

The Impact of Fintech Startups on Banking Services in Vietnam

Huyen Thi Dieu Le¹, Men Thi Bui², Giang Thi Cam Nguyen¹

(1. Faculty of Finance, Banking Academy, Vietnam;

2. Department of Tax and Public Finance, Faculty of Finance, Banking Academy, Vietnam)

Abstract: Fintech has considered a new financial industry that applies technology in the financial sectors to improve the business activities. Fintech companies provide one or more internet-based and digital-based additional financial services. Fintech startup is at the center of the fintech ecosystem, has its entrepreneurship and promote innovation mainly in payment, lending, crowd-funding, real estate management and insurance, providing more personalized services than traditional financial intermediaries. This paper discusses the impact of fintech startups on banking services such as: (i) alternative payment method; (ii) changing lending business operation; (iii) efficient crowd-funding business model. Therefore, it is time to consider about the integration of these Fintech services into the banking services in the context of digital technology advancement.

Key words: fintech; fintech startups; banking services

JEL codes: G21, G28, G38

1. Introduction

Financial technology (Fintech) is considered as one of the most crucial innovations in the financial services industry and is developing at a rapid speed, has been driven by sharing economy, facilitating new regulation and information technology. Fintech expects to modify the financial industry by decreasing costs, improving the quality of financial services, creating a more diverse and stable financial sector (Mackenzie A., 2015). The technology growth in infrastructure, big data, mobile devices and data analytics allow fintech firms to well compete to traditional financial firms with unique and personalized services. In the PwC report (2016), 83% of financial institutions believe that various aspects of their business are at risk since fintech arrived. Due to fintech companies already having a remarkable influence on the financial services, every financial firm needs to build capabilities to invest in advanced technology in order to stay competitive. The growth of investment in fintech has been phenomenal. According to Accenture (2016), global investment in fintech ventures in the first 3 months of 2016 reached \$5.3 billion, a 67% increase over the same period the previous year, and the percentage of investments going to fintech startups in Europe and the Asia-Pacific nearly doubled to 62%. Traditional banks invest in external fintech firms in the form of collaborative fintech ventures, as well as their internal fintech projects in the aim of fostering fintech innovation and gaining a competitive advantage.

According to KPMG (2017), China and the USA are leading countries in fintech startups. The top 100 fintech companies in 2017 consist of 55 payments and transactions companies; 22 lending companies; 14 wealth management businesses and 9 insurance firms. Holland Fintech (2015) expects that approximately \$660 billion in

Giang Thi Cam Nguyen, M.Com, Faculty of Finance, Banking Academy of Vietnam. E-mail: giangntc@hvn.edu.vn.

revenue may transfer from traditional financial services to fintech services in the areas of payments, crowd-funding, wealth management and lending. It is a clear evidence that fintech has become a major institution in the world. In light of urgent necessity to inform financial professionals about the disruptive innovation, in this research we will discuss the following topics. First, we introduce a theoretical view of the fintech ecosystem. We then discuss banking technology services, as competition of fintech and finally illustrate the impact of fintech startups on bank services in Vietnam in recent years.

2. Literature Review

2.1 Fintech Ecosystem

A stable fintech ecosystem is important factor in the growth of the fintech industry. Diemers et al (2015) suggested that entrepreneurs, government, and financial institutions are the elements in a fintech ecosystem. Five elements of the fintech ecosystem has been identified as below:

- 1) Fintech startups (e.g.: payment, lending, crowdfunding, capital market, wealth management and insurance fintech companies);
- 2) Technology developers (e.g.: big data analytics, cloud computing, crypto-currency and social media developers);
- 3) Government (e.g.: financial regulators and legislations)
- 4) Financial customers (e.g.: individuals and organizations)
- 5) Traditional financial institutions (e.g.: traditional banks, insurance companies, stock brokerage firms and venture capitalists).

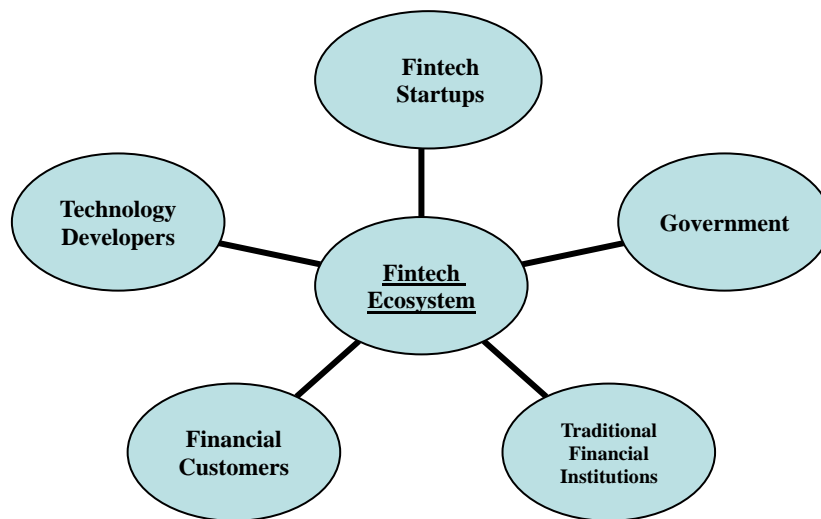


Figure 1 The Fintech Ecosystem

Source: Lee & Shin, 2018

It can be seen that, at the central of the ecosystem are fintech startups. These firms are mostly entrepreneurial and have driven major innovations in the areas of payment, wealth management, lending, crowd-funding, capital market and insurances by cutting operating costs, aim to specialized markets and providing more confidential services than traditional banks. They are driving the phenomenon of financial services, which have been strongly

disruptive for banks (Walchek, 2015). The ability to personalized services, which is one of the major factors of rapid development in the fintech sector, as existing financial institutions are disadvantage in this situation. Consumers, rather than relying on a single financial institution for their needs, are beginning to consider, pick and choose services they would like from a variety of fintech companies. Venture capitalists and private equities are useful to cooperate with fintech startups with the level of investments increased significantly over time.

Technology developers supply digital platforms for social media, big data analytics, cloud computing, artificial intelligence, smart phones and mobile services. Technology developers create a favorable environment for fintech startups to launch innovative services rapidly. They hire excellent data analytics to create unique personalized services to customers and cloud computing may be used for cash-strapped fintech startups to deploy web-based services at the cost of internal infrastructure development. Social media has been fostering the growth of communities in the crowd-funding and P2P lending services. The mobile devices remove most advantages of physical distribution. Open network administrators are also providing low cost infrastructure for fintech companies' service development, such as mobile payment and mobile banking. In return, the fintech industry is generating revenue for these technology developers.

Governments have been providing a favorable regulatory environment for fintech since 2008 financial crisis (Holland Fintech, 2015). Depending on the domestic economic development plans and policies, different governments provide different level of regulation (e.g.: licensing of financial services, relaxation of capital requirements, tax incentives) for fintech startups to stimulate fintech innovation and facilitate global financial competitiveness. For example, Singapore is changing online payment regulations to make the rules easier to payment service providers and push payment technology more develop (Reuters, 2016). On the other hand, since 2008, traditional financial institutions have been subject to more strict legislation, capital requirements from government regulators. The looser regulatory requirements imposed on fintech startups allow them to provide more customized, more economic, and friendly-to-access financial services to consumers than traditional banks. However, while certain regulations are favorable to fintech startups, they still need to know how regulations may affect their remaining service provisions.

Financial customers are the source of revenue generation for fintech startups. While large firms are important sources of revenue, the prevailing revenue source for fintech companies are individual customers and small and medium-sized enterprises (SMEs). A survey found that the use of fintech services is greatest among younger, wealthier customers (Holland Fintech, 2015). Early fintech adopters tend to be tech-savvy, younger urban, and higher paid individuals. The future demographic is favorable to fintech companies in that in the next few years, the tech-savvy people will consist of the largest part of the population and drive the growth of financial services.

Traditional banks are also a major driven force in the fintech ecosystem. After realizing the disruptive power of fintech and losing market shares, traditional financial institutions have been re-evaluating their existing business models and developing plans to embrace fintech innovation. Traditional banks have competitive advantages in economies of scale and financial resources compared to fintech startups. However, traditional banks tend to focus on common banking services, providing comprehensive financial services to consumers rather than specialized products and services. While traditional banks initially treated fintech companies as threats, they have shifted their focus to collaborate with fintech startups in various funding provisions. In return, they are able to maintain market structure and develop technology platforms (Yang, 2015).

2.2 Fintech Startups With Financial Services and Its Impact on Banking Services Based on Technology

The introduction of fintech helps to redefine the method which people store, save, borrow, invest, spend and protect their pocket wisely. In general, there are six financial services which supplied by the increasing number of fintech startups: payment, lending, crowd-funding, wealth management, capital market and insurance services. The real valuable positions and operating mechanisms have been identified as below:

(i) *Payment*: Compared to other financial products and services, payment service is almost simple. Fintech startups attract consumers rapidly at lower costs with the fastest advanced payment platforms.

(ii) *Lending*: Peer-to-peer (P2P) consumer lending and P2P business lending is another big tendency in fintech. P2P lending fintechs allow individuals and businesses to lend and borrow between each other. With their effective and efficient structure, P2P lending fintechs are able to set low interest rates and an advanced lending procedure for borrowers and lenders.

(iii) *Crowdfunding*: This service involved parties are (1) the project entrepreneur who calls funding, (2) the contributors who might be interested in supporting potential projects, (3) the moderating organization that facilities the supply and demand from the party (1) and (2). To do so, the moderating organization helps the contributors to access information about different funding opportunities to develop and complete new products.

(iv) *Wealth management*: One of the popular wealth management in Fintech startups is automated administrators that give financial advice and options for a portion of the price of a real adviser. They used algorithm technology to create robot advisors. They operate in the way of mix assets to invest in, according to customer's investment characteristics.

(v) *Capital market*: New fintech startups take almost full range of capital market aspects such as investment, foreign exchange, risk management, trading. One area of promising area is trading. Trading fintechs connects the traders with investors to discuss and share knowledge, place orders to sell and buy stocks and monitor risks in set time.

(vi) *Insurance services*: Fintech startups enable to widen a direct relationship between the insurer and the customer. They exploit data analytics to predict, calculate and match risk, and customers are provided products to meet their needs such as healthcare, car, life and other insurance.

The common feature of fintech startups is that technology-based business is risky. Fintech startups could influence banks and other traditional financial institutions by providing a common background for building collaborative partnerships, which would help traditional financial intermediaries to gain access to the best technology. Therefore, fintech startups supply services such as payments, lending and crowd-funding these influences on banking services as follow:

Firstly, alternative payment method as an element effect on financial banking services based on technology: Fintech startups attract consumers rapidly at lower costs with the fastest advanced payment platforms. The two markets that Fintech aims to consumer and retail payment or wholesale and corporate payment. The payment services are one of the most used retail financial services in a daily basis. The BNY Mellon (2015) research, consumer and retail payments in fintech include mobile wallets, mobile payments and digital advanced currency solutions. These services improve the experience for customers who seek for a speed, convenience and multi-channel accessibility. Mobile payment services which seems to be friendly and securely applied on mobile devices, becoming more popular business model. According to Li (2016), some approaches to mobile payments are shown as charging to a phone bill, barcode (QR code), near filed communication (NFC), a credit card on

mobile websites and direct mobile payment out of using credit card suppliers. In fact, the most widely known NFC- based mobile payment applications are Apple Pay, Samsung Pay, Google Wallet... Another common payment model is P2P payment services, such as PayPal and Venmo with no fees. When fintech startups can afford to compete with banks in payment services by paying higher interest rates on their accounts, there must be some kind of benefit that compensates for their inability to exploit the fractional reserve requirements and earn the interest margin granted by maturity transformation. Some advantages of fintech in this term mentioned: (1) lighter regulatory requirements than banks; (2) better technologies. Technological advance is relevant in the short term, when new entrant can exploit. Fintech startups could potentially spark such a disruptive evolution due to their new alternatives that enhance the efficiency and quality of services (Ferrari, 2016). According to this theory, Fintech startups eventually displace services in banks.

Secondly, lending business model of fintech startups have a significant effect on supplying banking services. Peer-to-peer (P2P) lending business is another big tendency in fintech. P2P lending fintech allows individuals and businesses to lend and borrow between each other. With their effective and efficient structure, P2P lending fintech is able to set low interest rates and an advanced lending procedure for borrowers and lenders. A significant distinction from a commercial bank is that these fintech startups do not influence in the lending process, as they are simply matching lenders with borrowers and collecting administration fees from of users. Because of this advancement, there is no necessity to meet the capital requirements that influence the total amount of loan, while commercial banks have become more and more limited in the loan which they were engaged in (William-Grut, 2016). The fintech innovation in lending demonstrates in the use of flexible credit models, online data sources, data analytics to evaluate risks, fast lending procedure and lower costs. However, the success or failure of this business model almost depends on how interest rates act, sometimes out of control of the fintech firms. Fintech startups could influence banking services by providing a common ground for building collaborative partnerships, which would help the capital-rich traditional financial intermediaries to gain the best technology. It shows that Fintech startups would get the capital needed for investing in new projects and developing better services for the consumers worldwide (Bugrov, 2017). Fintech startups offering successful substitutes for traditional lending services which might disrupt banking industry.

Thirdly, crowd-funding business models create network for those who mobilize fund more easily than banks. Three involving parties are (1) the project entrepreneur who calls funding, (2) the contributors who might be interested in supporting potential projects, (3) the moderating organization that facilities the supply and demand from the party (1) and (2). To do so, the moderating organization helps the contributors to collect information about different funding opportunities to develop and complete new products. There are three popular crowd-funding model, namely rewards-based crowd-funding, donation-based crowd-funding and equity-based one. In particular, rewards-based crowd-funding has been one of the most attractive fundraising choices for numerous of small firms and creative projects. In this case, the borrower set the interest rate that they are comfortable with and can guarantee a refund during the set time period in the contract. In return, the supporters give some types of rewards (Mollick, 2014). Donation-based crowdfunding is a way to support money for a charity project by asking donations. In a donation-based crowdfunding, the funder does not receive anything other than some form of non-monetary conditions. Equity-based crowdfunding is an engaging option for SMEs as increased capital ratio requirements on traditional banks to make a loan. Equity-based crowdfunding allows entrepreneurs to reach investors who are interested in acquiring equity in their startups. Fintech startups would give up a part of the ownership in exchange for the funds. Moreover, fintech startups use technology to access

these borrowers' creditworthiness inexpensively over traditional banks (Hayashi, 2016).

3. Empirical Evidence for the Growing Fintech Startups and Banking Services in Vietnam

3.1 Fintech Startups in Vietnam

Fintech is used to describe the use of technology in financial services. Fintech companies are often start-up businesses that use new business models and new products that compete with core banking services, insurance or payments (ASIC, 2016).

Since 2008, the SBV has studied and allowed many non-bank payment service companies. Up to now, after establishing a relatively clear legal framework, the SBV has granted official operation licenses to payment intermediary service providers. Since 2017 we had 48 companies operating in fintech, by February 2019, the State Bank of Vietnam had licensed intermediary payment services to 29 fintech companies, which were not banks.

Table 1 Fintech Companies in Vietnam

No	Services	Companies	Numbers of fintech firms	Proportional
1	Payment	2C2P, VT Pay, One Pay, VTCPay, BankPlus, VinaPay, VNPay, Senpay, NganLuong, ZingPay, BaoKim, 123Pay, WebMoney, Cyberpay, 1Pay, SohaPay, Moca, Vimo, Payoo, OnOnPay, Momo, FPT	22	48%
2	Lending	Loanvi, Tima, TrustCircle	3	6%
3	Crowdfunding	FundStart, Comicola, Betado, Firststep	4	8%
4	Blockchain	Bitcoin Vietnam, VBTC Bitcoin, Copyrobo, Cardano Labo	4	8%
5	Others	Mobivi, Money Lover, Timo, Kiu	15	30%
	Total		48	100%

Source: Fintech News, Fintech in Vietnam Update and new Infographic 2017.

Fintech companies' development has caused more competition in the financial services sector. In the next 5 years, if the traditional financial companies do not change their business strategies, they will be at risk of losing market share. Specifically, traditional money transfers and payment companies are expected to lose 28% of the market share, which will transfer to fintech companies, while banks will lose 24% of the market share; asset management companies are down about 22% and insurance companies lose 21% of the market share (PwC, 2016).

Vietnam is considered a potential market for the development of new fintech companies, for the following reasons:

Firstly, the proportion of people using smartphones is more popular than many countries in the region. The internet is covered nationwide, with a high and stable transmission quality. This promotes the development of e-commerce, thereby creating momentum for the growth of fintech companies in Vietnam.

In the publication of a study by Solidiance Consulting, Vietnam's Fintech market reached 4.4 billion USD in 2017 and is expected to double by 2020. In addition, the number of start-up incubator programs, entrepreneurship promotion programs and programs to promote entrepreneurship in Vietnam are the second largest in the ASEAN region (Solidiance, 2017). Up to now, there are about 80 fintech companies operating in Vietnam. However, the financial services provided by fintech companies are payment and money transfer services, which are small market shares in the financial technology industry. In Vietnam, Fintech companies have not fully exploited

financial services on this technology platform.

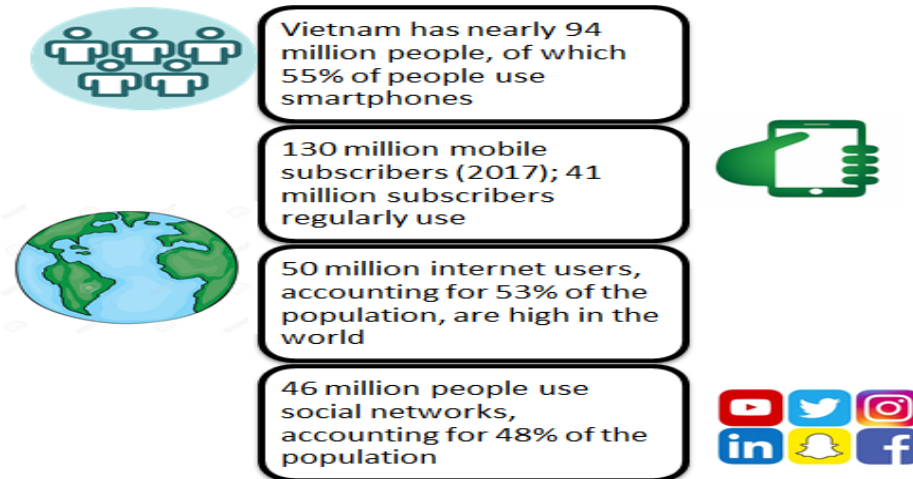


Figure 2 Numbers of Internet Users in Vietnam

Source: <http://fintechnews.sg>

Secondly, the proportion of people using digital payment methods is higher than other methods.

The proportion of people using digital payment is higher than other methods, about 22.7%, while the use of payment accounts is only 2.9%. MGI figures show that the widespread adoption and using of digital payment methods could increase the emerging economies' GDP by 6%, or US \$ 3.7 trillion by 2025. In Vietnam, the trend of applying technology 4.0 is increasingly popular, fintech companies have taken pioneering steps to establish and gradually improve the non-cash payment network and the digital financial ecosystem.

Thirdly, Vietnam laws encourage the development of fintech companies.

The State Bank of Vietnam has been allowed to test of several cooperative models between banks and Fintech companies. In March 2017, the State Bank of Vietnam established a Fintech Steering Committee, which proposed solutions to improve the ecosystem and legal framework, facilitating the development of Fintech companies. These programs are a part of the policy of supporting entrepreneurial ecosystems in accordance with the Decision 844/ QD-TTg of 2016 of the Vietnamese Government.

However, fintech companies have just developed at the beginning. They provide online payment tools or digital payment solutions or money transfers. Among these, fintech's fastest-growing startup in Vietnam is in the payment segment, especially in the type of e-wallet. Among these, fintech startup is the strongest in the field of payment, especially in the type of e-wallet.

The numbers of Vietnamese fintech startups are expected to increase. There are about 72% of fintech companies opting to cooperate with banks. This cooperation is a premise to contribute to improve financial-banking services in Vietnam (CESTI, 2018).

Generally, the significant growth of fintech companies brings some benefits but also risks and challenges to the financial market. Vietnam is facing a challenge. That is the legal framework for the financial technology industry. Fintech is a potential field in Vietnam in terms of population size and comparative advantages of human resources in the field of information technology. The legal management framework of Vietnam basically meets only a part of the financial technology sector in payment, the legal framework has not completed and synchronous

for other financial sectors. Services supplied by fintech companies in Vietnam are still in the early stages, not diversifying yet but mostly payment activities. One of the reasons is that the number of people using banking services are not high, mainly withdrawing money from accounts and banks still account for most of the market share of financial services. In addition, Fintech ecosystem in Vietnam does not have a close connection between the entities including management agencies, financial institutions, Fintech companies and start-up businesses, investment funds, and telecommunications floors... Connection activities to provide consumer products and services are mainly cooperation between fintech startups and banks. However, this cooperation is still limited, merely providing simple payment services, not providing other advanced services as well as receiving, responding and sharing information about customers.

Table 2 The Rate of People Using Payment Services of Vietnam Compared to Other Countries in 2018

Unit: %

Comparison criteria	Vietnam	Low and Middle-income countries	East Asia and Pacific countries
Send or receive remittances in cash	6.6	8.8	5.8
send or receive remittances by OTC	7.9	4.7	7.3
Send or receive remittances using personal accounts	9.6	10.1	15.0
Non-using the financial institution account	5.9	22.0	11.9
Non-using the personal account	5.7	21.6	11.8
Using the credit card to pay	6.2	10.0	33.1
Access the mobile or internet account	9.2	8.3	31.0
Using the payment account via the internet	20.5	6.8	38.6
Using the government payment account	3.0	8.3	12.2
Using salary account	8.9	5.5	15.9
Using payment accounts	2.9	7.5	20.8
Using digital payment methods	22.7	29.2	58.0

Source: WB (2018), The Little Data Book on Financial Inclusion.

3.2 The Banking Services Based on Technology in Vietnam

Major banking services are: deposits and other payments; lending services (consumer credit, mortgage credit, factoring, financing of commercial transactions); financial leasing; payment and money transfer services; guarantee and commitment; trading services for client accounts or financial institutions; money brokers; asset management etc. In Vietnam, in the context of increasing financial technology companies and the strong development of modern banking technology, it poses a challenge for the banking industry to innovate and change the mode of service. Therefore, in recent years, banks have constantly launched many electronic banking products and services (E-banking), such as: Point of Sale (POS), home banking; internet banking; phone banking; mobile banking; kiosk banking; call center.

However, the implementation of e-banking in Vietnam is facing various obstacles. To be successful, the introduction of e-banking in Vietnam requires high standards of the technology infrastructure. As a developing country, the technology infrastructure of Vietnam is still developing and is still lacking the capability to fully implement e-banking up towards. Furthermore, the legal system, especially when it comes to e-banking, has not been fully completed. The responsibilities and obligations of both financial institutions and customers while dealing with e-banking have not been stated out clearly in legal form. In addition, the lack of citizen's awareness

about the internet and internet-based services has hindered the development of electronic banking in Vietnam. For example, banks have initially deployed AI and digital Banking including Vietbank (Chatbox application works on Fan page); TP bank (Applying T’AO assistant on Facebook messenger); MB (Piloting smart form automation); BIDV (Piloting software to analyze customer data based on AI) etc.

In the context of increasing technology competition, the trend of providing digital banking services are the association between banks and technology firms. Technology companies need (i) Large-scale technology application; (ii) Reliability and stability; (iii) Experience; (iv) Access to capital. While commercial banks want (i) Update and upgrade core system (Core); (ii) Innovation culture; (iii) Fast deployment; (iv) Ability to recruit necessary talents; (v) Support of technology experts. This relationship helps both banks and fintech companies take advantage of each other. In summary, there are 3 trends in digital banking services development in Vietnam including: the cooperation between fintech startups and banks; banks apply technology to optimize customer trading methods; self-services orientation for both customers and bank staff.

4. The Influence of Fintech Startups on Banking Services in Vietnam

Fintech has changed not only the market structure of the banking system, but also playing an important role in global comprehensive financial sectors. The wave of fintech has changed traditional business model of banking services. Fintech startups operate more flexibly than banks due to its compact business model, fast product provision, convenience and low cost. Therefore, fintech startups have a great impact on banking service in Vietnam in the following aspects such as alternative payment method, lending business operation, crowdfunding business model.

Evidence for alternative payment method: The development of new technology applications such as big data, block chain will allow fintech startups to collect data, to simplify customer analysis process, to improve service quality, to reduce costs for payments. According to KPMG indicates that the main activity area of top 100 fintech startups of payments and transactions in the world accounted for 12%, lending 22%, real estate management 14%, insurance 7%, and other services 32%. On the other hand, there are currently about two thirds of fintech startups in Viet Nam providing the online payment tools for customers, payment of online solution (POS), transfers... Fintech startups in Viet Nam provide mainly mobile payment service (statistically accounting for 25%), in the meanwhile other services are at low rate. Some fintech firm that supply payment services in Vietnam (Box 1). In fact, In Vietnam has more 120 companies operating in payment, lending, crowdfunding to real estate management, investment. However, with 35 startups and payment is the best segment. For instant, MoMo is one of fintech startups which has big capital providing payment with Moca, GrabPay.

Table 3 The Fintech Companies Providing Payment Services in Vietnam

Napas	Vietnam Esports	Baokim E-commerce	M-Pay
Vnpay	Ecpay	Vimo Technology	Onepay
M_Service	Zion	VTC	Wepay
Bankpay	VNPT Epay	Moca	Nganluong
Viet Union	Viet Phu Payment	Fpt Wallet	lpay
VNPT – Media	People Care	Viettel	Vinatti
Vimass	Smart Net	Edenred; Paytech	

Source: SBV, 2019.

However, as far as technological adoption is fast enough, if banks do not want to lose their market share, they would expect to gain technological convergence. For example, PayPal-the largest world supplier of electronic payment service, just started its business as a linked service to E-bay (the electronic auction and sale site). PayPal offers services far and above payments on E-bay, most of which are linked to bank to credit card accounts (also linked to banks accounts). In fact, common payment model is P2P payment services, such as VNPay and VNPT Epay with no fees. So that, online payment methods with high technology leads to the easier implementation and lower cost for the customers.

- **Evidence for lending business operation:** Fintech startups provide a list of the diversified financial products to customers due to the technological development. Financial products of fintech startups ensure the 24/7 service supply in time and space. For instance, P2P lending companies (direct relationship between borrowers and lenders) have effectively operated, shortening approval time and bank disbursement loans from weeks to hours. Fintech startups provide financial services for demander with lower cost and faster implementation time, compared to traditional banks. In Vietnam, P2P lending is the second segments market with about 20 fintech startups such as Tima, Growth Wealth...

- **Evidence for crowdfunding business model:** Fintech startups make the changes in business model, especially, crowdfunding business model. Fintech startups would be better for supporting individual customers, small and intermediate enterprises especially the customers in remote areas, be difficult in accessing financial services. With the advantages of small business models and technological support, Fintech startups occupy the area where there is a lack of banking system, where the people are in difficulties in technological approach or some burrowers may be refused by banks because of unsatisfied the capital or real estate requirements of procedure or regional barriers.

In Vietnam, IG9 is started in 2014 to mobilize capital by crowdfunding business model but it is failed. Then, the other fintech startups operating in crowdfunding such as Comicola, Firststep, Fundstart, Fundingvn.... However, the prospect of crowdfunding models in Vietnam is not effective. Because, Vietnamese people are afraid of risks with new ideas and projects, they tend to prefer existing products. Fintech startups has not really had many creative projects and the lack of diversity in the form of capital calls. In Vietnam, the model is only popular in a small community (books, comics, community projects) that have not yet had extensive access to startups and investors. The crowdfunding in Vietnam only illustrated in two forms of donation and reward, whereas equity crowdfunding model is not available.

5. Recommendations

Emerging of fintech has changed the way, location and time of customer transactions, as well as has brought convenience for customers to approach to many kinds of financial services, contributing to narrow distance among social classes. Therefore, market share of bank has been reduced by the attack of new entrants, leading to the phenomena of cooperating solutions.

5.1 To the Banks

Banks should clearly understand the strengths and weaknesses of start-up fintech firms to optimize the advantage of them because the fintech startups model accept risks, social compact meanwhile banking model is cautious, safe and sure. So that, banks and fintech startups are moving towards working together through

partnerships, many banks are investing in start-up fintech firms or buying them to make their services more digitized. Banks need to cooperate in actively research and develop financial technology in the internet banking systems to provide higher quality of financial services. Moreover, banks must invest in digitization and innovative solutions, such as automation of services, new payment infrastructure and analysis of big data. For example, banks should have innovation labs inside their organizations and look for interesting ideas.

Banks should use fintech to focus on the retail market and to test for more new services such as international trade. This means that banks transfer new business processes related to customer service online the use of online banking and mobile banking applications is growing among banking customers. If banks were to introduce agreement confirmation online with the help of a mobile banking application, it would bring benefits to both banks and customers. Besides, big data will improve the understanding of customer needs and behavioral patterns and also drive operational efficiency and effectiveness throughout the organization.

Banks need to learn from experience of other countries in the software industry with fintech. Fintech products are based on continuing innovation and creativity of technology but the current legal regulations have not kept up the reality in many cases which causes a series of fintech related scams. Therefore, it requires cooperation among banks in the prevention of crimes related to high technology.

5.2 To Fintech Startups

Start-up fintech firms provide the automatic consulting services for customers and other technologies. Because fintech startups specializes in high technological product supply, they serve customers better, substituting thousands of employers to machines and technology. The traditional banks, security brokers, insurance companies, investment funds have been concern about slow changes in the severe competition. Therefore, enhancing auto-consulting services can help those start-up fintech companies increase their insurance with customer interaction.

Fintech startups enhance competitiveness through financial product strategy implementation, clearly indicates to the customers the utilities of financial services. At the same time, enhancing cooperation capacity with intermediary financial institutions to take advantages of potential customers to continually explore the open market share which other intermediate financial institutions has not approached. Start-up fintech firms use of technology from expanding the network to increase the need of electronic services.

Fintech startups should understand the strategies, risk issues and market share of bank to develop products and services to adapt to the core values of the banks. Moreover, they must work with banks to take advantage potential customers and the market of banks. These help Fintech Company to dominate the market.

6. Conclusion

Vietnam is considered as a market with a large and young population, high technology awareness. The Vietnamese government should improve the full legal framework for fintech ecosystem development as well as supporting the cooperation of start-up fintech firms and banks in the aim of providing high quality financial services. With an efficiency and effectiveness legal framework, it is an important target for the Vietnamese banking system.

References

Accenture (2016). Global Fintech Investment growth continues in 2016 driven by Europe and Asia, Accenture study finds.

- ASIC (2016). “Fintech: ASIC’s approach and regulatory issues”, available online at: <http://download.asic.gov.au/media/3962105/melbourne-money-and-finance-conference-2016-fintech>.
- BNY Mellon (2015). “Innovation in payments: The future is Fintech”, *Management Science*, Vol. 41, No. 5, pp. 795-816.
- Bugrov (2017). “Information technology and banking organization”, *Journal of Financial Services Research*, Vol. 51, pp. 313-338.
- Diemers et al. (2015). *Fintech – Challenges and Opportunities: How Digitization is Transforming the Financial Sector*, McKinsey & Co Edition.
- Ferrari (2016). *Regulating Fintech: Crowdfunding and Beyond: European Economy – Banks, Regulation and the Real Sector*, MIT Press.
- Hayashi Y. (2016). “CFPB fines Fintech firm Dwolla over data-security practices”, *The International Journal of Bank Marketing*, Vol. 17, No. 7, pp. 324-339.
- Holland Fintech (2015) “The future of Finance: The socialization of finance”, available online at: <http://hollandfintech.com/the-future-of-fintech-the-socialization-of-finance>.
- KPMG (2017). “The pulse of Fintech”, available online at: https://assets.kpmg/content/dam/kpmg/xx/pdf/2018/02/pulse_of_fintech_q4_2017.pdf.
- Li P. (2016). *Current and Future of E-commerce: Encyclopedia of e-commerce Development, Implementation and Management*, Hershey, PA: IGI Global, pp. 1031-1044.
- Lee I. and Shin Y. (2018). “Fintech: Ecosystem, business model, interment decision and challenges”, *Business Horizon*, Vol. 61, pp. 35-46.
- Maja Pejkovska (2018). *Potential Negative Effects of Fintech on the Financial Services Sector: Examples from the European Union, India and the United States of America*.
- Mollick (2014). “The dynamics of crowdfunding: An exploratory study”, *Journal of Business Venturing*, Vol. 29, No. 1, pp. 1-16.
- Nguna Kiilu (2016). *Effect of Fintech Firm on Financial Performance of the Banking Sector in Kenya*.
- Pham Xuan Hoe and Nguyen Thi Minh Ngoc (2017). “Fintech startups, opportunities to cooperate or compete to banks”, *Banking Magazine*, No. 14.
- PwC (2016). *Payments in the Wild Tech World Digitisation and Changing Customer Expectations*.
- PwC (2016). “Blurred lines: How Fintech is shaping financial services”, Annual PwC report.
- Reuters (2016). “Singapore to update electronic payment regulations in Fintech drive”, *Yahoo News*.
- The State Bank of Vietnam (2019). *List of Non-Bank Payment Service Companies*.
- Solidiance (2017). *Unlocking Vietnam’s Fintech Growth Potential*, WB.
- Mackenzie A. (2015). “The fintech revolution”, *London Business School Review*, Vol. 26, No. 3, pp. 50-53.
- Walchek (2015). “The unbundling of finance”, *Business Insider*.
- William-Grut (2016). “Financial intermediation and delegated monitoring”, *The Review of Economic Studies*, Vol. 51, pp. 393-414.
- Xavier Vices (2017). *The Impact of Fintech on Banking*.
- Yang (2015). “Internet technology and customer linking in Nordic banking”, *Internal Journal of Service Banking*, Vol. 132, No. 2, pp. 475-496.
- Zhu R. (2012). “Does online community participant foster risky financial behavior?”, *Journal of Marketing Research*, Vol. 49, No. 3, pp. 394-407.