



Some Legal Issues About Fintech in Payment Activities in Vietnam

Nguyen Minh Hang^{1*}, Luong Thi Linh Chi²

¹Faculty of Economic Law, Hanoi Law University, VIETNAM.

²Faculty of Law, Hanoi Open University, VIETNAM.

*Corresponding Author (Tel: +84 904 177 211, Email: nguyenminhhang246@gmail.com).

Paper ID: 13A5P

Volume 13 Issue 5

Received 22 December
2021

Received in revised form
15 April 2022

Accepted 22 April 2022
Available online 29 April
2022

Keywords:

Financial technology
(Fintech); E-payment;
Banking payment
activity; Ewallet; Anti-
money laundering law;
Digital transaction;
Modern retail payment,
Online payment.

Abstract

The term Financial technology (Fintech) is the combination of finance and technology to create new services and products in the banking sector based on information and telecommunication technology platforms. The reality in Vietnam shows that in the past few years, Fintech companies have been operating in the provision of digital financial products such as mobile wallets, peer-to-peer transfer, mobile payment, mobile banking, peer-to-peer lending, etc. Accordingly, they have been licensed to carry out payment activities and some will provide banks with technological support for modern and efficient payment services. The authors have given two main groups of solutions: Completing regulations on operation conditions of Fintech companies; and Building and developing advanced and modern retail payment infrastructure. Including some basic solutions for the development and operation of Fintech companies in Vietnam.

Disciplinary: Business & Economic Management, Economic Law (Digital Transaction & Law).

©2022 INT TRANS J ENG MANAG SCI TECH.

Cite This Article:

Hang, N. M., Chi, L. T. L. (2022). Some Legal Issues About Fintech in Payment Activities in Vietnam. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 13(5), 13A5P, 1-15. <http://TUENGR.COM/V13/13A5P.pdf> DOI: 10.14456/ITJEMAST.2022.100

1 Introduction

In recent years, the use of digital technology has become an inevitable trend and has been the target and destination of financial and banking activities [1, 2]. Accordingly, the cooperation between fintech companies and banks has become more and more important and necessary. In 2020, Fintech Vietnam received many good signals due to connecting with service providers, applying technology, creating many digital transaction platforms and, above all, receiving direct support from the government [3,7,8,22]. Especially, according to the report on Fintech in Asia - the Pacific region of IDC Financial Insights, there are 5 representatives from Vietnam in Fintech Fast

101 group (Top 101 Fintech firms with the best growth rate in 2020) including Payoo and 4 major e-wallets, accounting for 92% of Vietnam's e-wallet market share, namely MoMo, Moca, Tima and ZaloPay [23]. The rapid development of technology and the explosion of these Fintech companies requires the construction and completion of a suitable legal framework for the Fintech system in general and payment activities in particular in Vietnam [4,6,9,10].

2 Literature Review

Fintech, standing for financial technology, is a broad term referring to all companies that use information and telecommunication technology to provide financial services [11]. They are penetrating nearly every section of financial services, promoting banking and financial activities, especially in the field of non-cash payments [12,16,17]. With innovative solutions, Fintech companies have provided new and modern payment solutions for customers to replace traditional payment services that require payment accounts at banks [13,14,15]. These payment services can be built based on the mobile phone system or the Internet such as E-money, mobile payment, payment via QR code or Peer to peer payment. The two markets that Fintech companies focus on developing include: (i) Payment for individual customers and retailers; (ii) Payments to businesses and retailers. Retail payment includes mobile wallets, mobile payments, peer-to-peer (P2P) real-time payments, foreign currency and remittances, and digital currency solutions [18].

Vietnam's banking payment activities are mainly handled through: (i) Payment systems organized, managed and operated by the State Bank (Paper/Electronic Clearing System; inter-bank electronic payment system) (ii) Switching and credit card clearing systems; (iii) Securities clearing and settlement systems; and (iv) Internal and Bilateral payment systems organized by banks, managed and operated by some credit institutions. International payment transactions are mainly handled by the International Money Transfer Service via the SWIFT system and the Western Union Money Transfer Service (WU) directly negotiated, signed, and cooperated by domestic credit institutions with international organizations [19,20,21].

With the advantages of technology advancements, Fintech companies have shown rapid growth in the field of payment intermediaries with diverse products and services such as electronic payment gateways, collection and payment support, and especially e-wallets. In addition, the trend of cooperation in providing intermediary payment services has supported commercial banks to expand their customer service range, contributing to promoting commercial payments in Vietnam.

3 Method

The descriptive and analytical methodology of this paper is supported by primary and secondary sources of research data: official documentation, books, independent reports, newspapers, and private stakeholders' analysis. Moreover, the field experiences of senior civil servants and eminent professionals have also been taken into consideration to reach conclusions and provide useful information.

4 Result and Discussion

Regarding the legal mechanism, Vietnam currently has not had a legal framework for Fintech companies, although the Government has issued many documents to regulate some contents on Fintech such as Law on Electronic transactions, Law on Cybersecurity, Scheme for payment of non-cash payments in Vietnam during 2016-2020; Scheme for Completing the legal framework for the handling and management of virtual assets, virtual money, electronic money; establishment of a Steering Committee in the field of financial technology. The technological intermediary payment services such as e-wallets, QR codes, and Mobile money, basically have a legal framework to ensure the legitimacy of the payment intermediary service providers, which are specified in documents such as Circular of the State Bank No. 39/2014 (Circular No. 39/2014) guiding payment intermediary services and have been amended and supplemented many times at the Circular No. 39/2014/TT-NHN (Circular of the State Bank 20/2016; Circular of the State Bank 30/2016), Circular of the State Bank 23/2019 has amended and supplemented a number of articles of Circular No. 39/2014 that concretize management and supervision requirements for e-wallet services; it has also mentioned some contents regulating the operation of Fintech companies in Vietnam.

4.1 The Law on Payment Activities of Fintech

4.1.1 Operating Conditions of Fintech Companies in Payment Activities

Decree 101/2012 dated 22/11/2012 of the Government on non-cash payment (hereinafter referred to as Decree 101/2012) is the precondition for intermediary payment activities; The amended and supplemented documents only provide a few contents regulating the operation of E-wallets - a popular type of payment intermediary that Fintech companies in Vietnam are providing in operation. Therefore, the legal framework for the model of Fintech companies operating as payment intermediaries is only mentioned much about the conditions, and operating regulations to ensure the safety of e-wallets, specifically:

Article 15, Clause 2 of Decree No. 101/2012 stipulates that the conditions for establishing a payment intermediary are “Having an establishment license or business registration issued by a competent state agency, in which providing intermediary payment services is one of the main business activities of the organization”. Legally, this regulation has ensured the legitimacy of the organization that wants to participate in payment service activities.

In addition, Article 15, Clause 2 of Decree No. 101/2012 stipulates personnel conditions: “The legal representative, the General Director of the organization applying for the permit must have professional qualifications or practical experience in business administration of their in-charge field. The staff performing intermediary payment services must be professionally qualified for their operation”. This is an unclear condition in terms of management objectives and does not seem to be really in line with the objectives in business conditions specified in Article 7 of the Law on Investment. If this regulation is to ensure the operational efficiency of the enterprise, it is not

necessary because this is the need of the enterprise itself. In fact, payment intermediary service providers have been operating effectively for many years without a legal representative and/or key personnel to meet the mentioned conditions.

In addition, this document stipulates professional conditions and technical, including technical infrastructure physical foundation, facilities meeting the requirements of the provision of payment intermediary services the State Bank's regulations; intermediary services to assure safety; a backup technical system independent from the main system to assure the safe and uninterrupted provision of services when the main system breaks down; technical and professional processes in the provision of payment confidentiality and compliance with the law on e-transactions; internal examination and control processes for payment intermediary services in e-transactions. This regulation is quite general, it is difficult to quantify (which facilities are supposed to meet the requirements of the payment intermediary service operation?) This will cause difficulties for businesses in practice and give more powers of presumption to enforcement officers.

In addition, Decree No. 101/2012 stipulates operating conditions for e-wallets: "E-wallet is a service that provides customers with an identified electronic account on information carriers (such as computers, mobile phone sims, electronic chips...) created by a payment intermediary service providers, enables to store a monetary value secured by money value deposit equivalent to the amount transferred from the customer's payment account at the bank to the secured payment account of the e-wallet service provider at the ratio of 1:1". Thus, an e-wallet is understood as an electronic account identified by the information carrier to store a monetary value that is equivalent to the value of the deposit transferred from the customer's payment account into the secured account of the e-wallet service provider. An E-wallet or digital wallet is simply an electronic account integrated into mobile applications or used via a website as a wallet to help users store money from bank accounts functioning online payment and transactions with electronic websites or internet fees that are linked and allowed payment by e-wallets. These service providers will cooperate with banks to manage users' funds and through this connection, the banks will reduce their management of payment transactions from customer cards because these will be done by e-wallet providers.

In addition, Circular No. 39/2014 dated 11/12/2014 of the Government guiding payment intermediary services (hereinafter referred to as Circular 39/2014) stipulates: "*The deposit into or withdrawing money from the customer's e-wallet must be done through the customer's payment account at banks*" (Clause 3, Article 8). According to the provisions of Circular No. 16/2014 of the State Bank in Vietnam dated August 1, 2014 guiding the use of foreign currency accounts and Vietnam dong accounts at authorized banks of residents and non-residents, there are no regulations regarding the use of foreign currency accounts to deposit into E-Wallets.

In practice, according to current management regulations, an e-wallet service provider may not: (i) issue more than one e-wallet for a customer's payment account at banks; (ii) grant credit to customers using E-Wallets, pay interest on E-Wallet balances, or any actions that may increase the

currency value on E-Wallets. Organizations providing e-wallet services must have tools for the State Bank to monitor and check in real-time the total amount of customers' money on e-wallets and the total amount of the secured payment accounts of e-wallet service providers at banks. The deposit into and withdrawal from the customer's E-wallet must be done through the customer's payment account at banks. Thus, Fintech companies providing payment services in the form of e-wallets are mostly linked to customers' bank accounts, and customers rarely deposit money directly into e-wallets or into Fintech company accounts; Therefore, it is important to have a clear legal framework to control the activities of Fintech companies in payment operations, especially in non-cash electronic transactions.

4.1.2 Regulations to Ensure the Safety of Payment Transactions

Payment intermediary service providers, including Fintech companies, are responsible for keeping confidential information related to customers in accordance with the law (specified in Decree No. 101/2012 and the Law on Cyber Information Security). At the same time, they must also comply with risk management principles in e-banking activities; comply with requirements to ensure security and safety of regulations and information technology systems on safety and security for the provision of banking services on the Internet (Circular No. 39/2014/TT-NHNN, Circular No. 39/2014, Circular No. 18/2018, Circular No. 35/2016 of the State Bank of Vietnam).

In addition, Points b and c, Clause 1, Article 17 of the Law on Cyber Information Security stipulate: Organizations are responsible for only using the collected personal information for purposes other than the original one after having the consent of the personal information owner; they must not distribute the information collected or provide, share, accessed or controlled to third parties, except with the consent of the owner or at the request of the competent state agency. In addition, payment intermediary organizations, including Fintech companies, must ensure the security and safety of payment intermediary activities as prescribed in Article 7 of Circular No. 39/2014 of the State Bank of Vietnam; Accordingly, it requires payment intermediaries to develop and comply with the State Bank's regulations on e-banking activities have risk management principles, with current laws on prevention and combat of money laundering, with requirements on ensuring safety and security of information technology systems, with regulations on security and safety for the provision of e-banking services according to regulations of the State Bank and other relevant regulations.

In addition, Circular 23/2019 of the State Bank of Vietnam guiding payment intermediary services stipulates many other solutions to protect the interests of customers using payment intermediaries - Fintech companies, including e-wallets as follows:

(i) Point c, Clause 6, Article 9 of Circular 23/2019 of the State Bank of Vietnam prescribes: Total transaction limit via personal e-wallet of 1 user at 1 e-wallet service provider is up to 100 (one hundred) million dong per month. This regulation is to better manage E-wallet activities, avoid the widespread and impractical e-wallet registration of users, and be in line with the current development of the e-wallet market in Vietnam. Circular 23/2019 of has not stipulated transaction

limits via e-wallets for user organizations because these are normally used for various purposes such as paying salaries for company employees, and managing internal revenues and expenditures, if a certain limit is specified, it will cause difficulties for organizations/enterprises to apply for payment via e-wallets in practice.

(ii) Regulations on e-wallet activities include Dossier to open e-wallet, personal information verification of the user, connection between e-wallet and a domestic payment account/debit card of the user. These regulations are due to the fact that the payment intermediary service acts as an intermediary that connects, transmits and processes electronic data of payment transactions between payment service users and payment service providers. Therefore, the intermediary payment services - operations of Fintech companies (including e-wallet services) must be provided to customers who already have accounts at banks. The e-wallet service needs to ensure the users' identity and must connect to their payment accounts at banks.

(iii) The State Bank supervises the activities of Fintech companies when they provide payment services;

(iv) Fintech companies providing payment services must stipulate and inform the terms and conditions of service used to customers, guide them to use the service and the regulations on the handling of checks or complaints.

In addition, Circular 23/2019 of the State Bank of Vietnam has regulations on the following prohibited activities: Using e-wallets to conduct transactions for terrorist financing, money laundering, fraudulent, cheating and other law-breaking purposes; renting, leasing, borrowing, lending e-wallets or buying and selling e-wallet information; E-wallet service providers are not allowed to grant credit to e-wallet users, to pay interest on e-wallet balances or any actions that may increase the currency value on e-wallets compared to the value of money deposited

In addition to the above provisions, Fintech companies providing e-wallet services must provide tools for the State Bank to supervise the provision of e-wallet services in the followings:

First, monitoring the total number of e-wallets (issued, activated and active), the total e-wallet balances of all customers at the time of accessing the monitoring tool;

Second, monitoring the total balances of payment assurance accounts for e-wallet services, information of each secured payment account for e-wallet services opened at cooperating banks, including account name, account number, balance at the time of accessing the monitoring tool;

Third, exploiting data in the monthly reports (from the 1st to the last day of the month) on the 5th day of the following month at the latest (Including the total number and total balances of e-wallets (issued, activated and active) at the end of the last day of the reporting period; the total number and total value of deposits, withdrawals, payments and other transactions of the e-wallets are reported on each day of the month; the total number and the total value of transactions on Debit side, the total number and the total value of transactions on the Credit side of the secured payment account guarantee for e-wallet services reported on each day of the month).

Moreover, for the 10 e-wallets with the highest number of transactions per object, Fintech companies must provide information to the State Bank of Vietnam (the units accepting payment; individual customers, and institutional customers but excluding individuals and organizations that accept payment). The information must include opening balance, ending balance; total amount and the total value of deposit and withdrawal transactions according to each affiliated bank; total amount and the total value of payment transactions, money transfers.

4.2 Practices of Fintechs in the Field of Payment

4.2.1 Achievements of Fintechs in the Payment Segment

Statistics show that the number of Fintech companies providing services in the Vietnamese market has increased rapidly, in 2016 with about 40 companies, and by April 2021, about 200 units have been licensed by the State to operate. The main fields of activity of Fintechs are payment intermediaries, including financial switching, electronic clearing, payment gateways, support for foreign currency transfer, revenue/expenditure support, and e-wallets[31]. Statistics show that Fintechs are operating in the following segments in Vietnam: providing payment tools such as Moca, Payoo, VinaPay, Momo... or providing POS/mPOS4 digital payment solutions such as Hottab, SoftPay; some companies provide fundraising platforms such as FundStart, Comicola, Betado or FirstSetp...; provide online loans such as LoanVi, Timal; personal financial management such as BankGo, Moneylover, Mobivi; data management such as Trusting, Social, Circle Bii; money transfer like Matchmovie, Cash2vn; Blockchain like Bitcoin Vietnam, VBTC Bitcoin [32]. Thereby, it shows that the number of Fintech companies in Vietnam increases yearly and most of them are in the payment field, as shown in the following chart from 2017-2020.

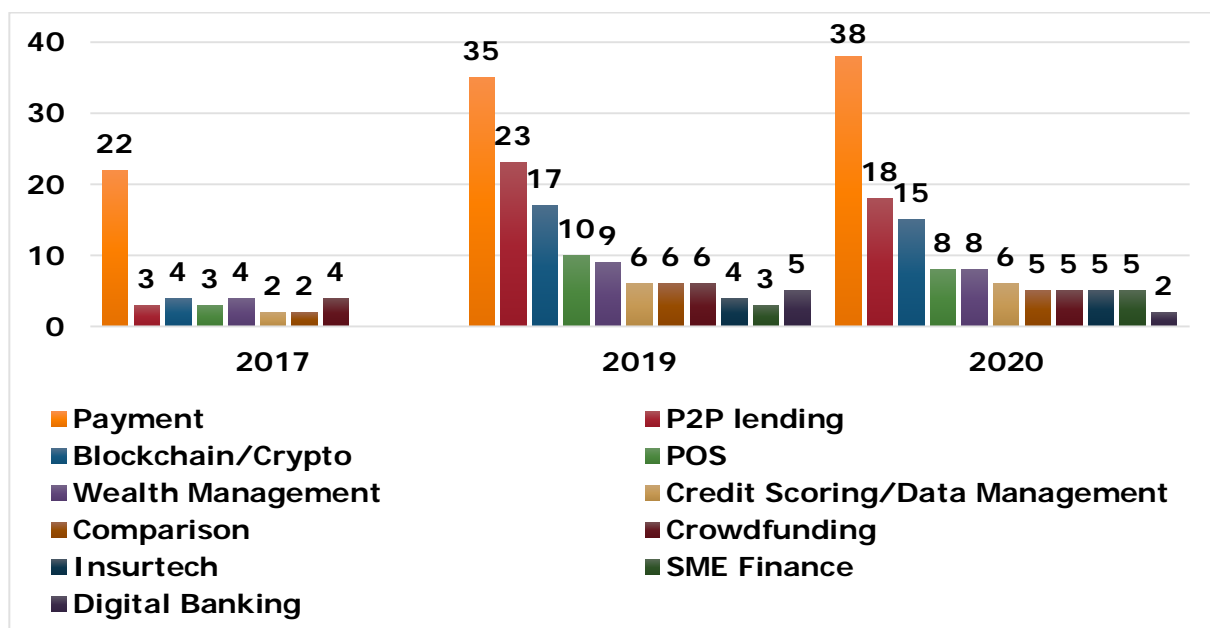


Figure 1: Number of Fintech Companies in Vietnam in 2017-2020.

The forms of payment via e-wallets basically meet the payment needs of consumers in the current rapid development of e-commerce with a number of advantages such as:

- There is a quick and convenient form of top-up and payment, including website and mobile application, anytime, anywhere with just a few simple steps and confirmation of transaction password.;

- Reducing users' working and traveling time, making payment transactions quicker and easier. At the same time, users can query account information anytime, anywhere, especially without having to carry cash, reducing the risk of losing money or being stolen;

- Enhancing security of transactions, allowing payment of small fees, easy to use and popular (since it may not need to connect with a bank account during the payment process) and wide range of uses. In addition, the e-wallet can be used for ordinary daily payments and other applications such as smart cards or Internet payments.

According to research and survey by the Institute of Banking Technology Research and Development under the Vietnam National University, Ho Chi Minh City (VNUHCM-IBT), there are about 200 Fintech companies in Vietnam in fields such as payments (37 companies)) is the most popular Fintech in Vietnam market with popular types are Mobile Wallet, Mobile Payment, Mobile Banking; loans (25 companies); Blockchain, Cryptocurrencies and Remittances (22 companies).

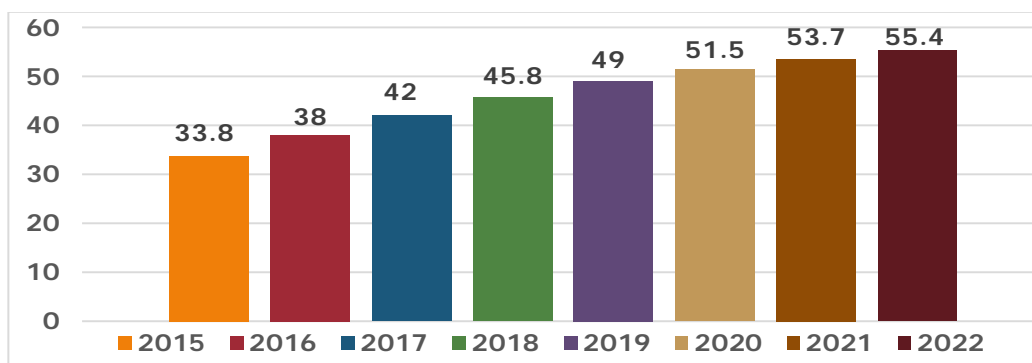


Figure 2: Number of mobile phone users with Internet connection in Vietnam (million users).

In addition, the development of technology and the trend of cashless payment in Vietnam shows the increasing number of consumers who have adopted payment applications of Fintech companies such as e-wallets. According to statistics from the State Bank of Vietnam, by the end of 2013, there were about 1.84 million e-wallet users with a total transaction volume of USD 1.1 billion. By 2016 this number reached 3 million and it is expected to exceed 10 million users in 2020 (Fintech development in the payment field in Vietnam).

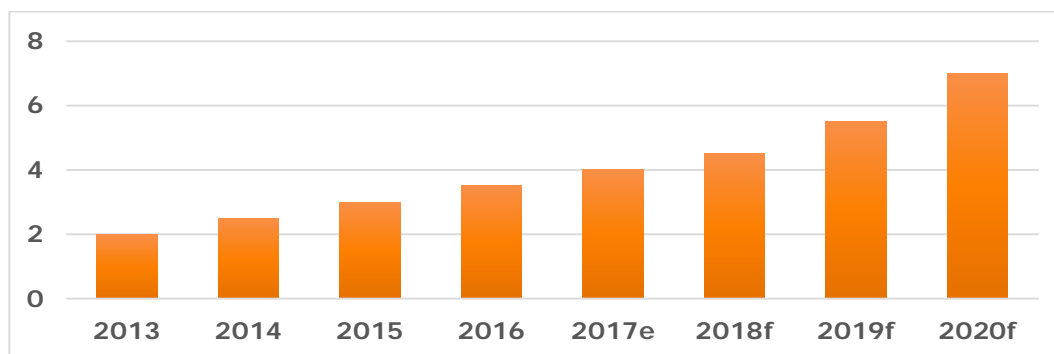


Figure 3: Number of e-wallet users in Vietnam 2013-2020f (million users).

In fact, in recent years, Fintech companies in the Vietnam market have competed fiercely for this lucrative market share to launch a series of e-wallet brands such as Momo, ZaloPay, Bankplus, Samsung Pay, Payoo, eDong, 1Pay, Bao Kim, Vimo, VTC Pay, Mobivi, eMonkey, Pay365, FPT Wallet, TopPay, Ngan Luong, AirPay, etc. With the strength of convenience and diverse ecosystem, MoMo - e-wallet of Online Mobile Services Joint Stock Company has quickly been connected by banks. The excitement and attractiveness of e-wallets have attracted commercial banks as well as large technology companies and corporations to gradually penetrate the market (Figure 3). Up to now, many banks have developed electronic payment systems. Regarding the popularity, from subscriber data and market share announced by e-wallet businesses, MoMo is currently the largest and most popular market share in Vietnam. Besides Momo, there are also many brand names from domestic and foreign investors such as Airpay, Moca, Payoo, Zalopay, VinIDPay (Figure 4).

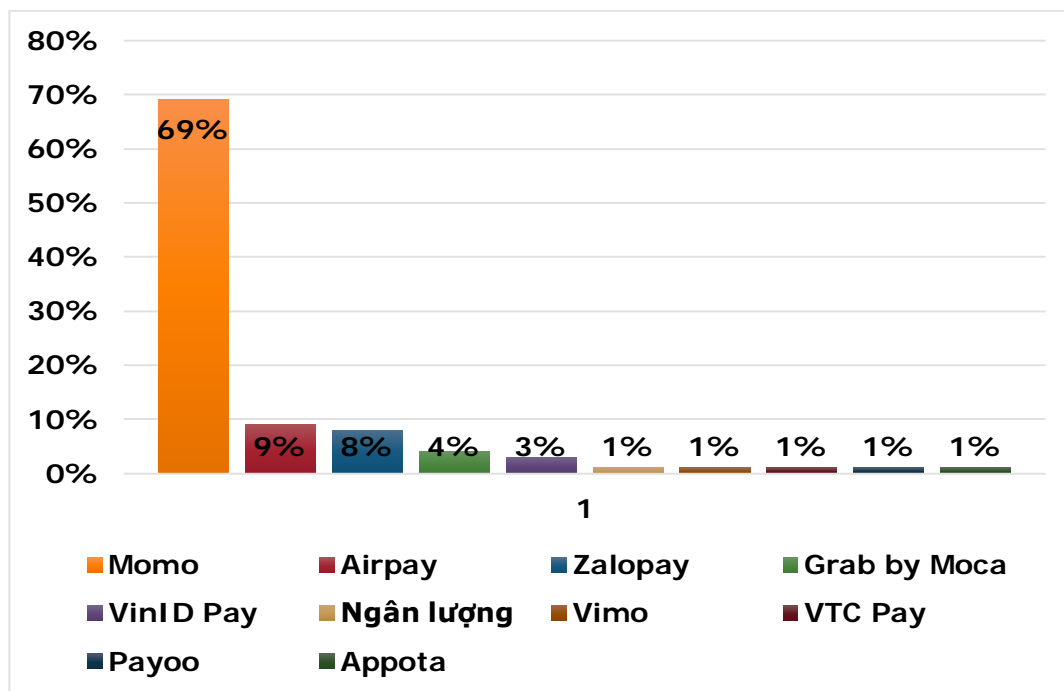


Figure 4: Popular and favorite e-wallets in Vietnam today

Figure 3 shows that Vietnam is one of the potentially fastest-growing markets in the region for the application of technology payments through Fintechs such as e-wallets. It has a strong impact on promoting the growth of electronic payment. In addition, there are other advantages as followings: The Government encourages the development of non-cash payment; businesses give priority to using modern payment technology; types of e-commerce, business, consumption activities, commerce, shopping, services, and domestic tourism have developed rapidly; This has also had great impacts to the development of Fintech companies in Vietnam in the field of payment.

4.2.2 Difficulties and Limitations for Payment Activities of Fintech Companies

In providing payment services, including e-wallets, Fintech companies have encountered some difficulties and limitations. These come from several reasons as follows:

First, there is no clear legal corridor for the operation of e-wallets, without specific regulations and guidelines; The new regulations focus mainly on conditions, dossiers, procedures, licensing procedures, the definition of e-wallet service, secured payment accounts for e-wallet service, rights, and responsibilities of users, of related parties. The e-wallet services in Vietnam are still in the early stage, attracting much attention from the information technology community and the participation of domestic start-ups. In addition, E-wallet service providers must comply with the law on the prevention and combat of money laundering, however, the reporting subjects currently specified in the Law on Anti-Money Laundering do not include payment intermediary service providers, which causes Fintech companies providing e-wallets difficulties in implementing and complying with the regulations; therefore, in the coming time, it is necessary to have guiding documents, uniformly adjust regulations on subjects to be applied and comply with regulations on prevention and combat of money laundering.

Second, Fintech companies providing payment services still have difficulties in developing services, especially providing for those who do not have bank accounts, and who live in rural and remote areas. For services like e-wallets, specific regulations on classification and application of bank accounts/e-wallet accounts by level (with classification criteria such as basic account, transaction limit; transaction function, the purpose of usage and level of providing customer identified information) should be studied and applied in practice to facilitate the development of e-wallet services.

Third, the operation of Fintech companies providing e-wallet services in Vietnam now is a new field, it is quite complicated and challenging for inspection and supervision. Some Fintech companies have not yet fully complied with legal regulations such as allowing the opening and activating e-wallets that are not attached to customers' payment accounts at banks, attaching and recharging e-wallets from the customer's credit cards or by other means. An electronic payment gateway service is a service that provides the technical infrastructure to make the connection between banks and payment acceptors in order to support customers to make payments in e-commerce. In addition, with the role of providing the payment infrastructure of the system, some financial switching service providers have cooperated with unlicensed electronic payment gateway providers resulting in unintentionally abetted gambling and money laundering in the market. In addition, some international organizations have already provided payment services in Vietnam but have not yet registered their business and had a commercial presence in Vietnam. This will lead to risks in operation, liquidity, and being induced to join illegal activities, and difficulties in management. Therefore, there have been legal loopholes that create huge pressure in managing the activities of organizations licensed to provide intermediary payment services.

4.3 Results and Recommendations

Currently, about 150 Fintech companies are operating in many different fields, of which the majority of Fintech companies (nearly 72%) are cooperating with commercial banks under the

business cooperation model. In fact, payment activities account for the largest proportion of Fintech companies' operations in the Vietnam market (60.5% of all fields of Fintech companies) [23]. Besides, Fintech in Vietnam has been attracting the special attention of large technology companies to participate in the market through both direct and indirect forms such as investing in the formation of Fintech companies, establishing investment funds, and incubators to support Fintech start-ups, etc. Besides favorable conditions from the attention of the Government and the State Bank in the context of technology 4.0, the development of Fintechs in the payment field in Vietnam is facing the following main challenges: (i) the habit of cash payment is still popular, worries about new financial services based on technology, (ii) cashless payments remain limited in the public sector; (iii) the legal framework has not kept pace with the rapid development of technology, (iv) the fee for cross-border payment services is still high, the cross-border payment service is a big challenge, (v) customer's knowledge and customer training are limited. In Vietnam, the financial and banking sector has many potential risks, so it is being regulated by state documents on the operation of traditional credit institutions such as the Law on Credit Institutions (2010), the Law on Credit Institutions and the Law on Credit Institutions. agreement instruments (2005), Ordinance on Foreign Exchange (2005), Law on Anti-Money Laundering (2012), Law on Deposit Insurance (2012), Ordinance amending and supplementing a number of articles of the Ordinance on Foreign Exchange (2012). 2013) ... However, there is no synchronous system to regulate the activities of Fintech companies. Therefore, the author proposes some recommendations on the development and improvement of regulations.

4.3.1 Completing Regulations on Operation Conditions of Fintech Companies

First, maintaining the operating license of Fintech companies providing payment services: Payment intermediary services, including e-wallets, which relate to mobilizing money from organizations and individuals, may arise operational, liquidity and service risks to engage in illegal transactions. Therefore, it is necessary to continue to maintain licensing for Fintech companies providing payment services to meet market requirements and to create conditions for them to operate in accordance with the law, under the management of competent agencies and have a safe and sustainable operation.

Second, issuing regulations related to electronic money: Electronic money in Vietnam is currently is in the form of prepaid cards provided by banks and e-wallets. Cryptocurrencies are not a new one, but a type of fiat currency in the form of a payment instrument or means of payment to perform transactions and are guaranteed at a rate of 1:1 of fiat currency. Therefore, it is necessary to carry out additional research on cryptocurrency regulations to clarify the concept, nature, form of expression of electronic money and issues related to this in legal documents, licensing authority, and conditions for electronic money supply; management and risk control process to ensure safety and security of customer's transaction information, as well as compliance with regulations on anti-money laundering; to ensure the protection of customers' interests, rights and responsibilities of related parties, so as to better meet the requirements of state management, catching up the

development trend of technology and in accordance with international practices. At the same time, determine the scopes and objects of the electronic money supply to issue appropriate management regulations. The identification of electronic money as a means of payment will help state management agencies have more effective management and supervision measures to prevent illegal tools in currency transactions.

Third, researching and issuing several management regulations for the operation of Fintech companies providing payment services, ensuring that their performance is safe, effective, and substantial, minimizing risks, and preventing the abuses of Fintech companies in illegal acts... which includes:

(i) Maintaining the regulations on the payment through Fintech companies connected with the customer's bank account and the deposit/withdrawal money from Fintech companies including e-wallets must be done through the customer's bank account at banks;

(ii) Setting payment transaction limit through e-wallets and of Fintech companies in accordance with Vietnam market practice.

Fourth, regulating on expansion and flexibility in the deposit/withdrawal from various payment service providers of Fintech companies such as depositing/withdrawing money from e-wallets to facilitate service users, which helps service providers to expand utilities, improve experience and attractiveness to users, such as: (i) Allowing the recharge by receiving money from other e-wallets (either opened by the same or by another provider); (ii) Allowing the transfer from E-wallets to E-wallets (opened by the same or by another provider); allowing payment for legitimate goods and services; withdrawing money from the E-Wallet to the customer's payment account or debit card linked to the E-Wallet; (iii) Setting no limit to the number of payment accounts/debit cards of customers linked to the E-Wallet; E-wallet owners can choose accounts and cards to link with e-wallets, creating flexibility and favorable conditions for customers in using e-wallets; (iv) Supplementing specific regulations on opening e-wallets of customers (wallet opening dossier, necessary information and documents, measures to authenticate customer information, linking e-wallets to accounts); payment (or debit card) at banks.

Fifth, the payment intermediary services of Fintech companies in Vietnam have mainly served customers with bank accounts in urban areas because of some strict requirements from the State Bank. Therefore, they should consider providing services to customers in rural areas, and to the ones who do not have a bank account in order to promote financial inclusion.

Sixth, supplementing and clarifying the roles and responsibilities of Fintech companies providing intermediary payment services, banks and related parties, especially in the management of payment acceptance units, in the connection model between e-wallet providers and parties, to strengthen the responsibility of service providers and banks when developing payment services for payment acceptors, limiting risks from units accepting fake payments or providing goods/services out of the law.

4.3.2 Building and Developing Advanced and Modern Retail Payment Infrastructure

First, connecting the payment infrastructure of banks and Fintech companies to perform payment transactions quickly and efficiently, saving costs and resources for banks and Fintechs when connecting services to a focal point instead of each bank, Fintech makes separate connections.

Fintech companies can exploit the customer network, data and capital of the bank to provide their products and services to meet market demand. Accordingly, Fintech companies need to diversify payment services in customers' lives to meet their needs of customers, for example, customers can pay for online orders, for electricity, water, internet bills, recharge mobile phones, etc. Besides, for mobile payment wallets, customers who want to use them must link with a bank card in advance, this also means the cooperation of the bank in this digital form of payment.

Second, promoting the research and application of blockchain technology, distributed ledger technology to quickly apply in the field of finance - banking and other fields due to the huge benefits of these technologies. Along with the technology factor, it is necessary to improve the quality of human resources for the capture and management of FinTech technology. In addition, it is necessary to set up a specialized regulatory agency in the field of construction, development and management of a nationwide digital payment system, to issue guidelines on how to develop management for suppliers and how to use it with consumers.

5 Conclusion

Fintech companies have been penetrating nearly every segment of financial services, promoting banking and financial activities, especially the growing field of non-cash payments. This is currently one of the main areas of Fintech companies in many countries, especially in those with a low rate of accessing financial, banking, or payment services of people. With the high demand for utility in the context of rapid growth society now, Fintech companies need to build a payment ecosystem in different forms, these payment services can be built based on the mobile phone system or the Internet such as electronic money, mobile payment, payment via QR code or Peer to peer payment. Accordingly, the completion and application of regulations for Fintechs in payment services is necessary and should be learned from experience. There should also be a mechanism for testing and evaluating their effectiveness in the most comprehensive way.

6 Availability of Data and Material

All information is included in this study.

7 Acknowledgement

The authors thank the support and facilitation of the School of Law, Vietnam National University, Hanoi, Vietnam and The Vietnam Women's Academy gave the authors time to complete the research.

8 References

- [1] BankNetVN, (2014). Current situation of payment intermediary services. *Proceedings of the Scientific Conference on Solutions for developing and managing payment intermediary services in Vietnam*, Dan Tri Publishing House: Hanoi.
- [2] Karakas, C., Stamegn, C. (2017). *Financial technology (FinTech): Prospects and challenges for the EU*. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599348/EPRS_BRI\(2017\)599348_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599348/EPRS_BRI(2017)599348_EN.pdf)
- [3] SVB. (2022). *Creating a favorable legal foundation for Fintechs' activities*. <https://www.sbv.gov.vn/webcenter/portal/vi/menu/tranqchu/hdk/cntt/clptcntt/clptcntt>
- [4] Dang Cong Thuc. (2017). Fintech trends in banking sector and early movements in Vietnam. *Banking Magazine*, No. 19, October 2017.
- [5] IMF. (2018), *Financial access surveys 2018*. <http://data.imf.org/?sk=EñDCAB7E-ACCA-4592- AREA-S 9hB5463A34C>
- [6] FFIEC. (2004). *Handbook of Retail Payment Systems*. Federal Financial Institutions Examination Council, The Bank of Viet Nam.
- [7] SBV. (2018). *A Report on Completing Vietnam Fintech Ecosystem*. Fintech Steering Committee, State Bank of Vietnam.
- [8] SBV. (2019). *A Report on Operation Plan of Vietnam Fintech Steering Committee*. Fintech Steering Committee, State Bank of Vietnam.
- [9] Le Huyen Ngoc. (2018). Fintech's impact on banking activities and some proposals for banks and Fintech to develop together in Vietnam. *Proceedings of the conference on Future of Fintech and Banking: Development and Renew*, 147- 156
- [10] Mal Lan. (2018). Will the Fintech wave and the 4.0 Industrial Revolution make it difficult for the banking industry?. *Business Forum Newspaper*.
- [11] Nguyen Ha. (2017). *Fintech - The new development or temporary trend in Vietnam*. <https://techinsight.com.vn/fintechhuong-phat-trien-moi-hay-xu-huong-nhat-thoi-tai-viet-nam/>
- [12] Nguyen Ha. (2018). *Comments on the future of Fintech*. <https://doimoisanqtao.vn/news/2018/9/27/nhn-nh-v-tnelai-ca-fintech>
- [13] Nguyen Thl Hoa. (2017). Overview of financial inclusion, the role of digital technology in promoting financial inclusion in Vietnam. *Vietnam Banking Conference 2017*.
- [14] Nguyen Thl Thanh Nhan. (2018). Fintech business models in the world and suggestions for Vietnam. *Banking Magazine*, 9(May).
- [15] Nguyen Minh Ngoc, Ngu Yen Le Thao Huong, Chu Nhat Anh. (2019). Building and analyzing financial inclusion indicators. *Banking Science and Training Journal*.
- [16] PWC. (2016). *FinTech 2020 and Beyond: Embracing Disruption*.
- [17] PWC. (2020). *Financial Services Technology 2020 and Beyond: Embracing Disruption*. <https://www.pwc.com/qx/en/financial-services/assets/pdf/technology2020-and-beyond.pdf>
- [18] PWC. (2017). *Global Fintech Report*. <https://www.pwc.com/gx/en/industries/financial-services/assets/pwc-global-fintech-report-2017.pdf>
- [19] Trinh Ngoc Lan. (2019). *Fintech ecosystem development: lessons learned and recommendations towards sustainable development in Vietnam*. <http://thitruonftaichinhthiente.vn/phat-trien-he-sinh-thai-fintech-bai-hrc-kinh-nfhiem-va-de-xuatnam-huong-toi-phat-trien-ben-vunq-tai-viet-nam-23949.html>
- [20] Masoffer. (2020). *True Money: Vietnam Fintech Market Report 2017*. <https://fintech.masoffer.com/vi/bao-cao-thi-truong-fintech-viet-nam-2020/7814>

- [21] Sanicola, L. (2016). *Will Fintech help or hurt traditional advisors?*. CN BC. <http://www.cnbccorn/2016/05/25/will-Fintech-help-or-hurttraditional-advisors.html>
- [22] SBV. (2020). Financial technology and Industrial Revolution 4.0: Electronic Information Portal of the State Bank of Vietnam. *Vietnam Fintech Landscape 2020*. <https://finfan.vn/news/bao-cao-fintech-viet-nam-2020-1382>.
- [23] Vn. (2019). Vietnam's Top 500 largest enterprises in 2019 Vietnam Report. *A Seminar on Future of FINTECH and Banking, Development and Innovation*. <http://sob.uoh.edu.vn/thong-tin/ky-yeu-hoi-thao-khoa-hoc-tuong-lai-cua-fintech-va-ngan-hang-phat-trien-va-doi-moi.html>
-



Ms. Nguyen Minh Hang is Head of Banking and Finance Law Department, Faculty of Economic Law, Hanoi Law University.



Ms. Luong Thi Linh Chi is a Lecturer at the Faculty of Law, Hanoi Open University
