

# Factors Affecting the Development of Cashless Economy in Vietnam

PhD. Nguyen Van Binh, AOF

E-mail: nguyenvanbinh@hvtc.edu.vn

PhD. Pham Quynh Mai

E-mail: maipqkinhte@hvtc.edu.vn

Luu Quang Huy

E-mail: luuquanghuy260608@gmail.com

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### **Abstract**

Cashless economy is a common development trend of countries. It reflects the development level of a country as well as ensuring financial transparency. In Vietnam, cashless payment has gradually become familiar to most people and businesses in society. By using traditional research methods, such as synthesizing information, combining with practical observations, the authors would like to analyze and clarify the factors affecting the development of a cashless economy in Vietnam as well as propose some solutions to promote the formation of a cashless economy in Vietnam

**Keywords:** Cashless payment, Cashless economy, Economic development, Digital technology

#### 1. Research Overview

Moutusi Tanha et al. (2024), in the study "Factors influencing the development of the cashless payment system: Comprehending the function of the involved participants" stated that Cashless payments are increasingly popular globally due to their numerous benefits. The highlight of this study is that, it focuses on clarifying the factors related to the cashless ecosystem, thereby identifying the key factors that influence participants in adopting the cashless payment ecosystem. The study affirms that human factors and human motivation are



among the factors that promote cashless payments.

A very interesting study by Lachlan Schomburgk et al. (2024) is related to the cashless effect in consumer spending. The study has shown that the business cycle affects the cashless effect, especially in the growth phase. The study has suggested ways for interested people, such as consumers, researchers, businessmen, managers, etc. to approach and build appropriate plans in their work.

From the perspective of SMEs, Anna Iwanczuk-Kaliska (2024) focuses on identifying opportunities and threats related to the concept of a fully cashless economy for businesses of different sizes and in different sectors of the economy. By identifying barriers and drivers related to the cashless economy from the perspective of businesses, the author suggests future research directions and applications in the field of cashless economy.

In Vietnam, the issue of forming a cashless economy has been mentioned for a long time, some typical studies can be mentioned as:

Nguyen Dac Hung (2022) with the study "Developing non-cash payments based on digital technology platforms". The study analyzed in the context of digital technology, showing that this is an important factor promoting the development of non-cash payments, at the same time, proposing some solutions for the coming period.

Phan Thi Hoang Yen and colleagues with the study "Factors affecting the development of non-cash payments in the digital economy" (2022) pointed out a number of causes affecting the sustainable development of non-cash payments in the digital economy in Vietnam. Some typical causes are: legal documents are not yet complete and synchronous; people's psychology is not ready to use; security issues in payments are not guaranteed; There is no synchronization in the integration connection between related units... The study has proposed a number of solutions and recommendations to remove the limitations in the coming time.

Pham Hoai Bac (2021) with the research paper "Inclusion financial towards a cashless economy in Vietnam". The research paper emphasizes that the Fourth Industrial Revolution is changing the structure, operation methods and provision of many modern services of the banking system, forming new financial products and services such as M-POS, Internet banking, Mobile banking, payment via visa cards, payment via links with e-wallets, chip card technology, Autobank CDM automatic banking... creating convenience for people in using modern banking services and saving transaction costs. Switching to a cashless system is a priority in the process of improving efficiency, promoting business and economic development, and reducing poverty in remote rural areas - where traditional financial service providers find it difficult to reach, especially in the context of the complicated developments of the Covid-19 pandemic as it is today. Therefore, promoting financial inclusion is the foundation for forming a cashless economy.

### 2. Research Results

### 2.1 What is Developing a Cashless Economy

Economic development is a change for the better, more progressive in all aspects of the



socio-economic system, which is the improvement of both quality and quantity of a country. The connotation of development is a change for the better and more complete. This change includes the change of both quantity and quality.

Thus, it can be said that Developing a Cashless Economy is a process of transition from an economy that uses a traditional payment system based mainly on cash, to an economy that uses an electronic payment system, where there are increasingly diverse options for electronic payment, creating more and more conveniences for users.

In term of quantity, developing a cashless economy reflected in the diversity and richness of e-commerce payment options, such as card payment - with many different types of cards, payment via e-wallet, QR code, mobile payment applications... It is also reflected in the increasing number of e-commerce users based on criteria such as age, profession and region.

In terms of quality, developing a cashless economy reflected through the flexibility in using cashless payment forms, convenience, safety, security and high accuracy. As a result, it will lead to trust, credibility and willingness of users to use cashless payment options.

A cashless economy is an ongoing global trend and it has the potential to bring many benefits to a country's economy and society, such as:

# Developing a cashless economy contributes to stabilizing currency circulation and reducing social circulation costs

Developing a cashless economy means promoting the proportion of non-cash payments in currency circulation, contributing to reducing the amount of cash in circulation as well as the necessary costs for cash circulation, directly affecting the price market, curbing inflation and stabilizing currency.

Expanding non-cash payments will increase the amount of money recorded and reduce the amount of cash in circulation, thereby reducing costs for society in general and the banking industry in particular due to the reduction of costs in printing, counting, transporting and preserving money.

# Developing a cashless economy contributes to increasing tax revenue, making the economy more transparent

In fact, when a cashless economy develops, revenue and expenditure activities are stored and controlled. The State can closely monitor and limit the loss of revenue. In cashless payment, when all transactions are conducted through the electronic payment system, tax collection will become easier and more accurate, helping to increase revenue for the state budget. Thereby, limiting the loss of tax revenue due to fraud and tax evasion, which are common when using cash. From the perspective of the overall economy, all activities of businesses and individuals - through electronic payment methods - will be transparent and clear; authorities can easily monitor the financial activities of businesses, thereby detecting early signs of irregularities and violations of the law. The management, monitoring of expenditures and supervision are also more convenient, promoting the effective operation of the economy, accurately controlling income to implement the Law on Income Tax for high-income



individuals.

Developing a cashless economy also helps to direct the implementation of national monetary policy more effectively. Expanding and developing a cashless economy contributes to the good implementation of the monetary policy of the State Bank: expanding the form of non-cash payment will reduce the large amount of cash in circulation and increase the amount of money recorded, which helps the Central Bank to effectively use the tools of monetary policy.

### Developing a cashless economy helps limit and minimize corruption status.

When a cash economy exists, it is easy to foster underground economies, fraud, tax evasion, and corruption to arise, develop, and it is very difficult to control. This is also one of the obstacles to investigating and detecting the above phenomena. When a cashless economy develops, all transactions and payments will go through a technology system, which means that all transactions will be recorded fully and transparently on the electronic system. This makes it easy for authorities to monitor and trace the origin, amount of money and related parties in each transaction. Limiting cash spending will help address loopholes in corruption management, thereby contributing to preventing corrupt acts such as bribery, "underground" commissions, price manipulation, etc.

Thus, cashless payments play a very important role. From the perspective of the banking industry, it fairly reflects the management level, technical level of the bank as well as the trust of customers. Within a bank, non-cash payment not only affects the payment business but also affects other aspects of the bank's business such as credit business. If non-cash payment is done well, it will promote the development of credit business and vice versa. From the perspective of the whole economy, a cashless economy will help promote growth, increase foreign investment attraction, increase tax revenue and support businesses to operate more effectively. Developing a cashless economy also increases convenience for users, helps increase the transparency of the economy, thereby reducing corruption, promoting a more modern and civilized society.

## 2.2 Factors Affecting the Development of A Cashless Economy in Vietnam

First, State policies. By issuing and perfecting development strategies, the legal system as well as preferential policies, the State is an important factor determining the formation and development of a cashless economy. The Government issues a strategy for developing a cashless economy in a systematic, synchronous, visionary manner with specific goals, roadmaps, solutions and resources that are suitable for reality, creating an environment, space and orientation for each citizen, business and sector in the economy to form the habit of not using cash in payment transactions.

Similar to the legal system. If the legal system ensuring the cashless payment system is not complete and synchronous, the users will not feel secure when participating in payment activities from both the perspective of payment organizers and users of payment services. Therefore, the legal basis for the non-cash payment system is the foundation to ensure that all users feel secure and actively participate in payment activities. The legal system related to



electronic payments, ensuring network security, protecting personal data and privacy of people and businesses is built clearly and transparently, creating a favorable legal environment for the development of a cashless economy. Preferential policies on taxes, fees, interest rates, etc. issued by the State also contribute to encouraging businesses and people to participate in the cashless economy. For example, reducing transaction fees, providing tax incentives for businesses using electronic payments, supporting people to open bank accounts and use electronic payment services.

In Vietnam, the Government has issued many policies and guidelines to promote the development of this form of payment. Accordingly, on December 30, 2016, the Prime Minister issued Decision No. 2545/QD-TTg approving the Project on developing non-cash payments in Vietnam for the period 2016-2020. Then, on February 23, 2018, the Prime Minister issued Decision No. 241/QD-TTg approving the Project to promote payment via banks for public services: taxes, electricity, water, tuition fees, hospital fees and social security programs... On October 28, 2021, the Prime Minister issued Decision No. 1813/QD-TTg approving the Project to develop non-cash payments in Vietnam for the period 2021-2025...

Along with the State's policies and guidelines, the State Bank of Vietnam also organizes the implementation of projects, programs, plans and policies to promote non-cash payments and digital transformation in banking activities, such as: Plan to implement the Project to develop non-cash payments for the period 2021-2025; Plan to Digitalize the Banking Industry to 2025, with a vision to 2030; Banking industry's plan to implement Project 06...

# Second, Payment Infrastructure

One of the differences of non-cash payments is that there must be a payment infrastructure. Investing in the development of a synchronous electronic payment infrastructure, including a national payment system, a mobile payment system, an online payment system, etc., will be a factor to ensure safety, efficiency and meet the increasing needs of people and businesses. The development of payment infrastructure will also help expand the electronic payment network to rural areas, mountainous areas, islands, etc. to ensure that everyone can access and use electronic payment services.

In Vietnam, Vietnamese commercial banks have invested heavily in new technology, core banking, API applications, building an open banking ecosystem... By the end of 2022, the banking industry will invest more than 15,000 billion VND in digital transformation activities, making Vietnam to become one of the leading countries in applying digital banking, with a growth rate of 40% in digital payments in the past years.

Mobile banking application, e-wallet of many credit institutions, payment intermediary organizations have allowed customers to access and use full banking utilities and services such as: money transfer, bill payment, insurance payment, overdraft, consumer loan... Cashless payment can be seen in services outside the bank (beyond banking) such as: delivery, car booking, ticket booking...

It is the result of developing of the banking and Fintech systems in Vietnam that are



providing a variety of convenient non-cash payment solutions for people. With the application of high technology and modern payment infrastructure, banking activities are increasingly providing a variety of products and services, acting as a bridge to promote the development of cashless payment forms.

However, a fact in Vietnam is the payment infrastructure is not yet complete, especially in rural and remote areas. The lack of internet connection, smartphones and electronic payment transaction points makes it difficult for people in these areas to access non-cash payment services. Moreover, currently in Vietnam, there are many different types of non-cash payments provided by different payment service providers, leading to a lack of consistency and making it difficult for people to use. Centralized and standardized software and data have not been synchronized, so it is difficult for organizations and localities to connect with banks for electronic payments

### Third, Capacity and awareness of businesses and people

The awareness of businesses and people will greatly determine the development of a cashless economy. Because businesses and people are ready to accept and give up the long-standing habit of using cash in payments, then the cashless economy will have the opportunity to develop. The capacity of businesses such as investment, equipping electronic payment systems in businesses, the ability and qualifications of employees in businesses will help their customers have many diverse, convenient and safe payment options, and businesses themselves will quickly convert to modern and safe payment methods.

As for people and consumers, the ability to implement is also an important factor. Often, the elderly will be very hesitant to use electronic means for payment. For them, holding money in hand and buying and selling directly gives them a sense of security and certainty, although they also understand the benefits of cashless payments.

The need for non-cash payments is deeply influenced by customs, habits and education levels. When education levels and incomes are raised, the need to expand relationships and exchanges will increase, people will have access to modern science and technology, at that time the use of non-cash payment methods for them is inevitable and everything will become simple.

In Vietnam, according to Visa's study on "Consumer Payment Attitudes 2022", the use of cash in Vietnam has decreased significantly compared to the same period in 2020. Specifically, 89% of consumers use e-wallets, 85% prefer credit cards and debit cards, mainly for online payments and contactless payments. According to data from the VisaNet network, the number of contactless transactions on Visa cards in Vietnam in 2022 has more than doubled compared to 2021.

In 2023, non-cash payment transactions increased by 52.35% in quantity; in which, the internet payment channel increased by 75.54% in quantity and 1.77% in value; via mobile phone channels increased by 64.26% and 7.65% respectively; especially, payments via other methods such as QR code and POS are continuously increasing and are being accessed and preferred by many people.



Both payment via e-wallet and QR code are the payment method that most young Vietnamese people love, in which, payment via QR code is becoming more and more popular, penetrating into all types of businesses, and used by many users, in many regions from urban to rural areas, with different levels and ages, not only young people but also the elderly. Payment via QR Code is widely available not only in large supermarkets but also in traditional markets, street vendors, vegetable stalls in the market... now people going to the market often only need to bring their phones to pay without cash.

The development of smart mobile phones along with the Internet, artificial intelligence... leads to new forms and means of payment such as electronic money, mobile money, QR code, financial technology organizations, telecommunications participating in the supply chain of financial products and services, helping to open up many new options for users. The convenience and speed of cashless payment has gradually changed the long-standing cash-using habits of Vietnamese people. With the support of technology and smartphone features, cashless payment brings great benefits to all users, including the elderly who are very willing to accept it. In cashless payment, the operations are quite simple, even for the elderly, the instructions, feedback information (money coming in, money going out in the account) are very fast, accordingly, users can immediately monitor the transactions being made. However, a part of consumers are still hesitant to approach new technology and payment methods, due to concerns about security and safety in payment. And the reality is that Vietnamese's habit of using cash is still quite popular, the proportion of cash in total means of payment is quite high compared to many countries in the world. On the business side, many businesses are still not ready to use modern payment methods, due to concerns about the synchronization in the e-commerce payment system or for some other reasons

## Fourth, the level of economic development as well as the economic integration

The level of economic development is directly related to the living standards of the people, consumer culture, the development of industries in the economy as well as the country's relationship with other countries in the world. The higher the living standards of the people will create conditions for them to use more electronic payment services. The more the economy develops, the more the need for exchange and payment increases, requiring payment to be fast, safe and convenient to meet the needs of exchanging goods and services. On the other hand, the development of the non-cash payment system contributes to the more effective use of capital in the economy, thereby promoting economic development.

Vietnam is considered a dynamic economy, with many successes in growth and improving the quality of life of the population. The dynamism and diversity of the economy and the development of industries in the economy have become factors promoting the formation of a cashless economy.

Similarly, globalization and international economic integration pose requirements for the formation and development of a cashless economy. Along with that, the policies of other countries can affect the attraction of investment in the field of electronic payments and the development of a cashless economy in Vietnam.



It is easy to see that Vietnam is increasingly integrating deeply into the world economy. This both creates opportunities and challenges for Vietnam in developing a cashless economy. The widespread use of cashless payments helps Vietnam integrate better internationally, especially in the field of e-commerce and international payments.

And the last, information technology and the safety in using

The development of science and technology allows organizations providing payment services to develop different payment services for customers to choose from. The development of information technology has created a leap forward in the payment field, strongly affecting the way people make a payment transaction, non-cash payment is developing at the fastest speed ever. The development of the internet and new electronic payment technologies, ensuring network security and protecting personal data... are important factors for developing a cashless economy.

Currently in Vietnam, technology, technological solutions, artificial intelligence... are developing rapidly, penetrating all fields and sectors of the Vietnamese economy; become a strong driving force for the development of a cashless economy in Vietnam. People's access to and use of technology is increasingly expanding. To ensure safety and network security for payment activities, the State Bank of Vietnam has regularly issued documents directing the entire industry to strengthen the security and safety of payment activities, including requiring credit institutions and payment intermediaries to review internal procedures and regulations; prioritize the application of opening payment accounts/electronic wallets by electronic means (eKYC) for customers using chip-embedded citizen identification cards; strengthen risk management, conduct 100% post-audit of accounts/electronic wallets opened by eKYC... In addition, the State Bank of Vietnam also coordinates with the Ministry of Public Security to organize inspections of information system security and the opening and use of payment accounts at many credit institutions and payment intermediaries; Implement Project 06 on population data applications to serve data cleaning, verify customer information through chip-based citizen identification cards, VneID accounts and support in providing banking products and services.

Communication work is also highly focused by the State Bank of Vietnam to raise awareness of information security, guide users on how to prevent payment fraud, how to protect and secure personal information when implementing cashless payment. Communication work is also constantly innovated, created, applying modern technology to increase dissemination, continuing to reach the general public, including people in remote, rural and disadvantaged areas.

In short, the development of a cashless economy depends on many factors. In Vietnam, these factors are basically promoting the formation and development of a cashless economy, however there are still some limitations that Vietnam needs to focus on solving in the coming time.

### 2.3 Solutions

Some solutions to promote the development of a cashless economy in Vietnam:



### First, Completing the technological infrastructure for cashless payments

Developing the technological infrastructure for cashless payments will help strengthen connections, cooperation, and sharing with other industries and sectors to effectively implement e-payments. In other words, it is necessary to upgrade and develop a modern payment infrastructure that operates safely, effectively, and has the ability to connect and integrate with other systems, such as connecting with the national population database, citizen identification database, and databases of other industries.

# Second, Developing modern payment services, applying achievements of the 4.0 Industrial Revolution

The 4.0 industrial revolution with basic characteristics such as digital technology, cloud data, artificial intelligence, etc. This is the foundation for developing a variety of payment products and services on a digital platform, ensuring safety, security, and convenience for users. Therefore, Vietnam needs to promote the strengths of the 4.0 industrial revolution to continue developing new, modern payment products and services

# Third, Developing cashless payments in e-commerce

During and after the Covid 19 pandemic, e-commerce has made a spectacular breakthrough in growth. Along with the development of e-commerce, payment methods are also increasingly diverse, in which cashless payment is a favorite channel, not only in Vietnam but in most countries in the world. In the current conditions of Vietnam, although there has been a significant improvement in electronic payments in all fields, however, for e-commerce, Vietnam needs to continue to improve, strengthen connections, and integrate between the cashless payment infrastructure of payment service providers, payment intermediaries with the infrastructure of payment acceptance units, thereby better meeting the requirements of cashless payments in e-commerce, at retail points and online payment of goods and services.

### Fourth, Developing cashless payments in rural, remote and isolated areas

Vietnam needs to pay attention to rural and disadvantaged areas by focusing on implementing solutions to develop diverse supply organizations, distribution channels, and cashless payment products and services according to the National Financial Inclusion Strategy; Encourage the development of non-cash payment products and services that are suitable for consumer behavior in rural, remote, isolated, border and island areas.

When the banking system has not yet reached each remote and isolated area, Vietnam can consider to deploy payment agent activities in rural, remote, isolated, border and island areas according to regulations. These agents will act as representatives of the bank, as an extension of the bank, so that cashless payment services can reach all people in rural, remote and isolated areas.

*Finally*, Vietnam needs to improve and promote the work of ensuring security, safety, inspection, supervision, and anti-money laundering in payment transactions, especially electronic payments including bank cards; at the same time, it is necessary to promote information, propaganda, training, guidance and consumer protection in non-cash payments.



### 3. Conclusion

Developing a cashless economy is an inevitable trend, forming a civilized, transparent and modern society. The result of this study is: based on the theoretical foundation of developing a cashless economy (that is, developing both quantity and quality), the article has identified and analyzed the factors affecting the development of a cashless economy in Vietnam, and at the same time proposed a number of solutions to promote the formation and development of a cashless economy in Vietnam in the coming time. The limitation of the study is that it has not used quantitative methods in the analysis, and this is the next research direction of the authors.

# **Competing interests**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### **Informed consent**

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### Data sharing statement

No additional data are available.

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