INTERNATIONAL EXPERIENCE IN FINANCIAL TECHNOLOGY (FINTECH) DEVELOPMENT AND LESSONS LEARNED FOR VIETNAM

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ABSTRACT

Financial technology, or Fintech, has become one of the fastest-growing and most promising fields globally. Vietnam, with a developing economy, has witnessed the explosion of Fintech, especially in the context of the COVID-19 pandemic, which has driven the demand for digital financial services. However, to develop Fintech sustainably and effectively, Vietnam needs to learn from international experiences and apply them appropriately to its specific conditions. This article summarizes the development experiences of Fintech in several advanced countries around the world. From this, lessons are drawn for Vietnam to promote the development of Fintech, contributing to the country's socio-economic development.


1. INTRODUCTION

Fintech, short for "financial technology," is the combination of technology and financial services, often applied to improve and optimize traditional financial processes. Technologies such as artificial intelligence, block chain, machine learning, and mobile applications have opened up a range of new opportunities in the financial sector. Fintech has driven greater convenience and transparency in financial transactions, from payments to lending and investing. At the same time, it has also brought new challenges, including data security issues and impacts on the traditional industry. The global development of Fintech has transformed the way people approach and manage their finances. Since its emergence in the late 2000s, Fintech has experienced significant growth, particularly in the past decade. One of the most important aspects of this development has been the rise of mobile payment applications. Apps like PayPal, Venmo, and Alipay have driven the growth of online money transfers and cashless payments. This not only increases convenience for consumers but also helps them save time and enhance security. Additionally, the peer-to-peer (P2P) lending sector has grown rapidly, with platforms like LendingClub, Prosper, and Zopa enabling direct connections between borrowers and investors, bypassing traditional banks. This has created a more flexible and cost-effective means of accessing capital for individuals and small businesses.

Furthermore, the emergence of block chain technology has opened up a range of new applications in the financial sector. Cryptocurrencies like Bitcoin and Ethereum have attracted the attention of investors and consumers, while block chain projects like Ripple and Corda have been leveraged to enhance the efficiency and reduce the costs of international financial transactions. The development of Fintech has ushered in a new and promising future for the financial industry, creating opportunities for greater convenience, transparency, and cost savings, while also posing new challenges related to security and risk management.

For a developing economy like Vietnam, the adoption and leveraging of advancements in financial technology (Fintech) have become more crucial than ever before. Globally, Fintech has rapidly emerged as one of the key pillars of the digital revolution, presenting both new opportunities and challenges for countries, including Vietnam. In this context, understanding and learning from international experiences in Fintech development is not only necessary but also a crucial step to optimize the potential and address the challenges that Vietnam is facing.
2. THE PRESENT CONDITION OF FINTECH IN VIETNAM

Vietnam's digital financial services (DFS) market has emerged as the most rapidly expanding in Southeast Asia. In 2021, the Vietnamese DFS market was valued at $1 billion, accounting for only 6% of the regional market. However, this conservative start belies the market's immense growth potential. Projections indicate that Vietnam's DFS market is poised to surge to $3.8 billion by 2025, fueled by a remarkable compound annual growth rate of 38% - outpacing even the largest market, Singapore.

This trajectory is further reinforced by the overall trajectory of Vietnam's digital financial landscape. In 2022, the total transaction value in the Vietnamese DFS market was estimated at $22.6 billion, growing at a compound annual rate of 23.4% from 2020 to 2024. While this rapid growth rate is expected to moderate going forward, the fundamental drivers remain strong. Shifting consumer habits towards digital payments, asset management, and the thriving e-commerce ecosystem in Vietnam have created significant opportunities for Fintech startups specializing in areas like digital payments, alternative finance, wealth management, and blockchain applications.

Vietnam currently hosts over 260 Fintech startups serving diverse clientele and offering a wide range of services across emerging segments. Despite the slowdown in funding for Fintech companies globally in 2022, the sector in Vietnam still attracted $137.9 million in disclosed investments, representing 2.3% of the total deal value in the region. While this marked a notable decline from the peaks of $562.2 million in 2021 and $426.2 million in 2019, it still exceeded the levels seen in the pandemic-affected year of 2020 ($0.98 million). With certain sectors still requiring significant development, the Vietnamese Fintech industry continues to offer ample room for expansion and further investment opportunities.

Figure 1: Fintech Deal Count & Deal Value (USD billion) 2019 – 2022
(Source: Nextrans, 2022)

The observed deceleration in funding for Fintech startups in Vietnam during 2022 reflects the broader financial challenges encountered across the sector during the economic downturn. As macro conditions have become more turbulent, investors have adopted a more cautious and selective approach in their decision-making. The focus has shifted towards prioritizing profitability over growth-at-all-costs metrics that had previously dominated the Fintech investment landscape.

This shift in investor sentiment should not be interpreted solely as a negative development, however. Rather, it serves as a compelling factor that is prompting Fintech founders to reassess their cash burn forecasts and place greater emphasis on achieving sustainable growth through profitability. In a climate of increased economic uncertainty, investors are favoring business models that demonstrate a clear path to profitability and long-term viability.

While the decline in overall deal value in 2022 may appear concerning on the surface, it can also
be viewed as a necessary course correction. The previous exuberance around Fintech funding, driven by rapid adoption of digital financial services during the COVID-19 pandemic, has given way to a more measured and discerning approach. This newfound discipline, though challenging in the short term, will ultimately strengthen the Fintech ecosystem in Vietnam by weeding out unsustainable business models and encouraging a focus on operational efficiency and profitability.

Navigating this transition will require Fintech founders to recalibrate their strategies, optimize their cost structures, and demonstrate clear paths to profitability. Investors, too, will need to take a more nuanced and patient approach, recognizing that the path to long-term success in this rapidly evolving sector may not always be linear. By embracing this more prudent and sustainable mindset, the Vietnamese Fintech industry can position itself for continued growth and development in the years ahead.

3. EXPERIENCES IN FINTECH DEVELOPMENT IN SELECTED COUNTRIES AROUND THE WORLD

3.1. Experience of Singapore

Singapore has emerged as a regional leader in fostering Fintech innovation through a multifaceted approach adopted by its government since 2016. To create an environment conducive to experimentation with new financial technologies, the government has introduced several strategic initiatives. At the core of this effort is the establishment of a dedicated Fintech office in October 2016. This one-stop service agency brings together multiple government entities, including the Monetary Authority of Singapore (MAS), the Economic Development Board (EDB), the Infocomm Media Development Authority, and Enterprise Singapore. This centralized platform serves to advise newly formed Fintech companies on government-backed capital support programs and helps them navigate the evolving legal and regulatory landscape related to Fintech in the banking and financial sectors. Complementing this institutional support, in August 2016, MAS launched the Fintech Innovation Lab - a shared space that enables the Fintech community to collaborate, interact, and jointly develop new products and solutions. Two months later, MAS further reinforced its pro-innovation stance by publishing guidelines that offered more flexible mechanisms for Fintech companies to test financial products without excessive legal risks.

These concerted efforts have helped position Singapore as a hub for Fintech growth, although the government acknowledges that the city-state still lags behind some global peers in fully harnessing the opportunities presented by financial technologies. The investment landscape in Singapore's Fintech sector reflects this momentum. In 2022, total investments reached a five-year high of $4.1 billion, comprising 250 M&A, private equity, and venture capital transactions. This marked a 22% increase from the 2021 figure of $3.4 billion and a 75% surge compared to the $2.3 billion recorded in 2020. While falling short of the pre-pandemic peak of $5.62 billion in 2019, the 2022 investment amount still represents the second-highest on record for the Singaporean Fintech ecosystem.

Globally, the key areas attracting Fintech investments in 2022 included payments, cryptocurrencies, and Regulatory Technology (RegTech). Singapore's Fintech investment landscape mirrored this trend, with the top three sectors being cryptocurrencies, payments, and asset management technology. Notably, KPMG highlighted the remarkable growth in RegTech investments during this period, as well as a shift in investor focus towards early-stage Fintech deals, contrasting with the previous emphasis on late-stage transactions. Looking ahead, the Asia-Pacific region, including Singapore, is poised to continue its ascent as a hub for Fintech innovation, particularly in the realm of cryptocurrency management. The establishment of robust legal frameworks in countries like Singapore, Japan, and Hong Kong is expected to attract increased attention from cryptocurrency industry players and investors, especially in the wake of the FTX collapse.

3.2. Experience of South Korea

South Korea has emerged as a global leader in the development of ICT infrastructure, and this technological prowess has been instrumental in driving rapid transformations within the country's financial sector. Alongside fostering digital financial technology innovations, the South Korean financial landscape is undergoing a sweeping transformation, marked by substantial investments in cutting-edge technologies. The
swift rise of Fintech has led to a significant expansion and diversification of the financial ecosystem, with new players replacing and complementing the traditional financial institutions and market functions. Since the early 2000s, when South Korea embarked on its digital development journey, the Fintech industry has been increasingly dominated by financial companies owned by major technology corporations (BigTechs) as well as select large financial technology firms. 

To regulate this burgeoning Fintech sector, South Korea has implemented a robust regulatory framework. Electronic payment service providers in the Fintech space are required to register with the Financial Services Commission (FSC) and comply with the regulations stipulated in the Electronic Financial Transaction Act (EFTA). When the EFTA was first enacted in 2007, only 21 companies had registered. However, this number has since grown significantly, reaching 157 by the end of 2020. Alongside these larger players, a multitude of smaller companies, established by businesses in manufacturing, retail, and distribution, have also emerged, aiming to offer convenient payment services to customers through their shopping platforms or distribution networks. These providers of convenient payment services are mandated to undergo registration with the Financial Supervisory Service (FSS). The impact of these developments is evident in the substantial surge in the utilization of electronic payment services in South Korea. According to estimates from the National IT Industry Promotion Agency, the number of users of payment gateways (PG) increased by a factor of twelve from 2008 to 2020. During the same period, the portion of electronic payment services in the country's GDP escalated from less than 2% to over 25%. While payment gateways initially held a dominant market share of nearly 70% in 2017, this has since decreased to 53% in 2020 as the financial landscape has diversified.

The rapid development of convenient payment methods through payment gateways, facilitated by the country’s robust IT infrastructure and the widespread adoption of smartphones, has been the primary catalyst for this significant surge in electronic payment services. The digitalization of the entire payment and money transfer ecosystem within the goods and services market, which took shape in the early 2000s, laid the foundation for this transformation. Furthermore, South Korea's adoption of the open banking model has ushered in a novel form of collaboration between banks and Fintech firms. Through the API Hub platform, this model eliminates the need for one-on-one partnerships between banks and Fintech entities, with the Korea Financial Telecommunications and Clearings Institute (KFTC) playing a crucial role as the coordinating operator. KFTC brings together participating members within a shared platform, and any bank that adheres to the standardized principles and procedures can join the Open Banking Platform (OBP). To facilitate the integration of Fintech companies into this infrastructure, KFTC offers a pre-connected testing environment that interfaces with the testing environments of multiple banks.

3.3. Experience of Japan

Japan has taken a proactive approach in developing a comprehensive legal and regulatory framework to stimulate the growth of its Fintech sector. In 2016, the Japanese government designated Fintech as a promising area for growth in its "2016 Japan Revitalization Strategy." This strategic prioritization was quickly followed by concrete actions, including the amendment of regulations such as the "Bank Act" in May 2016 to encourage banks to establish IT-related subsidiaries dedicated to Fintech development. Alongside these legislative efforts, the Japanese government restructured its policy management system, introducing the "Regulatory Sandbox" framework. This innovative approach aims to facilitate Fintech growth and innovation by providing a secure environment for experimentation with new technologies and business models, while ensuring appropriate regulatory oversight.

Beyond the legal and policy realms, the Japanese government has also taken steps to create a conducive ecosystem for Fintech companies to thrive. The Ministry of Economy, Trade, and Industry (METI) launched a program from October 2019 to June 2020 that offered a 5% discount on credit card, debit card, prepaid IC card, or smartphone purchases at registered retail stores and small to medium-sized restaurants. This initiative was designed to incentivize the adoption of digital financial services among both businesses and consumers. Furthermore, the Financial Services Agency (FSA) and the Tokyo Metropolitan Government (TMG) have established...
dedicated teams to actively attract foreign financial service companies considering expansion into the Japanese market. This targeted approach underscores the government's commitment to positioning Japan as a hub for international Fintech players.

Additionally, the Japanese government has undertaken a broader set of measures to support the digitization of its financial and administrative systems. These efforts include digitizing personal identification, conducting research and testing on personal information cards, integrating electronic personal information identification into smartphones, and implementing a data management system to streamline government administrative processes. By leveraging digital technologies, the government aims to enhance the overall efficiency and accessibility of financial services and public sector operations. Through this multifaceted approach, the Japanese government has demonstrated a clear dedication to fostering a dynamic and innovative Fintech ecosystem, creating a regulatory environment that encourages experimentation, supports the adoption of digital financial services, and positions the country as an attractive destination for both domestic and international Fintech players.

3.4. Experience of the UK

The United Kingdom has firmly established itself as the second-largest hub for Fintech investments globally, trailing only the United States. Despite its leading position in the European Fintech landscape, the sector in the UK experienced a significant decline in investments in 2022. During this period, Fintech investments in the country decreased by nearly 56%, falling from $39 billion to $17.4 billion. This downturn was largely attributed to the impact of high interest rates and persistent inflation. The drop in investment activity extended beyond the total value, with the number of M&A, private equity, and venture capital deals in the UK Fintech sector also declining, reaching only 593 transactions in 2022. This sluggish performance continued into the first half of 2023, with Fintech investment in the UK plummeting to $5.9 billion. Despite these challenges, the UK's Fintech ecosystem remains robust, comprising over 1,600 companies, a figure expected to double by 2030. The sector contributes an estimated £11 billion ($13.4 billion) to the UK economy and sustains more than 76,000 jobs. To further strengthen this ecosystem, the UK government has made the Fintech sector a top priority, particularly as the country navigates its future relationship with the European Union.

In May 2019, the U.S. Treasury and the UK's Treasury established the U.S.-UK Financial Innovation Partnership (FIP) to promote collaboration within the private sector, facilitate the exchange of regulatory expertise, and drive growth and innovation. The FIP operates through two primary pillars: regulatory and commercial. Recognizing the strategic importance of the Fintech industry, the UK government launched a comprehensive review of the country's Fintech landscape in February 2021, led by Ron Kalifa, OBE. The Kalifa Review presented numerous recommendations, including alterations to UK listing regulations, enhancements to tech visas, the establishment of a regulatory 'scalebox,' and the creation of a Center for Finance, Innovation, and Technology. The government has already begun implementing some of these recommendations, underscoring its commitment to maintaining the UK's position as a global Fintech leader.

To achieve this success, the UK government has prioritized technology investments from the outset, leveraging its cutting-edge technological capabilities, strong appetite for innovative products, and leading legal framework to create favorable conditions for both SMEs and financial institutions to thrive in the Fintech space. Furthermore, the UK has been at the forefront of supporting new regulations in financial services, exemplified by the introduction of the Fintech Sandbox in 2015 and the "Fintech Sector Strategy" in 2018, which offered policies and initiatives to help Fintech businesses overcome short-term and long-term challenges. The demand for innovation has also been a significant driver of Fintech service development in the UK. By the end of 2020, around 12 million people in the UK had opened accounts with digital-only banks, and nearly two-thirds of the population used contactless cards. Additionally, 83% of UK SMEs utilized mobile banking, prompting traditional financial institutions like Santander to implement cloud-based solutions to enhance efficiency, expedite loan approvals, and improve customer experiences.
4. LESSONS LEARNED FOR VIETNAM IN DEVELOPING FINTECH

The experiences of various countries worldwide offer valuable lessons for Vietnam's approach to developing its Fintech sector:

Firstly, the experiences of various countries worldwide offer valuable lessons for Vietnam's approach to developing its Fintech sector. One key lesson is the importance of establishing a flexible and transparent regulatory framework. Successful Fintech hubs have implemented adaptive regulatory mechanisms that accommodate technological innovations while prioritizing financial security and consumer protection. For instance, Singapore's "sandbox" model allows Fintech firms to test new products and services within defined parameters, facilitating experimentation and the introduction of novel solutions.

Secondly, promoting ecosystem-wide collaboration is crucial for Fintech development. Leading Fintech nations have advanced financial infrastructure that enables seamless connections between Fintech businesses, banks, investors, customers, and third-party service providers. China's electronic payment system, anchored by mobile apps like Alipay and WeChat Pay, exemplifies this collaborative approach, empowering users to access a diverse range of financial services conveniently.

Thirdly, encouraging innovation and enhancing Fintech capabilities are essential. Thriving Fintech sectors are characterized by competitive business environments that foster innovation. Countries like Israel, with over 500 Fintech firms, benefit from access to venture capital, startup incubators, and comprehensive training programs, nurturing dynamic and innovative ecosystems.

Fourthly, building on these global best practices, several strategic directions can be suggested for Vietnam's Fintech development. Enhancing regulatory mechanisms should be prioritized, tailoring frameworks to the specific characteristics of different services and products. Strengthening ecosystem collaboration is also vital, creating favorable conditions for robust connections between Fintech companies and relevant stakeholders. Additionally, encouraging innovation through reduced barriers and financial incentives, along with increasing digital financial literacy, is crucial for driving Fintech adoption.

By drawing on the lessons from global Fintech leaders and implementing these strategic directions, Vietnam can unlock the full potential of its Fintech sector, contributing to the country's broader economic and social development.

5. CONCLUSION

In the current era of the digital technology revolution, the development of a sustainable and effective Fintech ecosystem has become a critical imperative for countries around the world. Leading nations such as the United States, China, Singapore, the United Kingdom, India, and Israel have successfully established robust Fintech ecosystems by cultivating collaboration among key stakeholders and creating a conducive environment for Fintech growth. Applying similar strategic approaches and evidence-based policies can help Vietnam maximize its significant potential in the Fintech sector. As one of the countries in the Southeast Asian region with substantial Fintech growth prospects, Vietnam stands poised to harness the transformative power of financial technologies. However, to foster a truly sustainable Fintech ecosystem, it is essential for Vietnam to learn from the pioneering experiences of these global leaders and selectively implement international best practices. The development of a thriving Fintech sector not only contributes to economic growth but also aids in building a more efficient and equitable digital economy. By drawing on the lessons from Fintech powerhouses, Vietnam can establish a regulatory framework that strikes the right balance between innovation and risk management, while also incentivizing collaboration among Fintech companies, financial institutions, regulators, and end-users. Additionally, Vietnam can leverage international Fintech expertise and knowledge-sharing platforms to enhance the capabilities of its domestic Fintech startups and incumbents. This cross-pollination of ideas and technologies can help Vietnamese Fintech firms develop solutions that are tailored to the unique needs of the country's consumers and businesses, ultimately driving comprehensive socio-economic development. With unwavering dedication, a steadfast commitment to continuous learning, and the proactive sharing of Fintech knowledge and best practices, Vietnam has the potential to emerge as a Fintech powerhouse in the Southeast Asian region and beyond. By positioning itself as a hub of Fintech innovation, Vietnam can meet the
evolving financial needs of its citizens, businesses, and institutions, ultimately contributing to the creation of a more inclusive, efficient, and sustainable digital economy.

REFERENCES


