	3
7	Z	20	3
8	RF	20	3
9	SP	20	1
10	RA	21	3
11	PAW	23	3

4.2 Intensity and Preference for QRIS Usage

Almost all informants stated that they use QRIS almost every day, with a frequency ranging from two to five transactions per day. Before knowing QRIS, most informants relied on cash and others on debit cards.

> “ Because it's more practical, just scan and pay, no need to bother carrying exact change or waiting for change.”(MHM)

The main reason for switching to QRIS is in line with the findings of previous research, namely speed and practicality, because informants do not need to carry cash or worry about change (Astiansyah & Damayanti, 2024; Safitri et al., 2024).

4.3 QRIS Ease and Impulsive Buying Tendencies

Most informants admit that the ease of the payment process via QRIS makes them more susceptible to the temptation of buying things they hadn't planned to purchase.

> "Because if I use QRIS, I just snack, I check the total expenditure at the end when I realize there is no balance." (ST)
> "Yeah, sometimes I feel unaware of spending a lot of money when using QRIS, maybe because it's practical and easy, so it also makes it easier for us to buy many things, such as online shopping." (RF)
> "Fast payment, no need to wait for change." (A)

Some informants also stated that they felt 'less aware' of the nominal spent when paying with QRIS compared to cash because there is no physical process of counting money.

> "Because if I pay with cash, I can feel holding the money to pay and that it is gone from my wallet and my brain responds 'wow, my money is really gone', whereas if QRIS, I just scan my phone and the money just turns into numbers on the screen, not physical objects. Because I don't hold it, I feel the transaction is not expensive." (RA)

These findings reinforce the argument that the ease of digital transactions can reduce the psychological friction that usually functions as a pause for thought before making a purchase, thus potentially increasing impulsive buying tendencies among its users.

4.4 Influence of Promotions and Social Environment

Promotions and discounts offered via QRIS or digital wallets also serve as a driver for purchasing decisions, which aligns with Generation Z's preference for attractive promotions, as noted in previous research (Astiansyah & Damayanti, 2024).

> "Promotions/discounts are clearly influential, especially if there is cashback, it makes me more tempted." (PAW)

In addition to promotions, social environmental factors also influence the decision to use QRIS. Several informants mentioned that peer habits make them more accustomed to transacting non-cash.

> "Almost all my friends are already cashless, so if I still carry cash, it's considered troublesome." (D)

4.5 Expenditure Awareness and Self-Control Strategies

Some informants admitted that the ease of QRIS has made their expenses exceed their initial plans, but some have developed personal strategies to control these habits.

> "For now, I have started to check the application where I keep my money more often and use QRIS so that I also don't forget what has come out when I transact." (MA)
> "I routinely check the transaction history in the application and record monthly expenses." (Z)

Strategies such as recording expenses and setting daily transaction limits show an adaptive effort by Generation Z to balance the convenience of payment technology with personal financial discipline.

4.6 Trust in QRIS Security

Regarding the security aspect, the majority of informants stated that they trust the QRIS system sufficiently, although some still have concerns about the potential for personal data leaks, especially when using public Wi-Fi networks.

> "As long as I use an official application from a bank or an e-wallet that is already famous, I trust it enough, but I am still paranoid if I connect to public Wi-Fi when I want to transact." (S)

Concerns about network security are in line with the technical obstacles found in previous studies, namely network problems and the risk of technical interference when transacting using QRIS (Astiansyah & Damayanti, 2024).

4.7 Overall Impact on Shopping Habits

In general, informants assessed that QRIS brings more positive impacts in the form of efficiency and practicality, but still acknowledge the negative risks of potential excessive spending if not balanced with self-discipline.

> "If suddenly QRIS could not be used again, maybe at first it would be very complicated, but honestly, maybe it would make me more frugal because I have to think twice before buying something." (SY)

The statement confirms that the ease of digital transactions, on the one hand, provides efficiency benefits, but on the other hand, has the potential to weaken self-control over expenses if not balanced with adequate financial literacy.

Discussion

QRIS Ease and the Weakening of Psychological Friction

The informants' reasons for using QRIS, namely speed, practicality, and not having to handle cash or change, match those reported in earlier preference studies (Astiansyah & Damayanti, 2024; Safitri et al., 2024) and fit the technology acceptance view that ease of use drives adoption (Davis, 1989). The more interesting finding is that the same qualities were also described as the reason spending felt less noticeable. ST checked the total only when the balance ran out, and RF felt unaware of spending a lot, particularly when shopping online.

RA's contrast between cash and QRIS is the clearest illustration. Holding cash makes the loss tangible, whereas scanning a phone turns the money into numbers on a screen. This closely resembles the pain of paying described by Prelec and Loewenstein (1998), in which payment mechanisms that make the outflow of money less salient weaken the discomfort that normally restrains spending, and it is consistent with work showing that payment mechanism affects spending (Soman, 2001; Runnemark et al., 2015). It also fits the mental accounting view that the way a transaction is framed shapes how its cost is experienced (Thaler, 1999). The implication is that efficiency and risk may be two sides of the same feature: removing the effort of paying also removes the pause that gave people a chance to reconsider. Technology acceptance models

usually treat ease of use as unambiguously positive, and these findings suggest that this assumption needs qualification when the technology is a payment instrument. Because the data are self-reported and interpretive, they indicate how informants experience this mechanism but do not show that QRIS causes higher spending.

Promotions and Peer Norms as Amplifiers

Promotions appeared as an additional trigger on top of ease. PAW stated that cashback made purchases more tempting, which supports earlier findings that promotions are an important reason young people choose QRIS (Astiansyah & Damayanti, 2024) and suggests that the same promotions may also encourage unplanned purchases. This is consistent with the idea that situational cues make acting on an urge more attractive (Rook, 1987).

D's remark that carrying cash is considered troublesome when all friends are cashless shows a social dimension that is easily missed in adoption studies. Cashless payment appears to have become a shared expectation among peers, and deviating from it carries a small social cost. This reflects the embeddedness of economic action in social relations (Granovetter, 1985) and the way payment practices carry social meaning (Zelizer, 1994). It also resonates with the role of normative influence in impulsive buying (Rook & Fisher, 1995): when spending cashlessly is the norm, a purchase made with a quick scan is likely to be judged less critically, by oneself and by others. QRIS use among Generation Z is therefore better understood as socially shaped behavior than as a purely individual convenience choice.

Self-Control, Expenditure Awareness, and Financial Literacy

Not all informants described losing control. MA and Z checked their transaction history, recorded monthly expenses, and in some cases set daily limits. These strategies can be read as ways of rebuilding from outside the friction that the payment process no longer supplies. If the act of paying does not make spending noticeable, users create a pause through monitoring, which fits the view that self-regulation depends on keeping track of one's behavior (Baumeister, 2002). SY's comment that losing access to QRIS might make him more frugal because he would have to think twice points in the same direction: he recognizes that the friction has been lost.

The strategies reported also appear to be improvised by individuals rather than the result of systematic learning, and informants differed in how far they used them. Since financial literacy is linked to better financial decisions (Lusardi & Mitchell, 2014), this suggests that digital financial literacy for young users should address not only how to use payment technology but also how to keep spending visible when using it. The present data do not measure informants' level of financial literacy, so this remains an interpretation to be tested in further research.

Implications

For payment service providers, the findings suggest that features that restore some visibility to spending, such as clear transaction summaries, optional spending limits, and spending notifications, could support user self-control without reducing convenience. Promotions could also be designed and communicated with attention to their effect on unplanned purchases. For educators and regulators, the findings support including digital financial literacy, and specifically expenditure monitoring, in programs aimed at young people. For Generation Z users themselves, the strategies already used by some informants offer practical examples that others can adopt.

Limitations and Directions for Future Research

This study has several limitations. It relies on a small purposive sample of young people aged 19-24, mostly students and young workers, so the findings describe the experiences of these informants and should not be generalized to all Generation Z users. The data are self-reported and may be affected by recall and social desirability. The interview data presented in this manuscript are illustrative and must be replaced with authentic field data, after which this discussion should be revisited to make sure each interpretation is still supported by what informants actually said. Future research could use mixed methods or experiments that compare spending across payment methods, collect transaction records alongside interviews, follow users over time, and include other age groups and regions.

5 Conclusion

This study explored how the ease of using QRIS relates to impulsive buying tendencies, expenditure awareness, and self-control strategies among Generation Z. The findings show that QRIS is valued for its speed, practicality, and efficiency, but that the same qualities can reduce awareness of the amount of money spent. Because paying is reduced to scanning a code, the psychological friction that normally prompts a person to think twice before buying is weakened, which can increase impulsive buying tendencies. This tendency is reinforced by promotions such as cashback and by peer habits that make cashless payment the social norm.

The findings also show that Generation Z is not passive in this situation. Some informants have developed their own strategies, such as checking transaction history, recording monthly expenses, and setting personal transaction limits, to restore the control that the payment process no longer provides. These strategies appear to be improvised by individuals rather than learned systematically, which indicates a need for digital financial literacy that teaches young users how to keep their spending visible when paying cashlessly.

Practically, payment service providers can support users by offering features such as spending summaries, optional limits, and spending notifications, and by communicating promotions responsibly. Educators and regulators can include expenditure monitoring in financial literacy programs for young people. Given the small and purposive sample and the self-reported nature of the data, these conclusions describe the informants' experiences and are not generalizable. Future research could use larger samples, mixed methods, or experimental designs that compare spending across payment methods to test the relationships proposed here.

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