

# From Cash to Code: F&B Entrepreneurs' Perspectives on Instant QR Payment System Adoption

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## Abstract

**Purpose:** The swift digitalisation of financial transactions has notably impacted the implementation of immediate QR payment systems in Malaysia, especially in the Food and Beverage industry. This study examines the factors and obstacles encountered by food and beverage entrepreneurs in implementing QR-based cashless payment systems.

**Design/methodology/approach:** Utilising a qualitative study design, data were gathered via focus group discussions (FGDs) with ten food and beverage business proprietors functioning in both metropolitan and semi-urban regions of Malaysia.

**Findings:** Thematic analysis conducted with ATLAS.ti identified three principal themes: (1) the increasing popularity and convenience of cashless transactions, (2) the user-friendliness and accessibility of the QR code system, and (3) ongoing obstacles encompassing operational difficulties, inconsistent system reliability, and security concerns.

**Research limitations/implications:** Notwithstanding these challenges, the study highlights an optimistic perspective on the growth of digital payments, propelled by consumer demand and changing company practices.

**Practical implications:** Notwithstanding these challenges, the study highlights an optimistic perspective on the growth of digital payments, propelled by consumer demand and changing company practices. The results provide guidance for policymakers, fintech developers, and organisations supporting SMEs seeking to improve digital financial inclusion within Malaysia's food and beverage sector.

**Originality/value:** This qualitative study employed focus group discussions to uncover key reasons why food and beverage business owners are adopting QR-based cashless payment systems.

**Keywords:** QR Payment Systems, Focus Group Discussion, Food & Beverages Industry, Malaysia

## Introduction

The global shift toward digital financial ecosystems has intensified in recent years, with cashless payment systems becoming increasingly prominent across various sectors. In Malaysia, this transformation is aligned with national strategies such as the *Financial Sector Blueprint 2022–2026* by Bank Negara Malaysia, which prioritizes digital payment adoption to enhance financial inclusivity and economic resilience. A central component of this digital shift is the implementation of instant QR (Quick Response) code payment systems, notably the

interoperable DuitNow QR platform launched in 2019. This system enables seamless transactions across different banks and e-wallet providers, offering a unified payment interface for both consumers and merchants.

The F&B sector, predominantly comprised of micro, small, and medium-sized enterprises, represents a critical segment of Malaysia's service economy. According to SME Corporation Malaysia (2022), micro, small, and medium-sized enterprises contribute 38.4% to the nation's GDP, with F&B entrepreneurs making up a substantial proportion of these enterprises. The nature of the F&B industry—characterized by high-frequency, low-value transactions and a strong emphasis on customer convenience—makes it an ideal candidate for digital payment integration.

The progression of technology has enabled the expansion of digital applications, especially in payment systems, which have grown progressively inventive (Mustapha, 2018) since cashless system for instance QR payment system offers several advantages (Yakean, 2020). The popularity of digital payments increased significantly following the Covid-19 outbreak, as businesses and consumers transitioned to cashless transactions (Ramayanti et al., 2024). To sustain operations and meet customer expectations, many enterprises have implemented cashless payment solutions (Kwabena et al., 2019). The QR payment system is a solution that has experienced swift acceptance among SMEs in Malaysia. This growth is driven by digital transformation, consumer demand for convenience, and government initiatives promoting cashless payments. Many businesses have integrated QR code payment systems to simplify transactions.

Previous studies indicate that while digital payments are regarded as efficient, rapid, and systematic, especially in a post-COVID environment, obstacles such as insufficient digital literacy, inadequate infrastructure, apprehensions regarding transaction fees, and trust deficits persistently impede comprehensive implementation (M Kassim et al. (2024); Kamis et al. (2024)). This study addresses this gap by exploring the experiences and attitudes of F&B entrepreneurs in adopting QR payment systems within urban and semi-urban Malaysian contexts. Utilizing a qualitative methodology through Focus Group Discussions (FGDs) and thematic analysis via ATLAS.ti, the research aims to identify the drivers, deterrents, and behavioural dynamics that influence digital payment uptake. The findings contribute to both academic literature and policy development by offering grounded insights into the intersection of technology adoption, entrepreneurial behaviour, and digital financial inclusion.

## **Literature Review**

### ***Digital Payment System***

The rapid evolution of the economic landscape has driven the advancement of digital technologies, particularly in the payment sector, ushering society into the era of digital transactions (Tarantang et al., 2019). Digital transformation in banking plays a vital role in promoting financial inclusion that leads towards contributing to global economic growth (Yoganandham, 2024). A digital payment system is a form of payment facilitated by banks and interconnected between individuals and financial institutions to enable digital monetary transactions (Briggs & Brooks, 2011). It operates through the internet or software applications, offering several advantages, especially in tracking and monitoring financial transactions. Moreover, digital payments enhance convenience and provide a wide range of payment options. Although conventional payment methods persist, they do not impede the ongoing

growth of digital payments, which corresponds with changing consumer behaviours (Hendrawan et al., 2023).

The F&B industry, particularly among micro and small enterprises (SMEs), has shown increasing interest in adopting digital payment solutions, especially after the COVID-19 pandemic which accelerated the shift to contactless transactions. Studies have shown that F&B entrepreneurs are often motivated by customer demand, operational efficiency, and government incentives to adopt new technologies. However, barriers such as lack of digital literacy, concerns over transaction security, and limited internet access in certain areas still hinder widespread adoption.

### ***QR Code Payment***

In Malaysia, digital payment platforms such as Touch 'n Go eWallet, GrabPay, Boost, Maybank QRPay, ShopeePay, and DuitNow QR are increasingly gaining traction. In the modern payment landscape, various cashless methods, including card payments, mobile payments via internet-enabled devices, and QR code payments, have been widely embraced (Puspita, 2019). The increasing inclination towards cashless solutions is propelled by their convenience and effectiveness. Numerous enterprises increasingly regard the use of cashless payment solutions as vital for optimising their operations. QR code payments have become a popular option. This method facilitates cashless transactions by the scanning of a barcode. It employs a two-dimensional barcode format that may be readily interpreted by mobile device scanners (Liébana-Cabanillas et al., 2015). Businesses often display static QR codes at cashier counters or tables, allowing customers to scan and complete payments via mobile banking apps or e-wallets. Overall, QR code payments provide broad accessibility and convenience.

The proliferation of digital payment technologies has transformed the financial behavior of consumers and entrepreneurs alike. Among these innovations, QR code payment systems have emerged as a popular cashless solution due to their ease of use, low implementation costs, and compatibility with smartphones (Rosli et. Al. 2020). QR payment systems allow merchants to accept payments by simply displaying a code that can be scanned by customers using e-wallets or banking apps.

Unlike traditional card payment systems that require expensive point-of-sale (POS) terminals, QR codes are inexpensive and user-friendly, making them especially attractive for small and micro-enterprises (Omar et. Al. 2024). This affordability makes QR systems highly scalable in developing economies where digital financial infrastructure is still maturing.

### **Method**

This study utilised methodological triangulation to enhance the validity and reliability of the findings through the integration of various qualitative data collection methods. Data were specifically collected via Focus Group Discussions (FGDs) and supported by individual in-depth interviews with chosen Food and Beverage (F&B) entrepreneurs in urban and semi-urban areas of Malaysia. This approach facilitated the cross-validation of themes arising from various viewpoints and circumstances. The use of multiple sources of data enabled a more thorough comprehension of the elements influencing the adoption of QR payment systems, including consumer behaviour, technological obstacles, and merchant perspectives. Additionally, thematic analysis conducted with Atlas.ti software facilitated systematic coding and topic generation, hence enhancing the trustworthiness of the triangulated findings (Carter et al., 2014; Patton, 1999).

**Findings*****Adoption of Cashless***

**P2:** *“even near the end of the month, we can easily trace how much monthly amount will go into an account like that.”*

**P3:** *“convenient for customers because customers can make less than a minute to make a payment. also easy for us because we don't need to bank in money. So the money goes directly into the account. and the third he makes it easier. He took care of the transaction record, namely the bank statement.”*

**P11:** *“most buyer are student. And my son who is a teenager told me to have QR codes payment.”*

Customer preference and trends has shifted towards cashless payments: There is a noticeable trend among consumers, particularly younger demographics, who prefer cashless transactions. Many customers, especially students and office workers, are increasingly using mobile phones for payments instead of carrying cash. Attracting Customers: Businesses that adopt QR code payments can attract customers who prefer this method, as some customers may choose to go elsewhere if their preferred payment method is not available.

The growing consumer preference for cashless transactions, particularly among younger demographics such as students and working professionals, signifies a broader digital shift in payment behavior (Zhou, Lu, & Wang, 2010; Oliveira et al., 2016). As mobile-based payments become increasingly integrated into daily life, the adoption of QR code payment systems is no longer merely a technological upgrade but a strategic imperative for businesses seeking to remain competitive. Studies have shown that perceived convenience and lifestyle compatibility significantly influence the adoption of mobile payment methods (Ramli et al. 2023). In the context of the Food and Beverage (F&B) sector, offering QR payment options can enhance customer experience and retention, particularly among tech-savvy consumers who may avoid establishments that do not support their preferred payment modes. Hence, aligning business operations with evolving customer payment preferences is crucial to meeting market demands and sustaining growth in an increasingly cashless economy.

Apart from that, the familiarity when involving younger generations customers must be prioritized. Age and technological familiarity play a significant role in influencing the adoption of QR payment systems, particularly in the Food and Beverage (F&B) sector. Evidence suggests that younger consumers, who are generally more digitally literate and comfortable with mobile technologies, are more inclined to adopt cashless payment methods such as QR codes (Madan & Yadav, 2016; Zhou et al., 2010).

***Ease of Use***

**P4:** *“didn't have a QR, the customer ran to another store. QR is convenient for cashless people.”*

**P8:** *“you don't need to prepare a lot of exchange money.”*

**P10:** *“one to simplify payments.”*

The findings underscore that the adoption of QR code payment systems among F&B entrepreneurs is significantly driven by the need to simplify and expedite transaction processes, particularly in fast-paced retail environments. The convenience afforded by QR payments reduces cash-handling burdens and eliminates the operational challenge of providing small change, making it especially suitable for outlets serving students and office workers—groups known to prefer digital payment modes (Oliveira et al., 2016; Patil et al., 2020). Testimonies

from participants further reveal that failure to provide QR payment options can directly result in customer attrition, highlighting the strategic necessity of accommodating preferred payment technologies. This is consistent with the Technology Acceptance Model (TAM), where perceived ease of use and usefulness are key determinants of technology adoption (Davis, 1989; Venkatesh & Davis, 2000). Hence, integrating QR payment systems not only enhances operational efficiency but also strengthens customer satisfaction and loyalty, aligning F&B businesses with the broader digital transformation agenda.

The funds from QR payments go directly into the merchant's bank account, eliminating the need for cash handling and bank deposits. This efficiency is especially beneficial for businesses that deal with high volumes of transactions.

### ***Safety and Security***

**P1:** *“Proper to have online transactions so you don't go to bank every night to cash in the money.”*

**P8:** *“Using QR makes more systematic towards data in business management. The transaction being recorded from the bank statement.”*

**P11:** *“Bringing cash is dangerous.”*

The transition to QR code payment systems has been positively associated with enhanced security, primarily through the reduction of cash handling, which mitigates the risk of theft for both merchants and consumers. It is supported by Chuah et. Al. 2024, where the study also found that perceived ease of use, perceived usefulness, and attitude significantly influence consumers' intention to adopt mobile payments in Malaysia. This shift aligns with the broader consumer perception that digital transactions are inherently safer than cash-based alternatives. Nevertheless, concerns remain among merchants regarding the reliability of transaction verification processes. Instances where customers claim to have completed payments without proper confirmation highlight a critical gap in real-time validation mechanisms. Therefore, while QR code payments contribute to a safer transactional environment, ensuring secure and verifiable transaction systems is crucial to maintaining trust and encouraging sustained adoption in the F&B sector.

### **Discussion and Conclusion**

The study identified several key challenges and limitations in the adoption of digital payment systems, including generational differences in technological familiarity, technical infrastructure issues, and concerns regarding transaction security. Figure 1 is an analysis of factors influencing the adoption of digital transactions and challenges associated with each other.



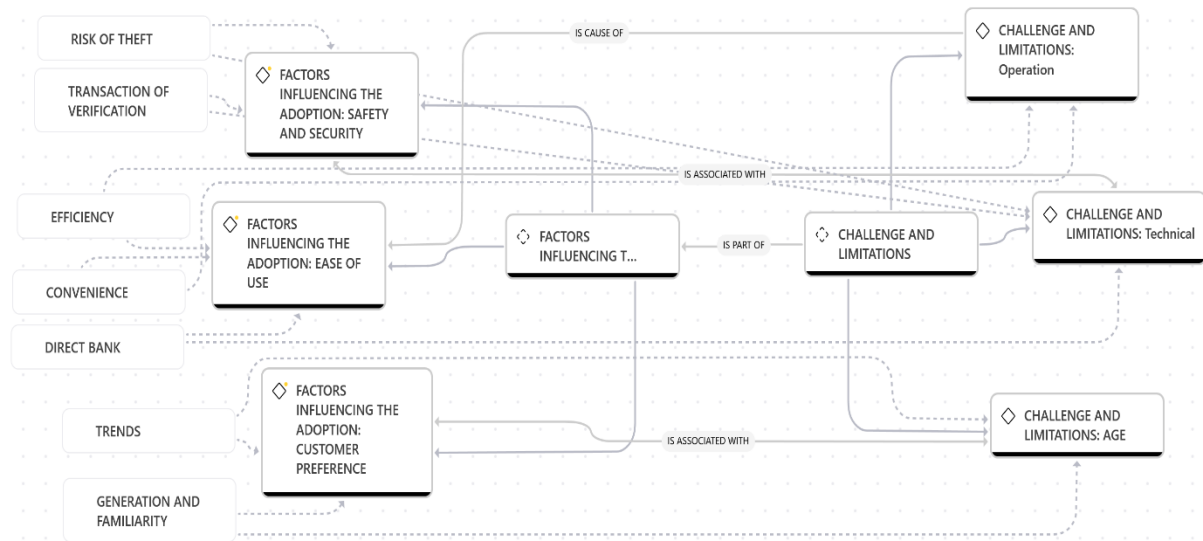


Figure 1: Analysis from interview

Although generational differences factors could be a contributing factor, it also highlights in contrast. Older customers may exhibit resistance or hesitation due to lower levels of digital familiarity, perceived complexity, or trust concerns and technology anxiety (Razali & Hashim, 2024). This generational divide creates a challenge for businesses aiming for full-scale implementation of digital payments, especially in diverse customer settings. From a managerial perspective, it becomes necessary to provide alternative payment options or digital education initiatives to bridge the gap and ensure inclusive service delivery. Therefore, age-related digital competency must be recognized as a critical variable in formulating effective strategies for QR payment adoption.

A major barrier to the extensive adoption of QR code payment systems among food and beverage enterprises is the prevalence of technical difficulties. Merchants often report connectivity issues, defective scanning devices, or software malfunctions in payment applications as major obstacles to smooth transactions (Wan Nawang, W. K., & Ahd.Moess, M. (2022)). These disruptions adversely impact business efficiency and lead to detrimental consumer experiences, especially when transactions are delayed or fail completely. In competitive markets such food and beverage businesses, where efficiency and convenience are crucial, technological challenges can result in consumer unhappiness and, consequently, a decline in sales. Digital payment systems depend significantly on internet stability and device performance; any disruption in this ecosystem erodes consumer trust and discourages repeat usage. Consequently, improving infrastructural and systemic reliability is essential for bolstering merchant and client confidence in the implementation of QR payments.

Additionally, merchants continue to express concerns about the dependability of transaction verification systems. Occurrences in which consumers assert they have finalized payments without enough confirmation underscore a significant deficiency in real-time validation systems. Consequently, QR code payments enhance transactional security, making secure and verifiable transaction solutions essential for preserving confidence and promoting ongoing adoption in the food and beverage sector. In terms of future research, some of important recommendations are put forward. The quantitative data on actual failure rates in F&B settings is sparse; thus, more field studies are needed to correlate failure frequency with consumer behavior. A comparative study across countries or regions with differing infrastructure, for

instance urban vs rural, developed vs developing countries could clarify how much infrastructure rather than user attitudes drives the problem. Moreover, a longitudinal study can be adopted to assess whether exposure over time reduces risk perception, or whether early failures have endured reputational costs.

In conclusion, technical and verification challenges are deeply interlinked and central to the slow uptake of QR code payments in F&B businesses. Addressing one without the other is unlikely to restore or build trust fully. For F&B merchants, policies, system designs, and investment must target reliability, confirmation clarity, and security to unlock the full potential of QR payment systems. Future works aimed at measuring and improving these aspects will be critical for broader and sustainable adoption.

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