

Fintech Management in Payment: International Experience and Some Suggestions For Vietnam

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Abstract: *The industrial revolution 4.0 is taking place firmly, bringing technology into all sectors of the economy. The banking and finance industry is no exception to that trend. Fintech represents a digital revolution that can completely change how the banking and finance industry does business. Fintech can increase efficiency in the financial sector, provide better products and services, and enhance economic integration in developing countries. As Fintech booms and occupies an increasingly important place in the financial system, regulation is considered the number one concern of governments around the world. It is necessary to have a complete and complete legal framework to promote the advantages and limit the risks in the operation of Fintech companies in general and Fintech in the payment field in particular. This article examines the management experience of Fintech in the payment field in several countries, thereby giving some suggestions for Vietnam.*

Keywords: Fintech, payments, bank

1. INTRODUCTION

The industrial revolution 4.0 is taking place firmly and is gradually changing most areas of the economy. For the financial - banking sector, "Fintech-Fintech" becomes the representative of a digital revolution, which can completely change how the banking and finance industry does business. According to the FSB Fintech Report (FSB 2019), global investment in Fintech has increased from \$9 billion in 2010 to \$111.8 billion in 2018. Fintech development has increased access to financial services. People's Government personalizes banking services for better service and low transaction costs, which can shorten real transaction time, increase competition, and increase the efficiency of supervision through cooperation across sectors and countries. In payments, Fintech, with the power of technology, can change payment methods and facilitate the discovery and leverage of technology [1].

Vietnam is considered to have a significant advantage in the current industrial revolution 4.0. Viet Nam has a young and tech-savvy population. Therefore, the access and dissemination of technology in the financial sector will have advantages. The number of Fintech companies providing services in the Vietnamese market has increased rapidly, from 40 companies at the end of 2016 to the second quarter of 2019 to nearly 150 Fintech enterprises operating in Vietnam in many different payment fields. In the past few years, payment activities have developed quite well. The number of payment accounts of people has increased rapidly over the years. Besides, e-commerce and electronic payment transactions are multiplying. This is one of the advantages for Fintech businesses to develop. This is an excellent opportunity to establish Fintech businesses in Vietnam in the coming time. This is also part of the strategy to promote access to financial services and financial inclusion that the Government has set out in Decision 2545 on non-cash payments.

Fintech can increase efficiency in the financial sector, provide better products and services, and enhance financial integration in developing countries. However, Fintech also has

an element of risk, and the effects on the financial system are severe. At the macro level, the first thing is the ability of Fintech companies to affect the financial system's stability. The lack of a supervisory mechanism and a regulatory framework by the state can cause reputational risks of a Fintech company to spread and destabilize the entire financial system. In addition, when all economic actors can participate in financial activities and create benefits of diversification of activities for financial markets, it also creates synergistic risks (procyclicality). Small fluctuations in one or more factors in the system will also have a more substantial impact on the financial system. With a significant role in the financial services economy is one of the most tightly regulated sectors in the world. Therefore, as Fintech booms and occupies an increasingly important place in the financial system, regulation is considered the number one concern of governments worldwide. It is necessary to have a complete and complete legal framework to be able to promote the advantages and limit the risks in the operation of Fintech companies in general and Fintech in the payment field in particular

However, the legal framework is one of the biggest challenges for FinTech companies in Vietnam and many countries worldwide. The international experience of some economies with a thriving FinTech ecosystem in the region and the world has shown that legal regulation always plays a significant role and is a critical factor for the development of FinTech while helping to reduce risks to the stability of the financial system.

In the context of the strong development of Fintech, to promote the innovation of products and services, support the development of FinTech in Vietnam, and limit the risks that may arise for customers. It is necessary to study the experiences of other countries in the management of Fintech in general and Fintech in the payment field in particular.

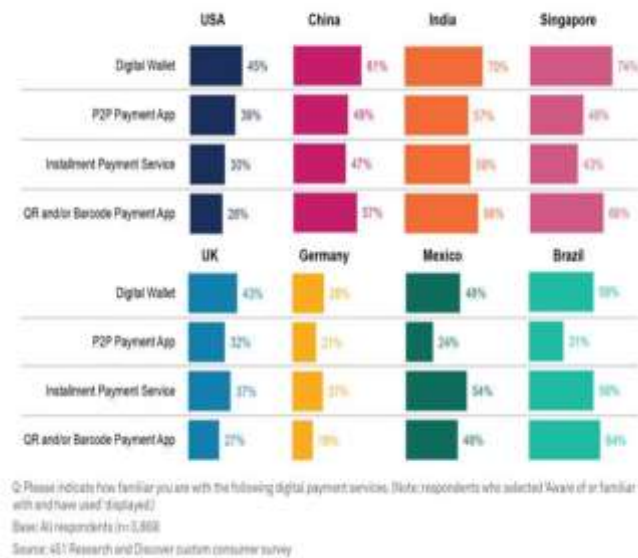
2. LITERATURE REVIEW

2.1. Financial Technology (Fintech)

Fintech can refer more broadly to any innovation that has to do with how companies try to enhance the production, distribution, and usage of financial services [2]. Due to this trend, the legacy financial institutions in developed economies will be forced to explain their strategies, build new capabilities, and change their cultures, which has so far mostly affected developing economies like China and India (Ernst & Young, 2017). Financial technology is growing strongly and has tremendous influence globally, contributing to changing the face of the global financial sector, especially in payments.

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Digital Payment Usage Varies Widely Across Countries



2.2. Advantages and disadvantages of regulatory approaches to Fintech

The vigorous development of Fintech is inevitable. As for regulators in the financial sector, they are taking the first steps toward figuring out how to protect consumers and the financial system without slowing down technological innovation.

With a significant role in the financial services economy is one of the most tightly regulated sectors in the world. Therefore, as Fintech booms and occupies an increasingly important place in the financial system, regulation is considered the number one concern of governments worldwide.

Due to the diversity of services in Fintech and the different industries it touches, it is difficult to formulate a single and comprehensive approach to these issues. For the most part, governments have used existing regulations and, in some cases, customized them to regulate Fintech in general and Fintech in the payments sector in particular [4].

Table 1: Advantages and disadvantages of regulatory approaches to Fintech

Approach	Advantages	Disadvantages
Treat the products and services provided by Fintech companies like banking services	Comply with the legal regulations on banking-like operations as well as consumer protection regulations and other legal regulations (same business, same risks, same rules) that consider the services provided by Fintech to be similar to those offered by traditional banking services, so these organizations need to be licensed to operate banking when providing services.	It is to suppress the creativity of Fintech companies when confining these companies to old management rules that are no longer suitable for the current technology age.
The school of openness, accepting Fintech innovations Fintech companies providing banking services will not be forced into the operating framework like traditional banks,	This school helps Fintech companies freely apply their creativity and innovation to renew traditional financial services, reduce costs for customers to use, and further broaden the scope of these services. Since the regulatory framework for Fintech companies cannot keep up with the rapid	Countries following this school often create testing mechanisms (also known as Sandboxes) that help Fintech companies to test their services/products on a limited scale with the control and supervision—supervised by state management agencies.

	<p>change of technology, some Fintech company models can cause customer loss and, on a large scale, lead to bankruptcy series of Fintech companies</p>	
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Since the first country in the world, the United Kingdom (the British Financial Supervisory Authority - FCA) issued the Fintech Experimental Framework (Sandbox for short) in November 2015, there are now 28 countries. The world has a similar approach. In Southeast Asia, Singapore, Malaysia, Thailand, and Indonesia are the first four countries to issue the "Regulatory Sandbox," with Singapore being the first to publish it in June 2016.[5]

Governments have established pilot programs ("Sandbox") for Fintech to assess the implications of the technology in the financial sector. The Fintech Regulatory Sandbox or Fintech Trial Mechanism is part of innovation that aims to reduce potential barriers to innovation, thereby allowing companies to experiment with product innovation in services and business models. The Sandbox operator is permitted to share information, ensuring appropriate safeguards. It was designed to contain the consequences of failure and maintain the overall soundness of the financial system. Fintech provides a roadmap for successful trials' continued use by relevant regulatory requirements. The Global Financial Innovation Group (GFIN), a consortium of 11 financial regulators from countries including Australia, Abu Dhabi, Bahrain, Dubai, Hong Kong, Singapore, and Canada, is based on the idea of a 'Global sandbox' that helped connect innovative companies to interact with regulators both locally and internationally [6].

Besides the Sandbox trial regulatory frameworks, some countries accept other mechanisms to support financial innovation, such as the Fintech innovation center and the Fintech development center. This allows startup projects to operate in a more favorable regulatory environment with specific incentives, supporting access to capital from financial institutions. The Government also creates a complete startup ecosystem with an open and attractive investment environment. Sandboxes also help shorten the time it takes for law enforcement to bring new laws up to date with the ever-evolving technology[7].

On a global scale, on October 11, 2018, the International Monetary Fund (IMF) and the World Bank (WB) launched the Bali Fintech Program (Bali Fintech) to help member countries exploit the benefits of Fintech and manage the risks that arise. In the Bali Fintech agenda, coordinated with the World Bank, there are 12 main elements to recommend member countries on the checklists in the current policy [8]. These factors include:

1. Commitment to using financial technology;

2. Applying new technologies to enhance the provision of financial services;
3. Enhance competition and commit to open access and competitive markets;
4. Using Fintech to promote and develop financial markets;
5. Monitor developments closely to deepen understanding of financial system developments;
6. Apply an adaptive regulatory framework and supervisory practices for the orderly and stable development of the financial system;
7. Protect the integrity of financial systems;
8. Modernize regulatory frameworks for the management and use of Fintech;
9. Ensure the stability of the financial and monetary system in the country;
10. Develop robust data and financial infrastructure to ensure fintech benefits;
11. Encourage international cooperation and information sharing;
12. Strengthening collective supervision of the international monetary and financial system.

In general, most financial regulators worldwide tend to support the Fintech wave because it promises to make financial transactions more accessible, transparent, and lower costs. Fintech can change how banks, companies, and users spend, manage and save money. One challenge for regulators, however, is to consider whether technology affects the safety and accuracy of the financial system. Strengthening international cooperation in management for Fintech in general and Fintech in the payment sector, in particular, will be especially important to reduce risks and promote financial system stability [9].

3. RESULTS AND DISCUSSION

3.1. CHINA'S EXPERIENCE

a. Development

In China, the explosion of technology in the payment sector:

In 2019 according to research by PwC (2019), Chinese Fintech enterprises held 4 of the top 5 positions in the world. The largest Chinese Fintech company is Ant Financial, with a value of up to \$ 60 billion, not inferior to UBS - the largest bank in Switzerland.

China is the world's largest market for digital payments, accounting for nearly 50% of the global market share. In 2019, mobile payments reached 38 trillion yuan (\$5.5 trillion), more than five times the size of the US market.

b. Conditions for development

Regulations: The Chinese Government has balanced policies between regulation on management and supervision and creating creative space for businesses.

The Internet boom has fueled the widespread use of e-commerce, and social media has fueled the growth of electronic payments. In addition, the Chinese Government is also building the technical infrastructure to apply technologies to financial services vigorously.

c. Management for Fintech

The view of the Chinese Government is to manage and supervise the development of the Fintech community.

Different authorities issue licenses to operate a Fintech company in China and other ways, depending on the main field of activity of the business applying for the license. Overall, however, the Government's stance on the sector is that technology helps solve problems rather than create situations that require scrutiny.

According to the China Banking Supervision Commission, the goal of regulation is to collect enough information and data to make smarter decisions and increase the number of people's access to their financial services.

3.1 EXPERIENCE OF SINGAPORE

a. The development

Singapore is the most fertile land for Fintech projects to be born, thanks to clear, open, and dynamic legal regulations that keep pace with development trends:

As of October 2019, the proportion of venture capital poured into Singapore's FinTech businesses accounted for 51% of the total venture capital investment in Southeast Asia's financial technology (FinTech) sector.

All the top 10 positions in attracting investment in Fintech are in Singapore.

Singapore is the region's dominant country in the Fintech sector, and up to 45% of Southeast Asian Fintech companies are headquartered here.

b. Condition to develop

The Singapore government has very supportive policies for the widespread application of Fintech

- In terms of infrastructure for electronic payments, the Singapore government has built a synchronous technology infrastructure for Fintech electronic payment applications to work.

The Singapore Government's non-cash social goal is seen as a catalyst for developing Fintech applications in mobile payments.

c. Management for Fintech

The Government designs an ecosystem around the existing financial system. This ecosystem is full of infrastructure and characteristics that allow the subjects and services to compete and complement each other.

The legal framework for groups is different, so the legal compliance is also different. Specifically, the regulatory regime in Singapore is classified by activities such as account granting; domestic and foreign money transfer; issuing electronic money, and virtual currency.

Singapore has been divided into four levels, equivalent to 4 parts of the regulatory framework on legal compliance and assessment of technology risks, consumer protection, and interoperability.

3.3 MALAYSIA EXPERIENCE

a. Evolution

Malaysia is one of the fastest-growing Fintech markets in Southeast Asia. At the end of 2018, Malaysia had about 200 Fintech companies operating in various sectors, including payments, e-wallets, asset management, Crowdfunding, Blockchain, Lending, Insurtech, Regtech, and the highest concentration is in the payments sector.

b. Conditions for development

The Central Bank of Malaysia prioritizes promoting the shift to electronic payments as a long-term strategy.

Regulators in Malaysia have taken proactive steps to implement a regulatory framework for Fintech.

c. Management for Fintech

The Malaysian Government stipulates that Fintech enterprises must comply with current Malaysian laws, whether established by foreign entities or by domestic citizens.

To enable Fintech innovation to be deployed and tested in a live environment, BNM introduced Sandbox to provide a conducive regulatory environment for Fintech implementation,

BNM sees Sandbox as a tool to harness innovation while safeguarding financial stability in Malaysia's banking sector.

3.4 SUMMARY OF INTERNATIONAL EXPERIENCE

From the ways to promote the development of Fintech in general and Fintech in the payment field in particular, some lessons can be drawn for Vietnam as follows:

Firstly, Fintech is a new concept, but it is developing very fast, and the legal regulations for management may not keep up with this development. Therefore, to manage and create the right environment needed for the development of Fintech, there needs to be a regulatory and supervisory agency for the development of the Fintech community. From the experience of countries, it can be seen that the legal framework related to Fintech is very fragmented. Various agencies issue fintech financial services companies licensed to operate in different ways, depending on the central area of activity of the business applying for the license. Therefore, to help solve these problems, there

needs to be a dedicated organization that closely monitors Fintech's activities.

Second, a sandbox can test innovative solutions inaccessible to the market. Fintech's overgrowing and beyond the regulatory framework can be challenging for regulators. Sandbox implementations allow us to gauge consumer adoption or commercial viability of a new solution or business model, which helps shape consumer adoption. Using a trial mechanism will provide empirical evidence that will allow regulators to strengthen existing regulations and develop new ones to keep the regulatory framework in line with the current rules for Fintech development.

Third, the top challenge faced by the financial services system in general and Fintech companies, in particular, is collecting enough information and data to make informed decisions. Get smarter and increase the number of people accessing financial services. When assessing the creditworthiness of Fintech companies providing financial assistance, regulators pay much attention to the value of the technology used and the size of their data systems. The regulator that considers Fintech companies' license applications mainly focuses on Fintech's use of cloud computing technology and database mining rather than evaluating expansion plans. According to managers, physical infrastructure is not as critical as the above factors.

Fourth, developing Fintech will solve the problem of providing comprehensive financial services to all people and businesses. However, there is an issue that needs attention to be resolved regarding collecting personal data; the top priority now is to get as much user data as possible, and next is the issue of who owns this data. Once technology helps solve the problem of personal data security, the Government will still have a positive attitude towards Fintechs.

Fifth, the top challenge for Fintech companies to grow is the lack of data engineers, so human resource development is a top priority. The case of China, for example, was initially successful in encouraging graduate engineers to work abroad and then bring their experience and knowledge back home.

The development of Fintech in general and Fintech in the payment field, in particular, is taking place very strongly in the world and Vietnam. Taking advantage of the advantages and limiting the risks that the 4.0 revolution creates in the financial sector depends a lot on the management policies of countries for the development of technology finance. In the context of the rapid and robust growth of technology, to be able to manage the financial technology sector, managers must, on the one hand, facilitate the development of technology, on the other hand, ensure the stability of the financial sector.

4. POLICY IMPLICATIONS FOR VIETNAM

Population size and comparative advantage in human resources in the field of information technology create many advantages for the Fintech sector in general and Fintech in the payment field in Vietnam. To make the most of the benefits

that Fintech can bring to the Vietnamese financial and banking market, to encourage and promote innovation and creativity while minimizing the negatives that Fintech brings to the industry. In the payment sector and financial system, some measures that need attention in the coming time are:

Firstly, quickly complete the legal regulations on Fintech. It is necessary to achieve and synchronize the legal corridor to manage, supervise and create favorable conditions for new types, means, electronic payment systems, and payment intermediary services, promulgate regulations on the responsibilities of service providers, users, and third parties, ensure security, safety and stable operation, limit arising risks and monitor forms and tools. Develop mechanisms and policies to encourage development, create an equal competitive environment between commercial banks and non-banking organizations, and strengthen measures to protect the legitimate interests of users.

Second, establish a standard testing framework for the Fintech community and startups: The Fintech community needs a hub, a shared workspace, where startups can work and where events related to Fintech, where investors and established companies can come and engage with startups. The effectiveness of this model has been demonstrated in practice in Singapore and Malaysia. In addition, to create the best conditions for innovation activities, state management agencies need to change their management thinking from passive to active, increase dialogue and work with enterprises with high innovation potential. Innovation activities to help navigate current regulation to better align with future innovative technology and business models.

Third, focus on developing and expanding application models of new and modern means and forms of payment, serving rural, remote, and isolated areas.

Fourth, the organization implements a payment system monitoring strategy. The State Bank supervises and evaluates the safety and effectiveness of payment systems managed and operated by the State Bank. Ensure security and safety for critical payment systems. Closely and effectively coordinate with law enforcement authorities (mainly C50: High-tech Crime Prevention and Control Police Department).

Fifth, promote information and propaganda, communicate work, and coordinate with press agencies to implement communication programs to raise awareness and strengthen consumers' and businesses' beliefs about the benefits and efficiency of electronic tax payment, electronic payment in e-commerce, and retail points. Promoting, disseminating, and guiding electronic payment, financial education, creating a fundamental change in people about the electronic amount and current habits of using cash.

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