

**TRANSFORMATION OF CUSTOMER BEHAVIOR TO FINTECH
SERVICE DURING THE COVID-19 SITUATION IN THAILAND.**



KAMIN JATEJARUNGWONG

**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF MANAGEMENT
COLLEGE OF MANAGEMENT
MAHIDOL UNIVERSITY
2022**

COPYRIGHT OF MAHIDOL UNIVERSITY

Thematic paper
entitled
**TRANSFORMATION OF CUSTOMER BEHAVIOR TO FINTECH
SERVICE DURING THE COVID-19 SITUATION IN THAILAND.**

was submitted to the College of Management, Mahidol University
for the degree of Master of Management
on
30 April 2022



.....
Mr. Kamin Jatejarungwong
Candidate

.....
Asst. Prof. Simon Zaby,
Ph.D.
Advisor

.....
Assoc. Prof. Randall Shannon,
Ph.D.
Chairperson

.....
Assoc. Prof. Vichita Ractham,
Ph.D.
Dean
College of Management
Mahidol University

.....
Manjiri Kunte,
Ph.D.
Committee member

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my advisor, Associate Professor Simon Zaby, who guided me in doing this project. He provided us with invaluable advice and helped us in difficult periods. His motivation and help contributed tremendously to the successful completion of the project.

Besides, I would like to thank Assoc. Prof. Vichita Ractham, Assoc. Prof. Randall Shannon, and Manjiri Kunte who helped us by giving me advice and providing the equipment which I needed. Also I would like to thank my family and friends for their support. Without that support I couldn't have succeeded in completing this project.

At last but not in least, I would like to thank everyone who helped and motivated me to work on this project.

Kamin Jatejarungwong



TRANSFORMATION OF CUSTOMER BEHAVIOR TO FINTECH SERVICE DURING THE COVID-19 SITUATION IN THAILAND.

KAMIN JATEJARUNGWONG 6349083

M.M. (General Management)

THEMATIC PAPER ADVISORY COMMITTEE: ASST. PROF. SIMON ZABY, Ph.D., ASSOC. PROF. RANDALL SHANNON, Ph.D., MANJIRI KUNTE, Ph.D.

ABSTRACT

Because finance has long been linked to everyone in the economy, and because of the constant technological advancements over the last ten years, the Fintech service rapid growth has occurred in the past. In this study, we investigated ordinary people's financial transaction behavior during traditional transactions (offline channels) and how Fintech services have transformed in the immediate wake of the COVID-19 pandemic, including how the trend of the behavior of financial users will change when the situation of the COVID-19 epidemic is in a better direction. The study was conducted out by interviewing users and providers of financial services to gather qualitative data. This report included factors other than the COVID-19 situation that are likely to be associated with user behavior change decision-making, such as the motivation factor and the user's characteristics. The study's results were similar to those of previous studies conducted in other countries. And the use of Fintech in Thailand is trending in the positive way. Fintech must, but nevertheless, be driven by three sectors in Thailand to be able to replace traditional financial services: financial customers, financial service providers, and government/regulator. To enhance the country's financial system and make a contribution to the Thai economy's growth potential.

KEY WORDS: Fintech/ COVID-19/ Behavior of financial users

36 pages

CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER I INTRODUCTION	1
CHAPTER II LITERATURE REVIEW	4
2.1 Fintech	4
2.2 Fintech and Impact of COVID-19	6
2.3 Exploring the Use of Fintech	7
2.4 Financial institution adjustment and digital disruption	8
2.5 Characteristics of majority users in Fintech	9
CHAPTER III RESEARCH METHODOLOGY	10
3.1 Data Collection Method	10
3.2 Interview Method	10
3.2.1 Sample Selection	10
3.2.2 Semi-Structured Interview	12
3.2.3 Probing Technique	18
3.2.4 Research Framework	18
CHAPTER IV DATA ANALYSIS	19
4.1 Characteristics of the Interviewees	19
4.1.1 Background information from customer side	19
4.1.2 Background information from service provider side	20
4.2 Fintech and Impact of COVID-19	20
4.2.1 Customer	20
4.2.2 Service provider	22
4.2.3 Conclusion	22
4.3 Exploring the Use of Fintech	23

CONTENTS (cont.)

	Page
4.3.1 Customer	23
4.3.2 Service provider	24
4.3.3 Conclusion	24
4.4 Financial institution adjustment and digital disruption	25
4.4.1 Customer	25
4.4.2 Service provider	25
4.4.3 Conclusion	26
4.5 Characteristics of majority users in Fintech	27
4.5.1 Customer	27
4.5.2 Service provider	28
4.5.3 Conclusion	29
CHAPTER V RECOMMENDATION AND CONCLUSION	30
5.1 Conclusion	30
5.1.1 Demand of Fintech service adoption after the pandemic	30
5.1.2 Potential of Fintech to be the main channel	31
5.1.3 The possibility of Fintech replacing traditional channels	31
5.2 Recommendations	32
REFERENCES	34
BIOGRAPHY	36

LIST OF TABLES

Table		Page
3.1	List of interviewees from customer side	11
3.2	List of interviewees from service provider side	11
3.3	Question list	13
4.1	Occupation and university field of study of interviewees from customer side	20
4.2	Service field of interviewees from service provider side	20



LIST OF FIGURES

Figure	Page
3.1 Research Framework	18



CHAPTER I

INTRODUCTION

Technology has continued to advance in order to provide people with a higher quality of life. Especially during the past decade, the world has developed technology more rapidly, resulting in digitalization to social and economic conditions and becoming part of everyone's daily life. For many businesses and industries, digitalization has aided in the creation of profitable opportunities. On the other hand, it forces businesses or companies to learn and understand how to use digital platforms to support their service and respond to customers more efficiently. At least to maintain competitiveness in the industry and not be a disadvantage of the business (Burak and Ipek, 2021).

Businesses are constantly competing to increase profits in today's economy, and technological change is a new trend for the future economy. The digital economy is a branch of economic activity that is directly linked to the advancement of digital technologies, which has resulted in significant new activities for people all over the world, such as e-commerce, online services, cryptocurrency, internet banking, and electronic payments (Borremans, Zaychenko, & Iliashenko, 2018). Therefore, with a key part of driving economic activity, their high economic importance and numerous competitors in the industry, banks and financial institutions must develop their services to match emerging technologies in order to meet the needs of their users. In particular, the speed of service and the convenience of digital technology help increase service efficiency for service users.

During a pandemic, there are many implementation changes to survive and maintain these unusual activities in the closest approach from the earlier usual activities. The shift from traditional banking to Fintech, such as Online Banking Service or Mobile Banking Application during pandemic become increasing dramatically. Even when the vaccination is expanding to be full coverage, the Fintech service and online platform trend are still growing to cover the main portion of customers service channels.

However, many researchers have started questioning how financial transactions and activities will change after the pandemic.

With my personal experience in the banking sector and investment service, these issues have been discussed frequently in recent times. Nonetheless, the recent study and research still have limitations to finding the answer from both sides of customers and service providers. For these reasons, this study will focus on the impact of the COVID-19 pandemic, which will drive the behavior change of financial transaction users and service providers. Hence, the research question of this study will have consisted with the following.

- 1) Will the customer continue increasing or remaining their demand of Fintech service adoption after the pandemic?
- 2) Will Fintech service have the potential to be the main channel for banks or financial institutions?
- 3) How do Fintech services and online channels replace face-to-face interaction in the practical approach?

This study aims to conduct insightful information from customers and financial service providers. The research methodology will be the in-depth interview to probe their needs and possible solutions from actual experience. Therefore, the customer's sampling selection will be considered from the various factors, e.g., gender, age, area of living, income level, educational level, financial and investment familiarity, and technology literacy. And the financial service provider's sampling selection will be considered from their area of service, size, and working experience. The data collection method will use the semi-structured interview in order to answer the research questions and shape the practical recommendations for stakeholders.

Earlier, Fintech could be the business advantage of some financial institutions. Nowadays, Fintech might be the fundamental service in order to keep providing assistance for their customer. Besides, the user experience could be different and shift to the online mode to respond to their needs of the flexible accessibility on the services. For these reasons, people may consider the COVID-19 as the force of changes and adjustments. On the other hand, this pandemic could be only the stimulus factor of this paradigm shift to be faster than expected. With this, the development of improving

and adapting may lead us to the ultimate digitalization world sooner. Therefore, digitalization adaptation becomes more important to live and survive in this era.



CHAPTER II

LITERATURE REVIEW

The spread of COVID-19 has affected people's lives, making everyone adapt to get through this period. That also includes the economic and business sectors worldwide that must change from this pandemic. Therefore, the world's most significant adaptation occurs, especially in the financial sector, which is connected to the economy from various aspect.

Several studies have found that the pandemic has had a significant positive impact on the use of Fintech through social distancing measures and government support. In the pre-COVID-19 pandemic, users of financial institutions and banks could go to branches for financial transactions. However, in the pandemic with the policy of social distance to prevent the spread of COVID-19, financial service providers must change themselves by changing the behavior of service users. Moreover, causing many users to change their behavior of using financial services from the past that had to go to bank branches to use more Fintech like online service banking. This pandemic situation proves the potential of Fintech innovation from the challenges and opportunities that come along (Mathew, Sunil, & Shanimon, 2022; Tripalupi & Anggahegari, 2020).

2.1 Fintech

Financial technology (Fintech) has been developed continuously according to the increase in the potential of sophisticated information, and communication technology has become an integral part of various aspects of people's daily life. The development of technology in the past decade has contributed to the transformation of products, services, and business operations from the past too quickly. Furthermore, of course, the financial and banking sectors are also part of this storm of change to accommodate the ever-changing needs of our customers and users (Tripalupi & Anggahegari, 2020).

Fintech can be defined as financial innovations developed by financial service providers or banks to replace traditional financial services. New technologies for transactions will become more complex by adopting technologies (Harahap et al., 2017).

Fintech or online banking service is like transforming traditional banking services into an online format, which provides customers or users with more convenience than traditional banking services. Whether it is withdrawing money, transferring money, managing accounts, financial service subscription, payment for service, investment, and applying for a loan from the bank can be made faster and more conveniently. Fintech, on the other hand, benefits service providers in many aspects, especially in terms of reducing service costs and increasing service efficiency (Uppal, 2008).

The evolution of Fintech has been around for a long time spanning three phases: Fintech 1.0 covering the period 1866 to 1967, Fintech 2.0 covering the period 1967 to 2008, and finally, Fintech 3.0 covering the period since 2008 onwards (Arner et al. 2016).

In the Fintech 1.0 phase, the technology's behavior is analogous, focusing on improvements in the faster transport of transactional and financial data. For example, the use of Morse code for money transfers, the introduction of computers to crack the code, and the creation of credit cards in the 1950s, was transformative for both business and consumer users. Next, Fintech 2.0 began to develop more from Analog technology to more Digital in the era. The financial industry started towards financial globalization. As a result, financial services are still mainly in the traditional form, and Fintech has become a convenience for users. Starting from the first ATM was invented in the UK and followed by a payment system through communication technology. Including the development of improvements to the regulation of financial systems and payment systems to suit the financial industry's changes. In 2008, entered the era of Fintech 3.0 according to the classification of Arner. In this era, more new products differ from traditional financial services. For example, Cryptocurrency and E-Wallet from technological innovations developed. (Arner et al. 2016).

However, the development of Fintech or online banking services has encountered different limitations in each country. It found that in developing countries,

there is still a lack of focus on creating legislation for regulating Fintech. There are also challenges facing Fintech service providers related to the knowledge of the technology application of the users. Therefore, creating a successful Fintech service requires cooperation between three parties; Bank as a service provider, the government as a person who sets laws and regulations, and service users or customers who need to learn technology. Therefore, Fintech service providers may need to study attracting financial service users with low technology usage (Al-Zatari & Reehan, 2021).

2.2 Fintech and Impact of COVID-19

In the early 2020s, the world was faced with Corona Virus Diseases 19 (COVID-19) pandemic, which originated in China. Moreover, this epidemic has undoubtedly affected the global economy and financial industry both Bank and non-Bank financial institutions, including Fintech. The COVID-19 pandemic is rapidly affecting the world, including people's way of life. That can be seen from the social distancing policies that many countries implemented to their own countries to slow down the epidemic's severity. As a result, people and businesses must adapt by working from home or studying from home, thus increasing online banking services users due to social distancing (Tripalupi & Anggahegari, 2020).

Several studies have found that the rules of social restrictions are contributing to businesses and people increasingly learning and using new communication technologies, including Fintech (Al-Zatari & Reehan, 2021).

In a study on the impact of the COVID-19 epidemic crisis on online banking services by distributing questionnaires to target groups in Romania, it was found that there was an increased level of usage from online banking service by users increased during the pre-period of COVID-19 (Baicu, Gardan, Gardan, & Epuran, 2020).

There are also studies from other countries that achieved similar results during the COVID-19 crisis, such as India and Ukraine, where COVID-19 pandemic factors positively impacted FinTech and online banking services. That is because it can reduce the risk of spreading between the bank's customers and the bank itself. Therefore, COVID-19 is a catalyst for users of banks and financial institutions. Especially those unfamiliar with modern technology are starting to adopt and use more Fintech and

online banking services, which is a plus for service providers who can reduce costs and time to promote the number of users during the COVID-19 period (Al-Zatari & Reehan, 2021).

2.3 Exploring the Use of Fintech

Pandemics are one of the most important factors influencing the use of Fintech. This has allowed the banking sector to move towards customer satisfaction and reduce operating costs. In addition, other factors are currently driving catalyzed customers to adopt more FinTech alternatives.

Burak and Ipek (2021) investigated the determinants influencing customer attitudes and intention. The study showed that Fintech's ease of use, performance, enjoyment, and security positively impact adaptation. On the other hand, perceptions of financial risk reflect a negative impact on customer perceptions.

Besides, Rawwasha et al. (2020) also studied the factors that affect the adoption of Fintech through the group survey and questionnaires. This study identifies the affecting factors into four influential factors, including expected benefits, privacy, usability, and trust. Regarding the study, the most affecting factor is trust from the customer (user) to the service provider (banking). Customer's trust will enable customers to feel more comfortable and open mind to use the service.

In another angle, the technology approach also impacts Fintech usage and banking adjustment. In order to attract customers to shift the behavior, the banking sector and financial institutions have to develop the interface to become more practical and user-friendly. The application will complement the main service and product. This attachment will enhance users' enjoyment and spontaneous service response (Dauda & Lee, 2015).

In the present, many studies reflect that ease of use, technology security, and technology knowledge are the main drivers for this paradigm shift (Al-Zatari & Reehan, 2021). With the pandemic stimulation, the shift of brick-to-click service becomes necessary faster than usual during the lockdown period.

2.4 Financial institution adjustment and digital disruption

In everyday life, online service is a vital element for people nowadays. Especially in the pandemic, every country announces the lockdown and social distancing measurements that force the institution to adjust themselves to be digitalization.

Arner (2020) stated that it is not time to experiment for their new technology and digital solution but to use the existing platform for greater utilization for the new context. In reality, the social distancing policy may change the customers' behavior, but digital financial services cannot emerge in a short period of time. The digital payment platform can be implemented effectively during the lockdown from its development before the crisis. Existing infrastructure is the essential foundation of the digitalization era.

Banking and financial institutions are the foundation of economic and social in many aspects in order to connect people. Therefore, the banking sector must adapt itself to respond to the changed behavior of its customers (Al-Zatari & Reehan, 2021). Seiam and Abu Alnadi (2014) discovered that the impact of online banking services for commercial banks could enrich their operation's effectiveness by reducing time, effort, cost, and compensation.

Fintech changes the service users' behavior. Fintech facilitates people to make transactions—for instance, utility expense payment and money transfer. At the same time, provide the accessibility for customers' financial information via platform. Digitalization has become one of banking's priorities to serve customer needs with quality and security. With this, banking will become the factor driving the economic recovery after the pandemic. Thus, banking has to put more effort into increasing customer trust and value creation from online services. Hence, banking tends to exert the integration of online and offline services provided in the future (Mathew, Sunil, & Shanimon, 2022).

2.5 Characteristics of majority users in Fintech

Beyond the influencing factors that service provider offers for the users, the Fintech's users characteristic and their surrounding environment also affect their

decision. Shihadeh (2020) found the common characteristic of Fintech's users. The study showed that the education level, gender, age, and income level is the influencing factor for users' choice. Higher education level tends to have more opportunity to use Fintech services significantly. Besides, the Generation Y user tends to have a more attention to Fintech more than the Generation X and Baby-Boomers Generation (Burak and Ipek, 2021).

In some developing countries, the government's knowledge and attention affect the accessibility of online banking services as well. Laws and regulations are necessary to provide the online banking service and Fintech more thoroughly and effectively (Al-Zatari & Reehan, 2021). Hence, urban populations tend to have the possibility and capability to use Fintech more than rural areas from its quality of infrastructure (Howcroft et al., 2002).

However, there are limitations of the Fintech user's characteristics. Hence, this study will emphasize the customer's behavior in Fintech adaptation to define their needs and characteristics that will benefit the banking sector to design and improve their service. Furthermore, study the challenge of banking adjustment to cope with the digital disruption era.

CHAPTER III

RESEARCH METHODOLOGY

Hereafter, the analysis of related information in Chapter II reflects the challenges and importance of the financial institution adaptation and customer adoption in digital products and services. However, the recent study and research still have limitations to find the answer from both sides of customers and service providers. Therefore, the qualitative research method is required to fulfill the gaps. In Chapter III, we will divide the research methodology into two parts: data collection and interview methods, which will outline the interview methods used.

3.1 Data Collection Method

Listening and probing from the real-life experiences of both customers and service providers will shape the answer to the research questions of this study. As a result, to collect the primary data and understand the challenge, expectation, motivation, and attitude of stakeholders, the qualitative research methodology is required to be used in this study. This study will use the in-depth interview method to conclude the Fintech overview's adoption and the practical recommendations for the financial service provider.

3.2 Interview Method

The study finding will be provided from the interview method, which will require the interactive question and answer session to collect the related insight information.

3.2.1 Sample Selection

This study will conduct insight information from 13 interviewees in Thailand and currently get affected by the pandemic impacts. The interviewees are selected from the various characters related to the consideration factor in Chapter II.

The interviewees will be divided into two groups, including customers and financial service providers. Therefore, the customer's sampling selection will consider from various factors, e.g., gender, age, area of living, income level, educational level, financial and investment familiarity, and technology literacy. The financial service provider's sampling selection will focus on their service area, size, and working experience.

Table 3.1 List of interviewees from customer side

Code	Gender	Age	Area of living	Income level	Educational level	Financial and investment familiarity	Technology literacy
C1	Male	Gen B	Urban	High	Bachelor	High	Low
C2	Female	Gen B	Rural	Medium	Bachelor	Low	Low
C3	Female	Gen X	Urban	Medium	Bachelor	Medium	Medium
C4	Male	Gen X	Rural	High	Master	Medium	Medium
C5	Female	Gen Y	Urban	Medium	Master	Low	Medium
C6	Male	Gen Y	Rural	Medium	Master	High	Medium
C7	Male	Gen Z	Rural	Low	Bachelor	High	Medium

C8	Female	Gen Z	Urban	Low	Bachelor	Medium	Medium
----	--------	----------	-------	-----	----------	--------	--------

Table 3.2 List of interviewees from service provider side

Code	Gender	Age	Area of service	Size of company or branch	Type of customer	Position	Year of Experience
P1	Male	Gen B	Urban	Big	Mid-Low-income customer	Branch Manager	20 Years
P2	Female	Gen X	Urban	Big	High income customer	Senior Manager	20 Years
P3	Female	Gen Y	Urban	Big	High income customer	Senior Manager	10 Years
P4	Male	Gen Y	Urban	Big	High income customer	Junior manager	5 Years
P5	Male	Gen Y	Urban	Big	Low-income customer	Junior manager	5 Years

3.2.2 Semi-Structured Interview

The semi-structured interview method is the interviewing approach to structured questions into the study scope. Still, it uses open-ended questions that give the interviewees more flexibility to answer the question. A semi-structured interview will allow the interviewer to ask the prepared relevant question while open to other unplanned questions to probe the insight information (Nathan, et. al., 2014). Therefore, this method will enable the exploration of topics pertinent to each candidate spontaneously. This approach will assist us in understanding the related challenges and expectations of interviewees from their real-life experiences. The interview will conduct through interactive conversation among the interviewee and interviewer one by one.

Table 3.3 Question list

Interviewee Type	Main Research Question	Interview Question
Customer / Service User	1) Will the customer continue increasing or remaining their demand of Fintech service adoption after the pandemic?	1) For now, do you use any Fintech products and services? Can you give an example of the product and service you are using? 2) During the pandemic, do you start using more Fintech products and services? If yes, what is the product and service that you just started to use? 3) Do you think that pandemic forces or encourages you to be open-minded about Fintech? Why? 4) Will you continue using this Fintech product and service after the pandemic or after the release of the social distancing policy? 5) Will you consider using more Fintech products and services from now on? Why?
	2) Will Fintech service have the potential to be the main channel for banks or financial institutions?	6) Do you think that the technology barrier creates any difficulty for people to use? Is it now easy to use? Why? 7) Currently, what is the purpose of the Fintech product and service you use? Can you give an explanation and example? 8) Do you use the online platform to make transactions or any financial activity more than the walk-in branch service? Why? 9)

Table 3.3 Question list (cont.)

Interviewee Type	Main Research Question	Interview Question
		<p>10) Do you consider that the Fintech product and service you are using can provide you with more convenience or satisfaction than earlier? Why?</p> <p>11) Do you satisfy with the current online platform technology? Why?</p>
	<p>3) How do Fintech services and online channels replace face-to-face interaction in the practical approach?</p>	<p>12) What benefits or pros do you get from using Fintech products and services? Can you give an example?</p> <p>13) Do you think that online channel has any limitations in receiving service? Why?</p> <p>14) Do you perceive any aspect that walk-in branch service can give more benefit or satisfy? Why? Can you give an example?</p> <p>15) Compared to the Fintech or online channel, is it more secure to make significant transactions or any important activity through the walk-in branch service or offline channel?</p> <p>16) From your point of view, is it possible to use totally online channels instead of the offline channel? Why?</p>

Table 3.3 Question list (cont.)

Interviewee Type	Main Research Question	Interview Question
Financial Service Provider	1) Will the customer continue increasing or remaining their demand of Fintech service adoption after the pandemic?	<ol style="list-style-type: none"> 1) Is it gaining more online users during the pandemic in the banking and financial sector? How? 2) What Fintech products and services recently increased use during the pandemic? Can you give an explanation and example? 3) For the new online user, do you recognize any specific characteristics of these newcomers? (e.g., gender, age, income, location, needs) 4) Do you think that pandemic forces or encourages the customers to be open-minded and use more Fintech? Why? 5) For now, do you perceive that walk-in branch customers still decreasing? Or is it have a signal to become increasing after the situation turns to normal? 6) Personally, do you use any Fintech products and services? And how about your family and friends? 7) After a vaccination has become increasingly, does the number of online users decrease? Can you give an explanation and example?

Table 3.3 Question list (cont.)

Interviewee Type	Main Research Question	Interview Question
	<p>2) Will Fintech service have the potential to be the main channel for banks or financial institutions?</p>	<p>8) During the pandemic, do the banking and financial institutions focus on technology investment and digitalize the operation system? Or does it begin earlier before the COVID-19 takes place?</p> <p>9) Currently, does the company heavily invest in interface improvement or any technology advancement? Why?</p> <p>10) During the lockdown period, does the operation service collapse or face any difficulty providing general services for customers? Can you give an explanation and example?</p> <p>11) For now, do you provide service through the online or offline platform? Is it easy to use and keep in relation with your customers?</p>

Table 3.3 Question list (cont.)

Interviewee Type	Main Research Question	Interview Question
	<p>3) How do Fintech services and online channels replace face-to-face interaction in the practical approach?</p>	<p>12) Do you perceive the pros or cons more in using the online platform? Can you give an explanation and example?</p> <p>13) Do you receive any complaints about the Fintech product and service? Can you give an explanation and example?</p> <p>14) Do you have any service that still requires a walk-in branch or any documentary requirement that cannot be processed online? Can you give an explanation and example?</p> <p>15) From your point of view, is it possible to use totally online channels instead of the offline channel? Why?</p>

3.2.3 Probing Technique

Probing questions are aimed to assist the interviewer in profoundly understanding the interviewee aspect. At this point, the probing technique is the follow-up questions that guide the interviewee to describe their situation to elaborate the answers deeply (Behr, Meitinger, Braun, & Kaczmarek, 2017). As a result of this, the probing process is designed to encourage the insightful response and understanding about a specific topic from both sides, interviewer and interviewee.

3.2.4 Research Framework

This study aims to conduct insightful information from customers and financial service providers through in-depth interviews to elaborate on their experiences. The research framework will cover exploring the challenge and expectations from the customer side to find the possible and suitable adjustment of the financial institution side. The relationship of the finding of characteristic differences and need factors will benefit service providers to invest and process more precisely. This study aims to combine the primary data collection and literature reviews to present the result of the significant factor of similarities and differences in customer side. In comparison, the possibility adjustment and existing improvement from the service provider side will be considered to shape the insightful analysis and practical recommendations.

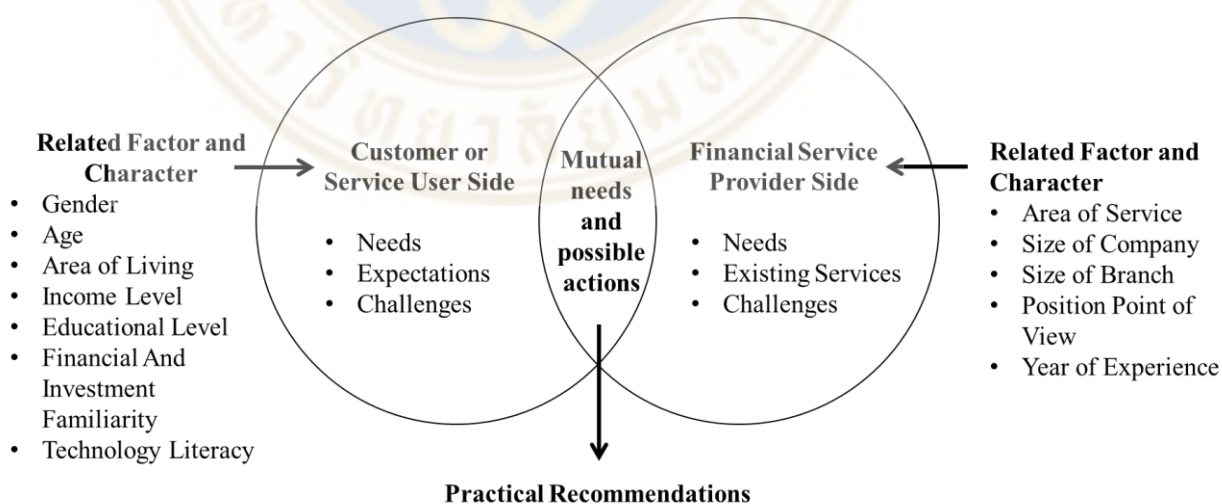


Figure 3.1 Research Framework

CHAPTER IV

DATA ANALYSIS

After conducting interviews for qualitative data, I analyzed and summarized all of the data in this chapter, which is categorized into four parts: (4.2) Fintech and COVID-19, (4.3) Exploring the Use of Fintech, (4.4) Financial Institution Adjustment and Digital Disruption, and (4.5) Characteristics of Majority Fintech Users. The data were analyzed separately into subsections: Customer and Service provider sides because we split the interviews with all respondents.

4.1 Characteristics of the Interviewees

This section describes the interviewees' personal characteristics, which may vary depending on their professional life and university field of study.

4.1.1 Background information from customer side

Users of general public banking and financial institutions are diverse in terms of occupation and university field of study, both of which are likely to influence interview outcomes. As a result, we divided it into two sections: (1) Occupational, which divided all interviewees' occupations into four categories: students, financial industry-related professions, non-financial industry-related professions, and retirement and (2) the university's professors. The interviewees' universities' faculties were divided into two categories: finance-related faculty and non-financial faculty. Table 1.1 summarizes the findings. Table 4.1 shows a summary of them.

Table 4.1 Occupation and university field of study of interviewees from customer side

Code	Professions	Faculty
C1	Retirement	Non-financial faculty
C2	Non-financial industry-related professions	Non-financial faculty
C3	Non-financial industry-related professions	Non-financial faculty
C4	Non-financial industry-related professions	Non-financial faculty
C5	Non-financial industry-related professions	Non-financial faculty
C6	Financial industry-related professions	Finance-related faculty
C7	Students	Finance-related faculty
C8	Students	Finance-related faculty

4.1.2 Background information from service provider side

Different aspects of service characteristics, which we divided into general monetary transactions, investment finance, and personal loan services, are likely to affect interview outcomes among financial service providers. Table 4.2 shows a summary of them.

Table 4.2 Service field of interviewees from service provider side

Code	Service
P1	Monetary transactions
P2	Investment finance
P3	Investment finance
P4	Investment finance
P5	Personal loan services

4.2 Fintech and Impact of COVID-19

4.2.1 Customer

The impact of the COVID-19 crisis on fintech usage was personally encountered by all respondents in this group of customers who were interviewed. The impact of COVID-19 has been experienced by the vast majority of respondents (6 out of 8 of all those interviewed) who use fintech services, especially those who use them more frequently. This was due to the government's safety measures and social distance measures that were enforced during the epidemic, as opposed to before the outbreak of COVID-19. Since the pre-epidemic period, two-sixths of the respondents in the group with increased Fintech use had increased and more frequently used new Fintech services. This was due to the fact that some of the services that had not been used previously differed from the rest of the four interviewees who were using them more frequently.

However, some respondents, specifically C1 and C7 interviewees, were affected differently by the COVID-19 pandemic than the majority. Despite being affected by COVID-19, the C1 interviewee was unable to conduct normal financial transactions. The interviewee also declined to use Fintech services for himself due to a lack of self-confidence in using the technology as a result of unfamiliarity and insecurity. The C1 interviewee chose to use Fintech services indirectly by entrusting financial transactions to close family members.

Meanwhile, at the start of the COVID-19 situation, C7 interviewees were affected in a completely different way than the other interviewees. This is due to a decrease in the use of Fintech services from before the COVID-19 crisis, which is due to a personal dislike of shopping and no financial expenses to be responsible for not leaving home due to government security measures. However, once the level of safety precautions was reduced, more activities could be carried out outside the homestead. In comparison to the pre-epidemic period, C7 interviewees respondents used Fintech services more frequently. Due to security concerns, we are attempting to reduce our daily exposure to paper money.

When it came to future Fintech adoption trends, seven out of eight customer-side interviewees (excluding C1 interviewees who are not currently directly using Fintech) had a plan in place. They were also happy to use new Fintech services if that Fintech service could fulfil their needs.

4.2.2 Service provider

Based on interviews with five service providers about the impact of COVID-19 on Fintech service users. The five interviewees all had the same results, namely, a significant increase in the use of financial services to Fintech compared to the pre-COVID-19 period, in which products or applications increased significantly. It will primarily be a service that uses other platforms to replace old transaction channels such as money transfer transactions, deposits, withdrawals, and E-payment systems.

The following are the factors that are driving more financial users to fintech, according to the five interviewees: (1) Government security measures that have resulted in the misappropriation of bank or financial institution branches necessitate the customer or service user finding another way to conduct financial transactions for the time being. And (2) the safety determinant, in which financial service users seek to maintain a safe distance from real cash during the COVID-19 situation.

All five interviewees agreed that after the COVID-19 situation, people are returning to branch locations to conduct financial transactions. Despite this, since the severe COVID-19 epidemic, the number of customers who use branches or offline channels has increased. However, in the long run, there is a proclivity for decline. This is due to the fact that the majority of users have been using Fintech services since they first began using them.

4.2.3 Conclusion

According to a study of the impact of the COVID-19 pandemic on Fintech usage in Thailand based on customer and service provider interviews, the impact of COVID-19 is expected to result in a increase in the number of users of Fintech services. COVID-19 factor has also had a positive impact on fintech services in other countries, according to studies (Tripalupi & Anggahegari, 2020; Al-Zatari & Reehan, 2021; Baicu, Gardan, Gardan, & Epuran, 2020).

Those who used Fintech services before and during the COVID-19 period, on the other hand, are more likely to use them again. Despite the fact that no government measures exist to control the disease or spread of COVID-19, the fact that it is widely used has greatly reduced concerns about its use.

4.3 Exploring the Use of Fintech

4.3.1 Customer

Customer-side interviews for factors influencing Fintech use have mostly pointed in the same direction. As C2, C3, C4, C5, C6, C7 and C8 interviewees, a total of 7 out of 7 used Fintech directly (With the exception of interviewee C1, who is not directly used) and gave purpose to the use of Fintech services with the convenience factor.

However, some interviewees mentioned factors influencing their use of Fintech, such as benefits other than convenience, security, and necessity. The following is a breakdown of the results:

The importance of benefits or worthwhile gains, such as promotional discounts or comparing the cost of use, was emphasized by the C6 and C8 interviewees. The benefits are provided by Fintech service providers and the government, which has issued measures to assist through Fintech, such as 50/50 subsidy and We Travel Together. It is a government policy that provides a subsidy to consumer spending if consumers adhere to the government's conditions via businesses or stores that participate in the government's program.

C5 and C7 interviewees who are currently active because of the safety factor, primarily because of concerns about the current COVID-19 situation.

Finally, due to changing social conditions and innovations driving the need for Fintech services, the necessity factor influences the Fintech usage of C4 and C5 interviewees.

While C1 interviewees chose not to directly use Fintech services due to their lack of technology knowledge, lack of daily use of technology, and lack of familiarity with technology led to a lack of self-confidence in using it. The self-service resulted in the C1 interviewee choosing to use the service indirectly instead.

In terms of ease of use, all of the customers interviewed (excluding C1 interviewees who are not currently directly using Fintech) agreed that the Fintech services they use are easy to use and that they have never had any problems with them.

4.3.2 Service provider

Aside from COVID-19, other factors that influence the use of Fintech services encourage financial service users to change their habits. There are also other factors to consider. Most service providers used the service because it was convenient, according to the five service provider interviewees. With Fintech, customers do not have to waste time and travel expenses for transactions at branches. Including the service provider's service can better meet the needs of customers as well.

Users of financial services, on the other hand, are driven to change their behavior by necessity. P1 and P2 were two of the five interviewees who noticed a shift in customer behavior. Customers frequently seek guidance on how to use Fintech services on their own after they have encountered difficulties. For instance, they want to use online services from other platforms that require Fintech, and adaptable applications for the context of the client's own work.

Customers complained to four of the five service provider side interviewees (P1, P2, P3, and P4 interviewees) that their organization's use of Fintech was difficult and that there were too many platforms, causing confusion.

4.3.3 Conclusion

According to the study, convenience factors are the most important factors influencing the use of Fintech services in Thailand. Other factors such as discounts and subsidies for using services, safety, and necessities, on the other hand, can encourage financial service users to use Fintech services. However, there are differences in opinion about the ease of use of Fintech, customer side, and service provider side among the interviewees. Nevertheless, such differences may arise as a result of the study's limitations, which include customer-side interviewees with a bachelor's degree or less and those whose complaints may represent a small percentage of all Fintech service users.

The results of the study were based on the findings of the studies discussed in Chapter II (Burak and Ipek, 2021; Besides, Rawwasha et al., 2020; Dauda & Lee, 2015; Al-Zatari & Reehan, 2021). However, according to a study by Besides, Rawwasha et al., (2020) there is a factor that our interviewees did not mention, namely the factor of trust in banks or financial institutions in Thailand, which are the main factors affecting fintech adoption. Due to their long-standing domestic foundations and stable

financial standing, banks and financial institutions in Thailand, which are the country's major Fintech service providers, may be quite trusted by domestic users.

4.4 Financial institution adjustment and digital disruption

4.4.1 Customer

From the perspectives of eight interviewees, I asked my opinion on the prospect of future transitions where online financial transactions, such as Fintech, will replace financial transactions through the same channels, such as using branch service. Which resulted as follows:

Five out of eight interviewees (C1, C2, C3, C5, and C6) thought Fintech financial transactions has the potential to fully replace traditional offline channels. This is noteworthy since even those C1 interviewees who were not directly involved with Fintech services believed the shift was possible. He reasoned that, while he did not use Fintech services directly, he recognized their value and necessity. Its advantages to both users and service providers are obvious. However, he believed it would take at least a long time to cause him to think this way, therefore he would not have utilized it. There was comparable rationale among the four interviewees who believed the transition was possible. They believed it was possible, but that it would take several years to achieve. Because, while most people are familiar with Fintech services, the system of many services needs to be enhanced to be more efficient, and additional solutions from future technology are required.

Because of the source, three out of eight interviewees (C4, C7 and C8) said that replacing fintech financial services with regular online financial transactions was impossible. During the interview, it was discovered that some products were not available online and that contact with branch workers was required.

4.4.2 Service provider

The questioner inquired about the possibility of online services eventually replacing all offline service channels, as well as whether or not branch services would be removed from customer service. Three out of five interviewees believed this was impossible because (1) Fintech services for specific customers were either unable to

meet their needs or unable to serve them. Customers, for example, require complex services (credit, investment, and corporate transactions), as well as the development of customer relationships (2) Due to insufficient traffic, investing in Fintech to replace certain services may not be cost-effective for banks or financial institutions and (3) Due to government regulations, some financial transactions cannot be completed through Fintech.

Two out of five interviewees, on the other hand, believed this was due to a shift in user generation and rapidly evolving technology. It is predicted that such an event will occur within the next 10-15 years, which is the factor of the COVID-19 epidemic crisis as part driving that event.

4 out of 5 interviewees stated when using the online platform, the interviewees (P1, P2, P3, and P4, who deal with clients or financial service users face-to-face) found it more difficult to maintain relationships between financial service providers.

4.4.3 Conclusion

The opinions of the interviewees, both on the customer and service provider sides, were split in this study. 7 out of 13 interviewees thought it was possible that Thailand's financial services system could use online channels to replace all offline channels. While six out of thirteen interviewees believed it was impossible.

However, the definite factor at present is that the role and importance of branch usage will gradually decline due to the impact of COVID-19, which encourages more financial users to change their financial transaction behavior through Fintech and familiarize themselves with the service users. It will be difficult to achieve a positive response in this direction if there is no critical factor in the governments that set the rules within the country and the availability of financial service providers (banks and financial institutions) that need to improve service patterns to be able to respond to changes in service users, according to the study referenced in Chapter II (Mathew, Sunil, & Shanimon, 2022).

Banks and financial institutions are increasingly focusing on Fintech investment and development due to the need to meet customer demand during the

COVID-19 situation, according to information obtained from interviews with financial service providers.

4.5 Characteristics of majority users in Fintech

4.5.1 Customer side

As a result of the interviews with a total of 8 participants, 7 of whom were direct users of Fintech services, only the C1 respondents were not directly using Fintech services but were indirectly using them through family transactions. Therefore, when comparing people who use Fintech services to people who do not, there will be few differences.

Therefore, research on the subject focuses on the specifics or levels of use of each interviewee's Fintech. The characteristics that clearly affect the level of Fintech usage are (1) age and (2) gender, according to this study.

Those who used Fintech the most were more likely to be from Generations Y and Z than from Generations B and X. Despite the fact that Gen B interviewees are as active in fintech services as C2 interviewees, her use is limited. For example, if she purchases the desired product through an e-commerce platform. She will prefer out of the e-commerce platform's e-payment system and instead choose to pay on delivery once the product is received. It included C1 interviewees who had never been used Fintech service before and were more willing to travel to a branch to conduct financial transactions. And the Gen X interviewees, although they have a higher level of Fintech usage than Gen B people, are also in a limited range. For example, C4 interviewees with daily limits on Fintech transactions to prevent electronic financial theft or unforeseen circumstances. In addition, C4 interviewees were more willing to choose cash on hand over fintech transactions.

The level of Fintech usage is also influenced by gender: females are more active in Fintech than males when compared to interviewees of the same age group. Although there isn't much of a difference at the Gen Y level. However, the differences can be clearly seen in other generation, and they can be divided into the following categories: At the Gen B level, the C2 interviewees were directly engaged in fintech, while the C1 interviewees opted not to work directly at all. At the Gen X level, C3

interviewees were more likely to use it than C4 interviewees, who were more concerned with safety and chose not to use it if it wasn't absolutely necessary. Finally, we saw a difference between C8 interviewees who had a higher level of Fintech adoption, particularly e-payments from e-commerce platforms, and C7 interviewees of the same generation at the Gen Z level.

4.5.2 Service provider

The information was gathered through interviews with service providers about the characteristics of the most active Fintech customers. All of the interviewees shared the same information that age affects their use of Fintech services. For example, prior to the COVID-19 pandemic, older customers, such as Gen B, were less active in Fintech services than others, due mainly to their unfamiliarity with the technology and their decision not to use Fintech services, even if the service provider had already recommended it. People in this group, however, have become more interested in self-study since the outbreak of the COVID-19 pandemic.

Beyond age, there are other characteristics of Fintech users that influence their use of Fintech services, such as education level, financial status, and geographic location. The following is information gathered from interviewees:

Four of the five interviewees (P2, P3, P4, and P5 interviewees) reported that their level of education affects their use of Fintech services based on their work experience. Those with a low education level or less than a bachelor's degree are more concerned with using Fintech services than those with higher education levels. Because of the fear of being deceived by the swindlers who have been exposed in the mainstream press, people feel nervous. P3 and P4 interviewees, interestingly, forbade their mothers from using fintech services for the same reason: fear of being deceived or cheated.

Three of the five interviewees (P2, P3, and P5 interviewees) said the client's financial situation influenced their decision to use the service. There are two ways to look at this factor. Because the interviewees P2 and P3 provide investment-related services, while the interviewee P5 provides a personal loan. As a result, the majority of the Fintech clients of the P2 and P3 interviewees are financially stable. However, because the vast majority of P5 interviewees' fintech clients are in the middle-to-low-income range, the characteristics will vary depending on the benefits that best suit

Fintech users' financial circumstances. However, because Fintech deployment entails users purchasing devices to use with said Fintech, those in a strong or stable financial position will be more likely to use Fintech services than those in a weak or unstable financial position.

In one out of five interviewees (P3 interviewee) stated that their area of living influenced their use of Fintech services, with customers in rural areas using Fintech less commonly than those in urban areas from factors in terms of local infrastructure and accessibility of financial service providers.

4.5.3 Conclusion

As a result of this research, we discovered that certain characteristics the most factor influencing the use of Fintech services in Thailand is age, as most older people are less familiar with how technology is used, because while younger generations, such as Gen Y and Gen Z, who have grown up with technology and are familiar with financial services in the form of Fintech, as well as offline transactions or through bank branches, are more familiar with using such services, which is in the same direction as Burak and Ipek, (2021) research.

According to the study's findings, other characteristics influencing the use of fintech services include: (1) gender, (2) educational level, (3) financial status, and (4) area of living. that have an impact on the use of Fintech services, and can be summarized as follows:

Customer-side interviews revealed that females tend to have higher levels of Fintech usage than males due to their purchasing behavior, which revealed the difference in fintech usage between males and females. Higher education and financial status will positively influence the use of fintech services as a result of the female e-commerce platform resulting in higher e-payment adoption. Financial services are more active in cities than in rural areas. The factors discovered in the study follow a study on factors and trends affecting the use of Fintech services in Chapter II (Howcroft et al., 2002).

CHAPTER V

RECOMMENDATION AND CONCLUSION

5.1 Conclusion

The impact of COVID-19 on the Fintech usage behavior of service users and financial transaction service providers is investigated in this study. As a result, the study's conclusions are based on the study's findings, which were used to answer all three research questions in Chapter I:

- 1) Will the customer continue increasing or remaining their demand of Fintech service adoption after the pandemic?
- 2) Will Fintech service have the potential to be the main channel for banks or financial institutions?
- 3) How do Fintech services and online channels replace face-to-face interaction in the practical approach?

5.1.1 Demand of Fintech service adoption after the pandemic

According to the results of the study, the trend of using Fintech will continue to grow in popularity. Users are increasingly turning to Fintech as a result of the COVID-19 pandemic crisis. At the same time, due to the COVID-19 situation, financial service providers such as banks or financial institutions are increasingly focusing on Fintech services by raising the level of development and investment to be more intense at present, resulting in the potential of Fintech services are more efficient. This will result in a positive change in the behavior of financial service users for Fintech in the future due to the combined force of both parties (more users and Fintech efficiency).

And the number of Fintech users will also grow faster than during pre-COVID-19 pandemic, which is affected by factors of necessity, such as buying certain types of products that require Fintech or Operating businesses in the future that need Fintech to meet the needs of partners or customers, etc. Convenience, which will lead to Fintech users sharing positive experiences with friends and family who have not used

Fintech services, creation as time passes, people from the new generation begin to replace those from the previous generation. People in the new generation are more technologically savvy. Furthermore, fintech developments are more responsive to user needs and can potentially replace more traditional financial services channels.

5.1.2 Potential of Fintech to be the main channel

Previously, bank or financial institution branches were primarily customer service channels; however, the introduction of Fintech such as Online Banking, Mobile Banking, or E-Payment has replaced many of the roles of branches or employees in branch. Presently, numerous new forms of Fintech, such as online personal loans, have emerged in the past two years.

According to the study, 12 of the 13 interviewees used Fintech to conduct financial transactions, particularly money transfers (except for C1 interviewees who were not directly active). People who almost never use financial services at branches (interviewees C7 and C8) because they can be replaced entirely by fintech and there are no complicated financial transactions. Even though he worked at a bank branch, interviewee P1, a bank branch manager, began to change his financial transaction behavior by using more Fintech.

As a result of the study's findings, Fintech services in Thailand have the potential to become the primary channel of service for banks and financial institutions. It is also the primary channel for many users of financial services. Many major Thai banks, according to information obtained from P2 interviewees, have consistently reduced the number of branches in the country in the past.

5.1.3 The possibility of Fintech replacing traditional channels

Despite the fact that Fintech's entry into the main service channel is becoming more common these days, the possibility of Fintech services replacing traditional services remains a complex matter in many ways. According to the findings of the study, the interviewees also had a lot of opinions. The majority of customer-side respondents believed Fintech could eventually replace traditional financial services. At the same time, the majority of financial service provider interviewees stated that Fintech would not be able to replace traditional channels.

For those who think it is possible, more user familiarity encourages financial service providers to develop more sophisticated Fintech for their financial services that are not yet in Fintech. And Fintech will benefit from the ongoing technological developments that are currently being developed.

In the group of people who think it is impossible, due to the complexity of some financial products and specific products requiring physical documentation and the value of investing in Fintech by financial institutions, including government regulations that still have restrictions on Fintech services.

As a result, the study concludes that the push for Fintech to be more responsive to applications is gaining traction. The three players in Fintech ecosystems (financial customer, financial service provider, and government/regulator) must all work together to help drive and empower Fintech to become more efficient.

5.2 Recommendations

As monetary is the fundamental factor of the economy and the exchange of the economy, if Fintech is unable to grow in Thailand, other technologies are likely not to be developed as well. The following are recommendations for contributions to the development of Fintech services conclusions of the research for each player in the Fintech ecosystem (financial customer, financial service provider, and government/regulator):

The following is a list of financial customer recommendations.

- To support the development of Fintech services in the country, customers or users of financial services should adapt and study Fintech services according to the changes that occur. This includes providing Fintech service providers with feedback that will benefit them as well. Because Fintech gives financial service users more options for conducting financial transactions across multiple channels and with greater efficiency, it also allows the country's economy to grow to greater levels.

- To safeguard their own interests. To reduce the risk of swiping, financial users should be aware of the use of Fintech and be cautious when providing personal information or Fintech usage data to an unknown person.

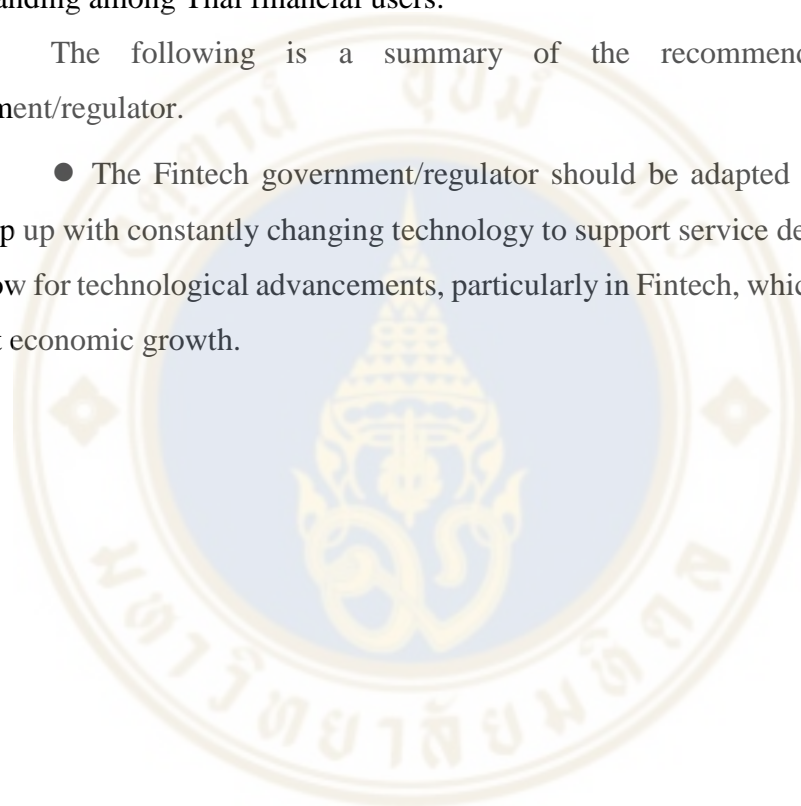
Recommendations to financial service provider can be summarized below.

- Fintech service providers should develop dynamic and anticipate future user needs to support the development of Fintech services and increase their ability to meet customer needs.

- To improve the overall capabilities of banks and financial institutions. After the burden of lowering their fintech adoption rates, service staffers will need to adjust, perhaps by learning another skill that will empower financial literacy and understanding among Thai financial users.

The following is a summary of the recommendations to the government/regulator.

- The Fintech government/regulator should be adapted to develop rules that keep up with constantly changing technology to support service development. This will allow for technological advancements, particularly in Fintech, which is another way to boost economic growth.



REFERENCES

- Al-Zatari, M. & Reehan, S. A. (2021). Using Online Banking Among Covid-19 Pandemic: A Systematic Literature Review. *Research Journal of Finance and Accounting*, 12, 1-5. DOI: 10.7176/RJFA/12-18-01.
- Arner, D. W., Barberis, J., Buckley, R. P. (2016). The evolution of Fintech: A new post-crisis paradigm?. *Georgetown Journal of International Law*, 47, 1271-1319.
- Baicu, C. G., Gardan, I. P., Gardan, D. A., & Epuran, G. (2020). The impact of COVID-19 on consumer behavior in retail banking. Evidence from Romania. *Management & marketing. Challenges for the Knowledge Society*, 15, 534-556. DOI: 10.2478
- Behr, D., Meitinger, K., Braun, M., & Kaczmirek, L. (2017). *Web probing – implementing probing techniques from cognitive interviewing in web surveys with the goal to assess the validity of survey questions*. Mannheim, GESIS, Leibniz-Institute for the Social Sciences.
- Borremans, A. D., Zaychenko, I. M. & Iliashenko, O. Y. (2018). Digital economy. IT strategy of the company development. *MATEC Web of Conferences*, 170. DOI: 10.1051/mateconf/201817001034
- Burak, E. I., Ipek, A. F. (2021). Covid-19's Impact on Attitude & Intention to Use Mobile Banking Applications. *International Journal of Recent Technology and Engineering*, 10, 135-144. DOI: 10.35940/ijrte.B6226.0710221
- Dauda, S. Y., & Lee, J. (2015). The Impact of Online Banking of Customer Satisfaction in Jordan. *Journal of Organisational Studies and Innovation*, 4, 1-13.
- Harahap, B. A., Idham, P. B., M, A. C., Rakhman, R. N., Harahap, B. A., Idham, P. B., M, A. C., & Rakhman, R. N. (2017). *Working paper perkembangan financial technology terkait central bank digital currency (cbdc) terhadap transmisi kebijakan moneter dan makroekonomi Perkembangan*

REFERENCES (cont.)

- Financial Technology terkait Central Bank Digital Currency (CBDC) terhadap Transmisi Kebijakan Moneter dan Makroekonomi.* 0–80.
- Howcroft, B., Hewer, P. A. & Hamilton, R. (2002). Customers perception of electronic service delivery in the UK retail banking sector. *International Journal of Bank Marketing*, 4, 475-493.
- Mathew, S. M., Sunil, S., & Shanimon, S. (2022). A Study on the Impact of Covid-19 Pandemic in the Adoption of Driven Banking in India.
- Nathan, E., Barlow, H., Ochsner, N., Kosslyn, M., Reisberg, D., Altmaier, M., ... Snyder, M. (2014). *The Oxford Handbook of Qualitative Research*. New York: Oxford Press.
- Rawwasha, H., Masa'd, F., Enaizan, O., Eneizan, B., Adaileh, M. J., Saleh, A. M., & Almestarihi, R. (2020). Factors affecting Jordanian electronic banking services. *Management Science Letters*, 10, 915-922. DOI: 10.5267/j.msl.2019.10.004
- Seiam, A. Z., & Abu Alnadi, M. A. (2014). The Impact of the Efficiency of Electronic Banking Services to the Financial Performance of the Commercial Banks of Jordan. *Al-Quds Open University Journal for Research and Administrative and Economic Studies*, 1, 319-336.
- Shihadeh, F. (2020). Online payment services and individuals' behaviour: new evidence from the MENAP. *International Journal Electronic Banking*, 2, 275-282. DOI: <http://doi.org/10.1504/IJEBANK.2020.114763>
- Tripalupi, R. I., & Anggahegari, P. (2020). The Impact of Covid-19 Pandemic: Challenges and Opportunities of Syariah Financial Technology. *International Journal of Nusantara Islam*, 8, 119-128. DOI: 10.15575/ijni.v8i1.10207.
- Uppal, R. K. (2008), *Banking Service and Information Technology – The Indian Experience*, New Century Publications, New Delhi.