

## Financial Technology Acceptance in Bangkok Metropolis and Vicinity

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— *Review of* —  
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### ABSTRACT

Various technologies presently exist have undergone significant development; therefore, they have been accepted by users of financial services in Bangkok and its vicinity. The focus of consumer education is on technology as a driver of economic growth. Applying technology in the financial industry, also known as FinTech (Financial Technology), to increase efficiency and effectiveness in work, saves time and improves the reliability of data. The sample for this study consisted of 410 people in Bangkok and its vicinity. The study found that the majority of the respondents were females aged 21–30 years, who had undertaken undergraduate studies as students and had an income of less than 10,000 baht per month. The analysis of customer behavior found that financial transactions were mainly carried out through technology because of the convenience in relation to time, and customers know about the services available through financial technology from bank employees and the recommendations of people around them and friends, respectively. An analysis of the data on the use of financial institutions' financial services revealed that the problems or obstacles in the transactions related to reliability and the failure system have a high level of importance. The hypothesis testing found that people who use financial technology and have made three transactions or more have greater confidence in the legal protection of financial transactions, reliability, stability and responsiveness.

Keywords: Acceptance, Financial Technology, Digital economy.

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## 1. INTRODUCTION

Thailand 4.0 is a national economic development policy of the Government. Thailand has experienced continuous economic development since the Thailand 1.0 model, which focused on agriculture, to Thailand 2.0, focusing on light industry, and Thailand 3.0, focusing on heavy industry. At present, Thailand is entering the Thailand 4.0 model, focusing on the introduction of technology and innovation to drive the economy to prepare for entering the era of the innovation-driven economy (value-based economy) with ten commander-level strategic and policy levels or a PM agenda (Maesincee, 2016): 1. Preparation for the twenty-first century, which will prepare the new generation of Thai people to move into the global economy. 2. Educating entrepreneurs and developing an innovative enterprise network driven by innovation (innovation-driven enterprise) and consisting of smart farmers, smart enterprises and high-value services. 3. Technology and industrial target development to increase competitiveness. Highly valuable investments will be made in these target groups. 4. The strengthening of the local economy by implementing economic strategies in the appropriate area, spreading knowledge and

technology and contributing to “multiple growth poles” to attract investment from outside and create high-productivity people in the area, including the creation of high-value products and services that can be competitive. 5. The integration of Thailand into the global community and pushing it as a trading nation and Middle Asia business centre. 6. The development of the physical infrastructure (water, forests, energy and the environment) 7. The development of the network infrastructure connectivity, such as the digital network and the transport and logistics network. 8. The development of the social infrastructure, such as welfare and social immunity. 9. The development of the intellectual infrastructure, such as science and technology research. 10. The development of a managerial mechanism to ensure that the urgent agenda above is driven effectively (Maesincee, 2016).

When innovation is driven by the economy, trade and investment, it is transforming itself into an era in which both sales and payments can be seen in a financial transaction through the financial technology nowadays. Financial technology is beginning to gain popularity, as they are convenient and fast. Most users are still members of the working-age groups, so the attitudes and behaviors of current working-age people towards financial technology transactions are an issue of interest and further study to provide information for developing transaction services through financial technology more easily and quickly and creating a guidebook to enable a faster understanding. A manual on protection against data theft and personal codes will also be developed, and the information will be used to produce public relations media to increase customers’ ability to handle financial transactions in the appropriate form in the future (Hidarat, 2016). Financial technology has come into play a role in the daily lives of consumers. Finance Technology or Fintech is an economic industry that consists of companies that use technology to make their financial systems more efficient, including 4 Social Media, Mobile, Analytics, and Cloud. According to Bank of Thailand report (2017) electronic payment transactions in the second quarter of 2017 amounted to 969.1 million items and were valued at 82.8 trillion baht. The usage has grown continuously increase from the same period last year to 28.2 percent. Internet and mobile payment and payment transactions grew at an annualized rate of 80.2 percent over the same period last year, as people began to use online services because it is quick and convenient. While money transfer and payments via ATM. and the bank transfers through branches had a contraction rate of 4.7 and 6.3 percent respectively.

## **2. RESEARCH OBJECTIVES**

1. To study the financial transaction acceptance of people in Bangkok and vicinities.
2. To investigate the factors affecting the acceptance of transactions via the financial technology of banks in Bangkok and vicinities.

## **3. DEFINITION**

Financial Technology or Fintech describes a business that aims at providing financial services and solutions to customers by making use of modern technology such as accounting services, money transfer services payment service credit card services and securities services.

## **4. LITERARY REVIEW**

Udomvechsakul (2014) study on the factors affecting the confidence in M-Banking services found that gender factors did not affect the acceptance of services. M-Banking, as well as Suwanno (2014), which is based on the study of factors leading to acceptance and purchase through social commerce, Facebook case study found that gender did not affect technology adoption and online purchases. As Kawachakul (2014) studied the trust in using online banking services of consumers in Bangkok. The results showed that the motivation factors affecting the trust in using the bank services online in Bangkok is security. The majority of respondents focus on the bank's website as the most accurate confirmation of the transaction and providing personal data protection and available anywhere, at any time, enabling ease of financial transactions increased the most.

Oliveira, et al (2016) study on the knowledge, understanding and confidence to use mobile payment technology. The study on the adoption and use of technology, which surveys online, was conducted in Portugal. The study indicated that the samples have security technology awareness. There is an expectation in the efficiency of technology and think that technology is affecting society are affected directly and indirectly also accepts payment via mobile phone and have the confidence to introduce the technology to another person.

## 5. RESEARCH METHODOLOGY

To study the acceptance of transactions made through financial technology in Bangkok and its vicinity, the researcher constructed a questionnaire following a review of the concepts and theories related to research used in quantitative analysis.

The questionnaire for this study is divided into three parts. Part 1 contains a set of questions related to the personal information of the respondents. Part 2 is a set of questions related to ecosystem information concerning financial technology, such as the frequency of use, the use of equipment, the reason for the transaction, public relations, problems and obstacles. Part 3 which included the last session acceptance of financial technology such as future transactions, confidence, trends and support.

The researcher collected online data by convenience sampling approach in the following process. 1. Exploration of the questionnaire to cooperate in obtaining responses of those in Bangkok and its vicinity. 2. Studying the completed survey to monitor the completeness and accuracy of the information and exclude incomplete responses.

## 6. RESEARCH FINDINGS

**Table 1.** The purpose of making transactions through financial technology to ensure that the security system is trustworthy

Transactional Purpose	Choose		Do not choose		Total
	Amount	Percent	Amount	Percent	
Accounting Services	168	42.0	232	58	400
Money Transfer Services	371	92.8	29	7.2	400
Payment Service.	304	76	96	24	400
Credit Card Services	83	20.8	317	79.3	400
Fund Services	57	14.2	343	85.8	400
Securities Services	50	12.5	350	87.5	400

Most of the users make transactions through financial technology use the money transfer services 371, representing 92.8%, followed by the payment service 304, accounting services for 76% and finally securities services 50, accounting for 12.5%

**Table 2** The respondents' confidence in transactional security and reliability.

Confidence in transactional security	Assured		Unsure		Total
	Amount	Percent	Amount	Percent	
Reliability	263	65.8	137	34.3	400

According to Table 2, 400 persons responded regarding their trust in transactions made via financial technology. Firstly, most of the respondents were confident in the financial transactions' technology (about 263, accounting for 65.8%). Secondly, 137 respondents were not optimistic about financial transactions, accounting for 34.3%.

**Table 3** The VIF values.

The confidence in the transactional security	Collinearity Statistics	
	Tolerance	VIF
Gender	.936	1.069
Age	.585	1.708
Occupation	.759	1.317
Education Level	.824	1.213
Income	.561	1.783

Considering the VIF value, it is found that the value for each variable for gender, age, occupation, education level and income is greater than one, showing that this information is acceptable.

**Table 4** The results are consistent with the assumption

Variables	Box's M	Sig
Gender	203.905	.000
Age	102.000	.000
Occupation	60.184	.000
Education level	22.618	.409
Income	203.905	.000

The analysis results for the level of education are consistent with the theory. Although the other information is not compatible with a method, this does not affect the data analysis, so the information is in the following order. The result of the test of the null hypothesis that the observed variance matrix of the dependent variables is equal in each group is not consistent with the assumption.

**Table 5** The acceptance of financial technology transactions by individual groups.

Hypothesis

H0: Financial technology ecosystems do not affect acceptance.

H1: Financial technology ecosystems exert impact on adoption.

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Acceptance	Gender	1.397	7	.200	.852	.545
	Age	28.422	7	4.060	6.016	.000
	Occupation	74.550	7	10.650	7.833	.000
	Education level	3.516	7	.502	1.816	.083
	Income	30.455	7	4.351	3.048	.004

It is apparent that, regarding the acceptance of financial technology transactions, age, occupation and income are significant at the 0.05 level.

**Table 6** The acceptance of financial technology transactions on the financial system.

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Acceptance	What is the most reasonable in financial transaction technology?	4.227	7	.604	.849	.547
	How do you know about financial transaction services?	4.104	7	.586	.865	.534
	What are the problems or disruption in your transaction through technology?	6.045	7	.864	1.018	.418
	How do you think the transaction through financial technology in the future will be?	.639	7	.091	.867	.533
	Do you have confidence in the law that protects financial transactions?	20.351	7	2.907	3.616	.001
	Do you think that the E-Money trend in the future?	1.088	7	.155	.872	.529
	Do you think the Thailand 4.0 is support for the use of technology?	2.888	7	.413	1.614	.130

In Table 6, regarding the acceptance of transactions through financial technology, users' confidence in the financial transaction protection law is significant at the 0.05 level.

## 7. CONCLUSIONS

The results of the hypothesis testing are used to determine the financial technology ecosystem relationships that affect the adoption, finding that the most influential aspects of respondents who accept transactions made through financial technology are three factors which are 1. Age 2. Occupation and 3. Income. These allow financial technology transactions within the system of financial institutions' safety measures. The main reason for their use is convenience in relation to time (24-hour service), and customers recognize the possibility to carry out sales through financial technologies from bank employees and due to recommendations from surrounding persons/friends. They think the service system provides safety and reliability.

## 8. DISCUSSIONS

A discussion of the study of the acceptability of financial technology transactions to consumers in Bangkok and its vicinity is presented in the following. Regarding the factors affecting the use of financial transaction services, the study found that the

acceptance of financial technology transactions has influenced customers' decision to use the online banking services of financial institutions in Bangkok. If customer transactions made through online applications are processed correctly, customers feel secure when transacting online via the financial institution's website. Customers can easily and quickly access the web pages of their bank. Transactions made via the bank's website can be completed quickly, and the bank soon solves problems with online deals and pays attention to legal protection, ensuring that it is safe to make a transaction.

The results of this research follow the article by Malisuwan (2017), which states that the government and the private sector are taking cyber security very seriously. It is a time of social change because of the difference of opinion between legislators and legal practitioners. As this research found that three factors which are age, occupation and income affected on acceptance of people who were born in different ages (before the era of the Internet and during the Internet era) differ extremely both in behaviour and in ideas, and the two parties will fight each other in the world of change, in the physical world and the virtual world, for a long time.

This article studies the acceptance of transactions made through financial technology among consumers in Bangkok and its vicinity. It finds that the approval of financial transactions in Bangkok and its surrounding region is still in the early stages, and these places focus on the foundation of growth to create an economic ecosystem that is suitable for both ends. Thailand also has many aspects that contribute to the development of FinTech businesses, such as the government and the private sector providing rigid support. The Government has put in place a national agenda, attitudes and expertise in Thai business services with high levels of access to financial services and so on. It is an excellent opportunity for those involved in the FinTech business as well as for other innovative companies in Thailand, and we will study and cooperate to develop the sustainable competitiveness of Thailand and become an innovation-driven economy through the Thailand 4.0 policy. However, the research finds that there are some important and urgent issues in the FinTech business ecosystem in Thailand that should be improved, such as the clarity of the licensing, regulations and laws relating to the FinTech business and the lack of primary responsibility, which will be the intermediary of the various mechanisms involved in the ecosystem of FinTech business, the safety of the technology and the appropriate disclosure standards. Further difficulties are the lack of personnel and the ability to produce personnel to meet the needs of transactions made through financial technology and the restrictions on the opportunity for foreign experts to work in the field of FinTech in Thailand, including accelerating the spirit of entrepreneurship, innovation and so on (Chunhajinda, 2017)

## 9. SUGGESTIONS

1. Future research should study other factors that affect the behaviour and factors concerning the acceptance of transactions made through financial technology in Bangkok and its vicinity to understand the needs of consumers and produce results to improve the services.

2. In future research, data should be collected from multiple careers, because nowadays more and more transactions are being undertaken to improve the quality of operations through financial technology, make an impression on consumers and produce repeat transactions, which help to increase revenue for a business.

3. A study should be conducted on the problems and needs of consumers in Bangkok and its vicinity regarding service transactions made through financial technology as well as the reasons for using or not using services. This would provide useful

information and act as a guide to the acceptance of the use of the services for financial institutions to improve various parts and increase the number of people using the services.

## REFERENCES

- [1] Bank of Thailand. (2017). *Electronic payment transactions in the second quarter of 2017*. Retrieved from [https://www.bot.or.th/Thai/Statistics/PaymentSystems/Documents/Q2\\_2560.pdf](https://www.bot.or.th/Thai/Statistics/PaymentSystems/Documents/Q2_2560.pdf). (in Thai)
- [2] Chunjajinda Pornchai. (2017). Fintech: Towards Thailand 4.0. *e-jodil*, 7(1). Retrieved from [http://e-jodil.stou.ac.th/filejodil/14\\_1\\_592.pdf](http://e-jodil.stou.ac.th/filejodil/14_1_592.pdf) (in Thai)
- [3] Hidarat Tanapa. (2016). *Factors affecting the adoption of contextual financial technology commercial Bank*. Master's thesis, Thammasat University. Retrieved from [http://ethesisarchive.library.tu.ac.th/thesis/2016/TU\\_2016\\_5723030200\\_3435\\_3774.pdf](http://ethesisarchive.library.tu.ac.th/thesis/2016/TU_2016_5723030200_3435_3774.pdf). (in Thai)
- [4] Kawachakul Surawut. (2014). *The trust in using online banking services of consumers in Bangkok*. Retrieved from [http://thaiejournal.com/journal/2557\\_volumes2/27.pdf](http://thaiejournal.com/journal/2557_volumes2/27.pdf). (in Thai)
- [5] Maesincee Suvit. (2017). *Turn Thailand into an investment*. Retrieved from [http://www.boj.go.th/upload/17.02.11\\_Speech\\_Suvit.pdf](http://www.boj.go.th/upload/17.02.11_Speech_Suvit.pdf). (in Thai)
- [6] Malisuwan Settapong. (2017). *Year 2017 Digital chase you the fast and the furious*. Retrieved from <http://www.kriszd.com/uploaded/files/ปีนี้%20ดิจิทัลไล่ล่าคุณ.pdf>. (in Thai)
- [7] Oliveira, T., Manoj, T., Goncalo, B., & Filipe, C. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, 61, 404-414.
- [8] Sookdhis Jessada. (2017). CMI fin tech the change of the financial industry, Thailand. *Bangkokbiznews*, Retrieved from <http://www.bangkokbiznews.com/blog/detail/643227> (in Thai)
- [9] Sookdhis Jessada. (2017). What is FinTech?. *bangkokbiznews*. Retrieved from <http://www.bangkokbiznews.com/blog/detail/640829> (in Thai)
- [10] Suwanno Sanpun. (2014). *factors leading to acceptance and purchase through social commerce, Facebook case study*. Unpublished Independent Study. Thammasat University. Thailand. (in Thai)
- [11] Udomvechsakul Saowanit . (2014). *Factors affecting the confidence in M-Banking Application in Bangkok and Metropolis*. Unpublished Independent Study. Thammasat University. Thailand. (in Thai)