

Cashless Payments in Vietnam: The Shift from Traditional Banking to Digital Banking

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Abstract:

In the context of the global digital economy, cashless payments have become an inevitable trend, contributing to financial modernization and increased transparency. Vietnam has emerged as one of the countries with the fastest growth rate of cashless payments in Southeast Asia, thanks to the coordination between State policies, digital banking strategies and the active participation of fintech. Based on data from the State Bank, international organizations and academic research, the article analyzes the current situation of cashless payments in Vietnam and compares international experiences. The results show that Vietnam has formed a diverse ecosystem including digital banks, e-wallets and interconnected payment layers; in the period 2018-2023, electronic transactions increased by over 40%/year. Cashless payments do not only help banks save costs and increase revenue, but also create social benefits, such as reducing cash risks, combating money laundering, and promoting financial inclusion.

Keywords: *Cashless Payments, Digital Banking, Vietnam.*

I. INTRODUCTION

The global financial landscape has undergone a profound transformation in recent decades, driven by the accelerating pace of technological advancement and the pervasive diffusion of digital innovations. Among the most notable developments is the emergence of cashless payments, which have redefined traditional notions of money, transaction, and financial intermediation. In theoretical terms, cashless payments refer to financial transactions conducted without the physical exchange of cash, facilitated instead through electronic or digital channels such as mobile banking, e-wallets, credit cards, and online transfers. This paradigm shift has not only revolutionised the way individuals and enterprises conduct financial activities but has also become a catalyst for the broader digitalisation of banking systems worldwide.

In Vietnam, the evolution from conventional banking models toward digital banking has been particularly dynamic, reflecting the country's rapid economic growth, youthful demographics, and government commitment to digital transformation. Traditional banking institutions - once reliant on in-person transactions and paper-based systems - have

increasingly adopted digital infrastructures to enhance efficiency, transparency, and accessibility. Digital banking platforms now enable customers to conduct a wide range of financial operations remotely, from payments and transfers to investments and loan applications, thereby reshaping the customer experience and competitive landscape of the Vietnamese financial sector. This transformation has been further accelerated by state-led initiatives under the National Digital Transformation Program and the Government's cashless economy development plan, both of which have positioned digital finance as a strategic driver of economic modernization.

The shift from traditional to digital banking has yielded far-reaching economic, social, and behavioural implications. Economically, it has contributed to improved payment efficiency, reduced transaction costs, and greater financial inclusion, particularly among unbanked and underbanked populations. Socially, it has fostered the diffusion of financial literacy, encouraged transparency, and mitigated the risks associated with cash handling and informal finance. At the individual level, digital banking has enhanced convenience, security, and user autonomy, aligning

financial behaviour with the broader trends of digital consumption.

The ongoing Fourth Industrial Revolution is widely characterised as a decisive technological epoch that has precipitated a structural shift across economic and social domains, not least within cross-border finance. Advanced computational paradigms-notably artificial intelligence, distributed ledger frameworks and cloud-based infrastructures-have been progressively integrated into international financial operations, engendering substantive reconfiguration of financial intermediation and market functioning. Innovations such as digital payment rails, programmable (smart) contracts and the tokenisation of assets have been implemented at scale and are credited with materially altering the architecture of the global financial system. Within this constellation of change, digital currencies-especially cryptocurrencies-are frequently ascribed a prominent, even transformative, role, being increasingly utilised as a means of settlement and value transfer (Tian et al. (2024)).

During Indonesia's stewardship of ASEAN in 2023, a regional accord was finalised that institutionalised QR-code payment interoperability as the backbone of intra-ASEAN digital payments; concomitantly, a local-currency settlement (LCS) mechanism was advanced to permit transactions to be denominated and settled in member states' own currencies, thereby reducing dependence on the US dollar. The scheme has been portrayed as a low-cost, friction-minimising payment infrastructure that, given the rapid proliferation of smartphone penetration across the region, is expected to broaden financial inclusion and to act as a catalytic stimulus for commercial activity, investment flows and socioeconomic development. Drawing on complex interdependence theory and utilising an interpretive case-study design, this paper contends that the feasibility of such cooperation can be traced to ASEAN's institutional architecture - characterised by non-military modalities and consensus-based processes - which enables a plurality of stakeholders to incubate and operationalise initiatives through multiple intra-regional channels. Moreover, it is argued that stakeholders are able to situate the payment cooperation within an institutional geostrategy that responds to great-power rivalry while preserving ASEAN's normative vision and centrality. The study thus contributes to contemporary debates in

ASEAN geopolitics and geo-economics by reframing intra-regional monetary-financial collaboration as an emergent instrument of institutional geostrategy (Bimantara & Nugraha (2025)). Vietnam stands out with its rapid transformation: from a cash-based society to reaching over 30% of cashless transactions by 2023, forecast to continue to increase strongly until 2030 (Nhan Dan Online, 2024).

That success comes from the harmonious coordination of three pillars: the State plays a creative role, building a transparent legal framework and incentive policies; commercial banks promote digital banking, improving experience and security; while fintech companies such as MoMo, ZaloPay, ShopeePay expand services to the population without bank accounts, contributing to the spread of comprehensive finance.

However, Vietnam still faces significant challenges: the habit of using cash is common in rural areas, along with cybersecurity risks and financial fraud (Truong, 2025). Therefore, analyzing both successes and limitations will help draw useful lessons for developing countries with similar contexts.

This research is therefore significant not only in elucidating the ongoing transformation of Vietnam's banking system but also in offering policy-relevant insights to facilitate a sustainable and inclusive transition toward a cashless economy. By analysing the drivers, challenges, and impacts of this transition, the study seeks to inform policymakers, regulators, and financial institutions in designing coherent strategies to strengthen digital infrastructure, promote cybersecurity, and enhance the resilience of Vietnam's emerging digital banking ecosystem in the era of digital transformation.

II. LITERATURE REVIEW

There have been several studies on Cashless Payments and the Shift from Traditional Banking to Digital Banking. Some of the studies include Hazar & Babuşcu (2023). The authors declare that in recent years, the financial sector has witnessed an accelerated diffusion of financial technologies (FinTech), through which market transactions have been rendered appreciably faster, more efficient and comparatively more secure. Advanced computational tools - notably artificial intelligence and machine-learning algorithms - have been

progressively embedded within service delivery chains, yielding analytical precision and real-time decision support that confer competitive advantages on financial intermediaries. The intrinsic complexity of contemporary markets, combined with imperatives for rapid response, has thereby heightened demand for such technological solutions. Consequently, FinTech innovations have been instrumentalised to broaden service portfolios at lower marginal cost, enabling incumbent banks to sustain competitive positioning while simultaneously incubating novel business models and market niches. Beyond efficiency gains, these technologies have been credited with expanding financial access - thereby advancing inclusion agendas - and with contributing to the attainment of selected sustainable development objectives. In sum, the transformative potential, practical conveniences and market opportunities associated with FinTechs have become central themes in analyses of modern financial-market evolution.

Continue this topic, Susmitha et al. (2024) undertake a comprehensive examination of the evolving paradigm of electronic and mobile banking alongside the expanding ecosystem of digital payments, situating them within the broader context of financial innovation and technological disruption. It investigates the developmental trajectory, diffusion patterns, and transformative influence of these platforms on financial intermediation and consumer behaviour. The exponential expansion of e-banking and mobile banking has fundamentally altered the modalities of customer engagement and the operational architecture of financial transactions. Moreover, diverse digital payment mechanisms - ranging from mobile wallets to cryptocurrencies - are analysed to elucidate their macroeconomic ramifications and their role in reshaping global financial dynamics. Particular emphasis is placed on the revolutionary impact of financial technology (FinTech) as a catalyst redefining conventional banking practices through automation, data-driven analytics, and digital integration. Drawing on empirical case studies, the research identifies exemplary implementations of FinTech solutions that demonstrate their scalability, efficiency gains, and inclusivity potential. The paper further addresses systemic challenges, regulatory considerations, and prospective developments that are anticipated to shape the future trajectory of digital financial services, thereby offering an integrated understanding of the sector's current

transformation and its strategic implications for global finance.

Research on cashless payments as well as the transition from traditional banking to digital banking has also been conducted in the case of Sweden, Finland and Canada. In Bhuiyan et al. (2025), after recognising the multifaceted advantages associated with digital and cashless payment systems, numerous advanced economies - such as Sweden, Finland, and Canada - have actively pursued the transition toward fully cashless financial ecosystems. Inspired by these precedents, the Government of Bangladesh has articulated a strategic vision to advance toward a cashless society through the deployment of information and communication technologies, aligning its national development agenda with the broader imperatives of the Fourth Industrial Revolution. Within this transformative framework, digital payment mechanisms are positioned as a pivotal instrument for facilitating the structural shift toward a cashless economy, enhancing transaction efficiency, transparency, and financial inclusion across all segments of society.

Among the inherent limitations of cash-based transactions are the operational inconveniences associated with physical currency management and the restricted accessibility of formal banking infrastructure required for cash withdrawals. In light of these constraints, Ong & Chong (2022) seeks to investigate, in a dual analytical dimension, the influence of cashless payment adoption on the utilisation of internet and mobile banking services. By examining this interrelationship, the research aims to elucidate how the expansion of digital payment ecosystems may accelerate the transition toward technology-driven financial behaviours and reshape consumer interaction with digital banking platforms.

Studies on cashless payments and the shift from traditional banking to digital banking with the Vietnamese situation have also appeared. Vietnam's accession to the Better Than Cash Alliance (BetterthanCash.org) reflects its strategic commitment to advancing financial digitalisation and promoting a modern payment infrastructure. The government has articulated an ambitious objective to reduce the proportion of cash transactions to below 10 percent of total payment instruments by 2020 (Vu, 2018), signalling a decisive move toward a digitally integrated economy. As a foundational component of the cashless paradigm, non-cash payment systems have evolved into a predominant mode of financial exchange globally and

have gained significant traction within Vietnam's economic landscape. Their growing prevalence underscores the country's broader shift toward digital financial inclusion and the ongoing transformation of consumer payment behaviour in alignment with international trends in financial modernisation (Ha, 2020).

Research from another angle, Khuyen (2023) investigates the relationship between cashless payment development and Vietnam's economic growth in the periods preceding and following the COVID-19 pandemic. Empirical findings reveal that variables such as the number of payment accounts, the total value of domestic cashless transactions, payments via bank cards, and transactions executed through electronic payment orders exert a statistically significant and positive influence on real GDP. These results indicate that the expansion of cashless payment systems constitutes an important driver of economic performance. Accordingly, further promotion of digital financial instruments - particularly the adoption of intelligent payment solutions and advanced financial technologies - is essential to sustaining growth momentum. The COVID-19 pandemic acted as a major catalyst accelerating the diffusion of non-cash payments, as consumers and institutions increasingly transitioned toward contactless and digital transaction channels. Among these, payment orders have progressively dominated cashless payment methods, whereas traditional instruments such as cheques and collection orders have virtually disappeared from financial circulation, a trend markedly reinforced in the post-pandemic period.

III. RESEARCH OBJECTIVES AND METHODS

The study aims at three objectives: (i) analyzing the current situation of cashless payments in Vietnam in terms of ecosystem, infrastructure and legal framework; (ii) assessing the impact on banks and society – from operational efficiency, revenue, costs to transparency and financial inclusion; (iii) drawing lessons on policies, infrastructure and banking-fintech cooperation for developing countries.

The research method combines qualitative data with secondary data from the State Bank, IMF, World Bank, PwC, along with comparative analysis between Vietnam - Singapore - Malaysia - Laos and case studies of typical organizations such as Vietcombank, BIDV, MoMo, ZaloPay. This approach ensures scientific, practical and high reference value for the process of building a modern digital society.

IV. CURRENT STATUS OF CASHLESS PAYMENT DEVELOPMENT IN VIETNAM

In recent years, Vietnam has transformed dramatically from a cash-based society to a dynamic digital payment ecosystem, formed from three pillars: policy - infrastructure - user behavior. This resonance has created a leap forward in the process of digitalizing national finance.

Table 1. Growth of cashless payment transactions in Vietnam (2018-2023)

Year	Internet Banking (% increase)	Mobile Banking (% increase)	QR Code (% increase)	Cashless payment rate in total means of payment (%)
2018	35.6	60.3	45.0	14.0
2019	40.2	64.8	80.0	18.0
2020	42.5	72.0	110.0	22.0
2021	46.0	85.5	125.0	25.0
2022	48.7	95.0	150.0	28.0
2023	50.2	103.0	170.0	31.0

Source: SBV (2024), quoted from Nhan Dan Online (2024), Vietnam News (2025).

According to the State Bank, in 2024, the number of cashless transactions will increase by 56.8%, the value will increase by 33.7% over the same period; Internet and mobile banking alone will increase by more than 50%. QR payments will develop strongly, spreading from supermarkets, convenience stores to gold shops and financial services (Nhan Dan Online (2024)). Electronic payments have gone beyond the framework of e-commerce, gradually becoming a new social habit.

By the end of 2024, Vietnam will have more than 200 million personal payment accounts, with 87% of adults owning a bank account - a high figure in the region. E-wallets such as MoMo, ZaloPay, VNPAY, ViettelPay attract tens of millions of users, evolving into "super apps" integrating bill payments, micro-credit and retail investments. The key factors are convenience, time savings and continuously improved user experience.

In terms of infrastructure, NAPAS plays a central role in connecting payment systems, from interbank clearing to VietQR standards, helping to connect banks and e-wallets, reducing costs and paving the way for cross-border payments. With smartphones, rural people can also access modern financial services, narrowing regional gaps.

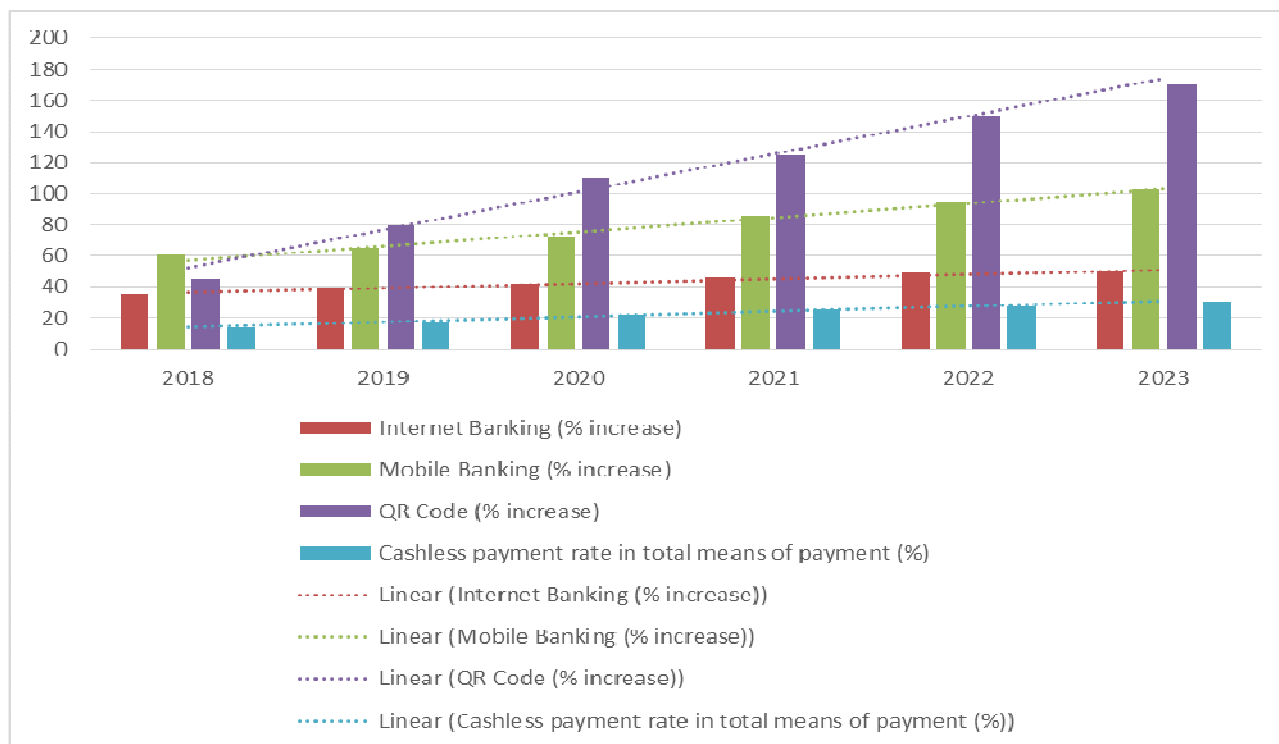


Figure 1. Changes of cashless payment transactions in Vietnam (2018-2023)

Source: The authors.

In terms of policy, Decree 52/2024/ND-CP creates a clear legal framework for payment activities, data security and responsibility of supply organizations. At the same time, the State Bank issued a Strategy for Digital Transformation of the Banking Industry, encouraging infrastructure investment, public-private partnership and mobile payments, creating a sustainable legal foundation for innovation.

FinTech plays a powerful catalyst role: providing flexible, fast and innovative services. Sandbox experiments expand the space for innovation, forcing traditional banks to digitize and collaborate - creating a competitive yet symbiotic relationship that drives the entire ecosystem forward.

However, the digital divide remains: rural people and the elderly have limited digital skills; telecommunications infrastructure is uneven. Initiatives such as payment agent networks, financial education programs and reduced transaction fees are being implemented, but an integrated strategy between technology, education and social policy is needed to ensure inclusivity.

Along with this comes the risk of cyber security, fraud and service disruption – challenges that require rigorous risk management, regular audits

and technical standardisation. Balancing innovation and safety is vital to maintaining user trust.

Vietnam is currently testing cross-border QR connectivity with Thailand, Cambodia and several ASEAN countries (Reuters, 2023). If successful, QR could become the “common language” of regional payments, contributing to promoting ASEAN digital economic integration.

Vietnam's experience is a testament to the speed, depth and inclusiveness of financial digital transformation. The synchronous combination of policy - technology - people has brought the country closer to the goal of a comprehensive digital society, while providing valuable lessons for developing countries on the journey to modernize the financial - banking system.

V. DEVELOPMENT RESULTS

Over the past decade, cashless payments in Vietnam have made spectacular progress. If digital banking was still new in the 2010-2015 period, since 2016, along with the explosion of the Internet, smartphones and e-wallets, a wave of innovation has spread strongly. According to the State Bank of Vietnam, in the 2020-2024 period, the number of electronic transactions will increase by an average of 40% per year, and the value will increase by 25% per year; in 2024 alone, it will

reach more than 17 billion transactions, an increase of 56.8% in quantity and 33.7% in value compared to 2023. QR payments have broken through by more than 100%, making Vietnam one of the fastest growing QR countries in Southeast Asia.

Not only limited to urban areas, digital payments have spread to rural areas thanks to widespread telecommunications networks and user-friendly banking applications. A PwC survey (2022) shows that 63% of people use cash less, and 72% of young people consider e-wallets or mobile banking as their main means, demonstrating the change in consumer habits and the resilience of the middle class.

Cashless payments not only increase transactions but also bring three major benefits to the banking system: First, increase revenue and service market share. Banks not only collect transaction fees but also provide value-added products such as quick loans, micro-insurance, personal financial management, thereby diversifying revenue sources and reducing dependence on traditional credit (EY Vietnam, 2024).

Second, saving operating costs. According to the IMF (2023), processing electronic transactions is up to 90% cheaper than cash. Digitizing billions of transactions helps banks save trillions of dong in paperwork, human resources and money transportation costs.

Third, improve customer experience. Digital banking integrates payment, savings, investment, ticket booking, top-up... creating a comprehensive financial ecosystem, personalizing services based on user data, increasing engagement and trust.

Not only beneficial for banks, cashless payments also bring positive impacts to society: (i) Reduce cash risks, limit loss, fraud and storage costs; during the COVID-19 period, it also helps reduce direct contact. (ii) Increase transparency - electronic transactions are clearly traceable, contributing to preventing money laundering, tax evasion, and narrowing the underground economy. (iii) Promote financial inclusion, thanks to e-wallets and mobile banking, rural people, informal workers and low-income groups can all access basic financial services, towards the goal of "everyone having a payment account" by 2030. (iv) Modernize the economy, cashless payments become the driving force for e-commerce, digital economy and innovation. It is not only a means of

payment, but also the "soft infrastructure" supporting the entire national digital transformation process.

Table 2. Structure of payment methods in Vietnam (2023)

Payment methods	Usage rate (%)
Cash	54
Mobile Banking	22
Internet Banking	12
E-wallet	9
QR Code	3

Source: SBV (2024); Vietnam News (2025).

Although cash still plays a certain role, its usage rate is gradually shrinking, giving way to modern electronic payment methods. This shows that Vietnam is on the right track in building a cashless society, in line with the trend of the digital economy.

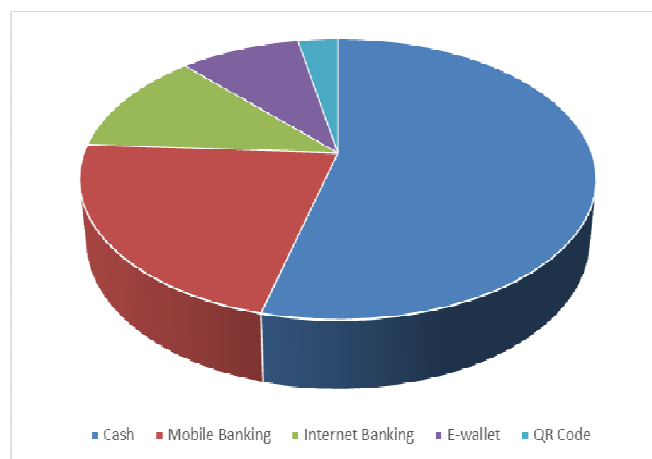


Figure 2. Usage rate of payment methods in Vietnam (2023)

Source: The authors.

Impact on banks. As the center of the payment system, banks must both invest heavily in infrastructure and benefit greatly from the shift to digitalization. Service revenue from cashless payments is becoming a new pillar in the profit structure. Banking service revenue increases by an average of 25% per year, mainly from money transfer fees, bill payments and e-commerce (SBV, 2024). Vietcombank is a clear example: in 2023, more than 65% of service profit will come from e-payments (Vietnam News, 2025). Techcombank and VPBank also stand out with their digital banking strategy, with service revenue accounting for over 30% of total income - an impressive increase compared to the previous period.

Along with revenue growth, banks also save significantly on operating costs. Dinh et al. (2018) pointed out that the cost of an over-the-counter

transaction is 5-7 times higher than an online transaction. With billions of transactions each year, this level of savings helps banks restructure their networks, reduce physical branches, invest in data centers and digital ecosystems, and move towards a leaner, more efficient operating model.

Increasingly fierce competition forces banks to constantly innovate customer experience. Today's digital banking applications not only meet payment needs, but also integrate investment, insurance, and online savings. Nielsen Vietnam (2023) shows that 78% of customers are satisfied with digital banking, in which "ease of use" and "multi-utility" are the two most highly rated factors.

With a ripple effect on society, cashless payments help reduce the risk of loss, theft, printing and transportation costs of cash, helping the economy save about 15,000 billion VND per year (SBV, 2024). Every transaction leaves a digital trace, supporting tax management, anti-money laundering and reducing corruption. According to the IMF (2023), thanks to electronic payments, the size of the underground economy in Vietnam has decreased from 22% of GDP in 2015 to 16% of GDP in 2022, an important step forward in financial transparency.

In particular, cashless payments contribute to promoting financial inclusion, helping people in remote areas access financial services through e-wallets and digital banks. Now, with just a mobile phone, they can receive remittances, social benefits or pay bills - which used to be a luxury in the past. This is a practical step towards the goal of sustainable development (UN, 2021).

Looking at the region, Vietnam is emerging as a bright spot in financial digital transformation, with fast speed, consistent policies and high adaptability. Cashless payments are not just a trend, but have become a strategic driving force for modernizing the banking system and the national economy.

Table 3. Comparison of cashless payment rates in ASEAN (2023)

Nation	Cashless Payment Rate (%)
Singapore	98
Malaysia	82
Thailand	74
Vietnam	46
Indonesia	41
Laos	21

Source: PwC (2022); IMF (2023).

Compared to Singapore and Malaysia, the rate of cashless payments in Vietnam is still low, but the growth rate is among the fastest in the region. Vietnam has the advantage of a young population structure, more than 60% under 35 years old and the internet penetration rate is among the highest in ASEAN. These are important foundations to narrow the gap in the period 2025-2030.

However, every development process has its downside. The rapid increase in cashless payments also exposes barriers: (i) Digital divide: more than 30% of the rural population does not have a bank account, mainly due to the lack of internet and smartphone infrastructure. (ii) User trust: Fraud, phishing, and fake messages are increasingly sophisticated, causing hesitation when making online transactions (Truong, 2025). (iii) Infrastructure costs: Small banks have difficulty investing in technology, causing strong market differentiation. (iv) Consumer habits: The elderly are still loyal to cash, making it difficult to change behavior in the short term.

From data to specific impacts, we can clearly see the two-sided picture of cashless payments in Vietnam. The bright side is the remarkable growth, banking benefits, social savings and opportunities for digital economic integration. The dark side is the challenges of digital divide, cyber security and consumer habits.

Despite its limitations, Vietnam has affirmed its position as a bright spot in ASEAN in digital transformation of the banking sector. This is an important foundation for drawing lessons for developing countries.

VI. LESSONS LEARNED IN DEVELOPING CASHLESS PAYMENTS

Over the past decade, Vietnam's journey towards cashless payments has been a testament to the harmonious coordination between the State, banks and technology. With the rapid pace of transformation in the region, Vietnam is considered a "typical laboratory" in building a digital society, where success comes from policy vision, banking innovation and people's trust.

First, lessons from digital banking. Vietnamese banks have put customers at the center, creating seamless, convenient experiences, meeting all financial needs on just one application. Techcombank, VPBank NEO and many other

banks show that convenience is the factor that makes people abandon cash. Along with that, the diversification of services, payments for electricity, water, tuition, healthcare, and shopping make digital payments blend into life. More importantly, security and trust become "intangible assets" that determine the success of cashless payments.

Second, lessons from state policies. Cashless payment projects, fee exemption and reduction policies, and a transparent legal framework have created a favorable environment for banks and fintech to develop. The NAPAS system connecting banks and e-wallets helps transactions to be fast, cheap, and safe, proving that strong infrastructure is the foundation of sustainable digital transformation.

Third, lessons from communication and awareness. The mindset of "holding money is more secure" is replaced by trust in digital utilities. The government and banks coordinate communication, guidance and financial education for the community, especially in rural areas, to help digital payments become more accessible and trustworthy.

Fourth, lessons from fintech cooperation. The combination of banks and fintechs such as MoMo, ZaloPay, ShopeePay creates a new payment wave, spreading strongly among young people and e-commerce.

Vietnam's experience shows that cashless payments are the result of a combination of the right policies, innovative banking, strong infrastructure, good financial education and effective public-private partnerships. The key lesson: put people at the center, ensure trust and convenience. If applied flexibly, developing countries can shorten the path to a cashless society, firmly entering the era of financial inclusion and digital integration.

VII. CONCLUSION

Cashless payment is no longer a trendy choice, but has become an inevitable trend in the process of financial and banking modernization. The case of Vietnam shows that when the right policy is combined with an effective digital banking strategy and social consensus, the transition from a "cash society" to a "digital society" can take place quickly and sustainably.

For more than a decade, Vietnam has achieved many outstanding achievements: the scale and value of cashless payment transactions have grown

strongly, especially through mobile banking, e-wallets and QR codes; commercial banks have increased revenue, saved costs and improved customer experience; society has benefited from reducing cash circulation costs, increasing transparency and promoting financial inclusion.

However, this journey also revealed challenges: the habit of using cash is still widespread, the technological infrastructure is uneven, the digital divide between urban and rural areas is still large and cyber security risks are increasingly complex. It is the parallel between achievements and difficulties that has created valuable lessons: putting customers at the center, considering security as the foundation of trust, building a transparent legal framework and encouraging public-private cooperation and a fintech ecosystem. These experiences are especially useful for developing countries. From a broader perspective, cashless payments are not only a story of technology, but also of cultural change and cultivating social trust. As cash gradually gives way to transparent electronic flows, society will move closer to the goal of sustainable development, inclusion and global integration.

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