



วารสารปรัชญาปริทรรศน์

JOURNAL OF PHILOSOPHICAL VISION

ISSN: 1513-6620 (Print) × ISSN: 2773-9643 (Online)  
<https://so05.tci-thaijo.org/index.php/phiv/index>



## Research Article

# A Comparison of Cashless Society Between Thailand and China

Fan Zheng<sup>1</sup> and Chatwarun Angasinha<sup>2\*</sup>

### ARTICLE INFO

#### Name of Autor:

#### 1. Fan Zhen

College of Social Innovation,  
Rangsit University, Thailand.

Email: [fan.zhen@gmail.com](mailto:fan.zhen@gmail.com)

#### Corresponding Author\*:

#### 2. Chatwarun Angasinha

College of Social Innovation,  
Rangsit University, Thailand.

Email: [chattrsu@gmail.com](mailto:chattrsu@gmail.com)

#### Keywords:

Cashless society; Payment gateways; Mobile-banking; Promptpay; Alipay

#### Article history:

Received: 26/08/2022

Revised: 25/12/2022

Accepted: 15/10/2023

Available online: 27/12/2023

#### How to cite:

Zhen, F. (2023). A Comparison of Cashless Society Between Thailand and China. *Journal of Philosophical Vision* 28 (2), 90-98.

### ABSTRACT

With the development of network information technology and the revolutionary breakthrough of new technologies, digital economy is the analysis and application of human digitization and information cognition. Thailand's mobile e-commerce economy has been severely impacted. Government payment platforms and other domestic mobile payment gateway platforms are sparing no effort to develop the mobile digital economy, helping Thailand to fully enter the ranks of cashless payment countries as soon as possible.

This research shows that: The Bank of Thailand assists the development of Prompt pay, not only to cultivate people's payment habits, but also to avoid transaction monopoly caused by overseas payment institutions in Thailand. Various mobile payment gateways and Promptpay, there is competition and cooperation between mobile banking. Competition allows each other to expand their business advantages, and cooperation allows each other to work together to promote the development of a cashless society in Thailand. Before the epidemic, tens of thousands of Chinese used Alipay for settlement in Thailand, effectively promoting cashless with the advancement of society, advanced mobile payment technology has been integrated into Thailand's mobile payment field. In addition to the epidemic, Alipay has also been affected by Thailand's financial policy, and Alipay's transaction volume in Thailand has dropped significantly; the government has optimized the entry policy and opened the country, and Chinese people will continue to return. In Thailand, Alipay will become more mature in the future and contribute to the Thai economy.

## 1. Introduction

A "cashless country" or "cashless society" is not a recent concept but has been part of our financial landscape for some time. Credit cards and the methods of settling cashless transactions have long been integral to this concept. Cashless payment relies on electronic and digital currency technologies, coupled with mobile internet, online banking, and contactless transaction technologies. In collaboration with financial institutions, it aims to replace traditional cash transactions (Wirun, 2017: 462-472). This socio-economic model serves as the primary payment and settlement method for financial services.

The digital economy, arising from the development of network information technology and breakthroughs in new technologies, involves the analysis and application of human digitization and information cognition. Its goal is to guide resource rationalization and effective allocation, thereby promoting comprehensive development in social and economic industries.

As e-commerce continues to grow globally, the advancement of computer and network information technology supports financial transactions, leading to revolutionary changes in financial tools through the internet. This development gave rise to electronic payment or cashless payment, with many major economic powers worldwide transitioning to cashless societies. Thailand's progress in the cashless payment industry outpaces most other ASEAN countries, trailing only Singapore. While the country is making strides, there is still progressed to be made.

However, for Thailand to advance further towards becoming a cashless payment country, continuous improvements in legal, technical, and social aspects are essential. Challenges include a significant number of aging consumers and low-income groups without access to smartphones, leading to cash transactions still accounting for about 97% of the daily transaction volume. The Thai government's "Thailand 4.0" plan, aligned with the Chinese "One Belt, One Road" policy, emphasizes a national electronic payment master plan to reform the banking system's payment infrastructure and introduce structural policies supporting Thailand's move towards a cashless society.

Thailand's private banking system is undergoing a transition towards complete mobile banking, encouraging consumers to use bank cards, including debit or credit cards, for transaction settlements. The banking system leverages mobile internet technology, launching internet banking to shift customers away from traditional banking towards mobile banking. Various domestic and foreign third-party mobile payment gateways exist, each with their advantages. The Bank of Thailand introduced the Promptpay mobile payment system, collaborating with major institutions to build a nationwide mobile payment gateway platform, further propelling Thailand towards a cashless society.

The outbreak of Covid-19 has disrupted the global economy, impacting countries worldwide. Despite these challenges, the contactless economy has thrived, leading to a surge in the electronic payment or cashless payment industry. Thailand, too, is witnessing the growth of electronic payment, poised to become a new growth point in the post-epidemic era.

In conclusion, the Thai government's relentless efforts to promote cashless payment, coupled with constructive policies, form the backdrop of this research. This study aims to delve into the development of payment gateways in both China and Thailand, the evolution of the digital economy, advancements in the mobile payment field, and the progress of mobile payment gateways. Through this research, the goal is to obtain valid results, organize and analyze findings, and provide theoretical support to facilitate Thailand's journey towards becoming a cashless country.

## 2. Objective

### Payment Gateway in China

Mobile payment refers to conducting monetary transactions through a mobile device, with virtual currencies transferred for purchasing goods or services (China Mobile Payment Industry Forum, 2014). The interpretation of mobile payment encompasses two main types. One involves transferring monetary value through mobile devices utilizing communication technology prototypes, aiming to clarify relationships between creditor's rights and debts. The other type enables users to move money through mobile non-voice modes on non-bank products. The widespread adoption of mobile terminal devices and the rapid development of mobile Internet form the foundation of mobile payment, emphasizing its notable feature – the mobility of payment methods. Presently, mobile payment is gradually replacing traditional cash and bank card payments, gaining wide acceptance in daily life for settling debts, purchasing goods, and engaging in labor transactions. Mobile payment has organically evolved into a significant manifestation of electronic money. Implementation of mobile payment not only relies on robust network and information technology but also necessitates collaboration with third-party payment platforms, eliminating the need for customers to directly pay the bank.

Alipay stands as China's largest third-party online payment gateway, prioritizing "simple, secure, and fast" payment solutions. Established in 2004, Alipay consistently upholds "trust" as the core principle of its products and services. Operating under two independent brands, Alipay and Alipay Wallet, it has become the world's largest mobile payment gateway since the second quarter of 2014. Alipay has forged strategic partnerships with over 180 banks globally, along with international organizations like VISA and MasterCard, establishing itself as the most trusted partner for financial institutions in the electronic payment domain.

Initiated in October 2003 by the online shopping platform "Taobao.com," Alipay was designed to offer credit guarantee services for buyers and sellers, ensuring the secure progression of online shopping transactions. Post-2004, Alipay severed ties with Taobao and progressively extended its services to small, medium, and micro-enterprises, facilitating payment transactions. China's cashless transaction scenario is broadly categorized into two dimensions: online shopping and payment, encompassing online banking and electronic money payment, and credit card and mobile payment, involving credit card and mobile payment transactions.

### Payment Gateway in Thailand

In various global markets, including Thailand, retailers and chain restaurants are navigating a swiftly evolving business landscape. Technological advancements have transformed consumer payment behaviors, prompting a surge in demand for expedited transactions in online shopping and catering. The Thai government has actively endorsed mobile payment gateways through the national electronic payment strategy under the "Thailand Industry 4.0" initiative. This strategic push has led restaurant chains, retailers, gas stations, and online merchants to enhance their electronic payment acceptance capabilities, positioning themselves to seize future development opportunities. The introduction of QR code payments in Thailand in 2017, featuring platforms like mPay, Bluepay, Alipay, and TrueMoney Wallet, marked a significant milestone. Thailand boasts a diverse array of major Internet enterprise mobile payment gateways, including Paysbuy, LINE, BluePay, TrueMoney, Alipay, PromptPay, Omise, PayPal, Rabbit Card, among others (Soumitra, Bruno & Sacha, 2018).

Aligned with other Southeast Asian nations, Thailand actively promotes the adoption of mobile payments across various sectors, encompassing government agencies, financial institutions, and technology companies. The Ernst & Young Southeast Asia Fintech 2018 Report reveals that mobile payments constitute a substantial portion of Thailand's financial technology industry, with 30% of over 100 fintech startups specializing in payments. Over the past five years, Thailand has witnessed a transformative shift in its payment landscape, with a growing number of consumers engaging in goods and services transactions through mobile payments. Mobile payment wallet providers are diversifying their service portfolios to encompass a broader ecosystem, exemplified by Kasikornbank's expansion into cross-border remittances, payment gateways, cash on delivery, and game recharge (Bi, 2016: 23-25).

This study delves into the disparities between China and Thailand across four dimensions: mobile Internet, digital economy, payment gateway, and mobile payment. China exhibits superior development in infrastructure construction, equipment operations, technical personnel, ownership and reserves, transaction scale, and user recognition compared to Thailand. Despite Thailand lagging behind China during the comparable period in 2020, the country has since achieved significantly greater advancement in the realms of mobile payment and mobile Internet in recent years.

### 3. Research Methodology

The data collection process encompassed the gathering of online electronic information and data from various sources, including websites, institutes, libraries, and bookstores in both China and Thailand, aimed at acquiring relevant and comprehensive information. Beyond electronic data collection, this research incorporated its specific requirements by conducting in-depth interviews, recording and extracting valuable evidence materials and information, and editing contextual dialogues.

Amidst the global public health emergencies, this study undertook additional research efforts. Specifically, the research team randomly and conveniently selected individuals, including friends of Chinese students studying in Thailand, Chinese consumers at Thai King Power Duty Free Shop, Thai student friends from Rangsit University, patrons of 7-11 and Family Mart convenience stores, as well as shoppers at Central Plaza and other Thai individuals with a significant and intensive use of payment gateways. Additionally, respondents from third-party

countries, excluding Chinese and Thai nationals, were included for an in-depth investigation. The research employed a combination of in-depth interview and observation methods.

The primary interviewees represented a diverse range of consumers in Thailand, including Chinese students, Chinese tourists, Thai university students, Thai consumers, and individuals from third countries visiting Thailand. These groups were chosen as representatives of mobile payment users who could readily embrace advanced mobile payment methods.

#### **4. Findings**

Focusing on the entire ASEAN region, despite the rapid development of mobile payment in Thailand, the utilization of mobile payment remains relatively low among consumers in the region. In essence, Thailand's mobile payment is still in its "wake-up period," and the low penetration rate signifies that mobile payment in Thailand has not reached its full potential, leaving ample room for improvement.

Thai consumers continue to exhibit a preference for cash transactions, particularly for small financial dealings. Automated teller machines (ATMs) provided by various commercial banks are widespread throughout Thailand, offering convenience for basic financial services such as deposits and withdrawals. Credit and debit card usage is also prevalent, given their long-standing issuance and high penetration rates in Thailand. These traditional payment methods, coupled with the high percentage of an aging population in Thailand, contribute to the slow adoption of mobile payments, as the elderly population tends to resist rapid changes and prefers the use of cash due to income and education disparities.

The study's interviews revealed emotional factors and motivations surrounding mobile payments. Despite a small number of individuals being reluctant to use mobile payments for various reasons, the majority acknowledged its convenience and believed it to be the most convenient method for making purchases. Regardless of background, whether Chinese, Thai, or foreign nationals in Thailand, interviewees shared a common belief that mobile payment represents an inevitable outcome of payment field development and societal advancement.

Field observations at Central Plaza, King Power Duty Free Shop, and 7-11 convenience stores indicated a prevailing trend of cash payments in Thailand. Mobile payments were less common, potentially linked to entrenched traditional payment habits. Mobile payment users were generally younger, and third-party foreigners preferred credit cards or Thai baht cash. Chinese tourists often opted for Alipay due to available discount coupons, favorable exchange rates, and the convenience of fund transfers without fees.

##### **1 The Relationship among Private Third-party Mobile Payment Gateways**

In Thailand, the rapidly growing e-commerce sector has catalyzed significant changes in traditional cash payment methods. The rise of global mobile Internet technology has accelerated the maturity of mobile payments. Recognizing the need to adapt to uncontrollable external factors, local mobile payment gateways in Thailand have proliferated. The different functions and service groups of these platforms lead to both competition and cooperation. Managed within boundaries, competition fosters improved customer service, user experience,

and loyalty, while cooperation facilitates innovation and service expansion, contributing to an overall enhancement of Thailand's mobile payment capabilities in line with global trends.

However, Alipay's limited Thai ID registration function has hindered its adoption among the local population, affecting payment behavior.

## 2 The Relationship between Thailand's Promptpay and Traditional Financial Gateway

PromptPay, a national electronic payment project supported by the Bank of Thailand, aims to establish an integrated electronic payment platform with full government backing. The ultimate goal is to create a cashless society by digitally connecting all bank accounts in Thailand. Achieving this goal requires collaboration with traditional banking institutions, with each institution opening its digital currency transaction processing port to connect with the PromptPay platform. This cooperative effort ensures that all transactions through PromptPay are recorded and processed by the respective traditional bank processors.

## 3 The Relationship between Private Third-party Mobile Payment Gateways and Thailand's Promptpay

The rapid development of Thailand's financial technology market has given rise to numerous localized third-party mobile payment gateways. While PromptPay is Thailand's official payment platform, a mutual cooperation and competition relationship exists between these localized gateways and PromptPay. The potential for cooperation arises in platforms that facilitate Thai baht conversion, offering a basis for collaboration. Cooperation with overseas payment gateways seems unlikely due to factors such as foreign exchange conversion. However, as the global financial technology market continues to integrate, cooperation may improve in the future.

## 4 The Relationship between Private Third-party Mobile Payment Gateways and Traditional Commercial Banks

Private mobile payment gateways rely on traditional banks for developing their payment services. Consumers typically use mobile phones to bind bank cards or deposit funds in virtual electronic wallets provided by private mobile payment gateways. Traditional banks play a crucial role in data reception, processing, and feedback throughout the mobile payment process. They also manage transaction risks, address issues, and act as intermediaries between private mobile payment gateways and the Bank of Thailand. Thus, maintaining a cooperative relationship with traditional banks is essential for the seamless functioning of mobile payments.

## 5. Discussion

### 1 The Development of a Cashless Society in Thailand

Based on the current market development status of e-commerce and mobile payment gateways in Thailand, it needs to be considered from five dimensions: user level, cashless payment market environment, cashless payment soft services, and consumer demand. First, Thailand must try to improve is to avoid the serious uneven distribution of income and the

serious social development for the elderly. The problem of uneven distribution of income in Thailand has existed for a long time, and this problem has caused serious income polarization. After all, there are a small number of people with high incomes, and the income of most people is generally low. Citizens with lower incomes often find it unnecessary to use mobile electronic payment and it is also troublesome. They think it is very convenient to use cash, and such cash transactions are often of small value. There are ATMs of various commercial banking institutions in Thailand (Deguang, Yanhong & Jinlian, 2017: 105-111). When cash is not enough, instant deposits and withdrawals can be realized at ATMs. In the development process of cashless society in Thailand, almost all high-income people are receptive to change, and they can quickly accept advanced mobile payment gateways and cashless ideas. However, this group of people is a minority. The development of a cashless society requires another part of low-income people to choose to use electronic payment gateways. Only when these people make good use of mobile payments, the overall development of a cashless society in Thailand will achieve a breakthrough. Another important dimension is the aging of the population. Thailand's fertility rate is lower than before, the problem of aging population is prominent, the elderly's memory loss, their ability to accept new things is poor, and they are prone to Alzheimer's symptoms. More and more complex electronic devices are not for them to use. These seniors still generally choose to use cash to maintain their inherent payment habits. For the development of a cashless society in Thailand, the aging population and the unbalanced income level are the primary dilemmas. In addition, the Thai government must patiently cultivate the habit of cashless payment among the people. Cashless payments will not abolish cash payments. The two must coexist.

Secondly, cashless payment requires a good social and market environment. The Bank of Thailand, local cashless payment companies, and commercial banks should strengthen exchanges and provide people with different types of payment scenarios as much as possible. Changes in payment scenarios are bound to drive the development of cashless payment and increase the penetration rate of cashless payment scenarios.

Third, cashless payment institution such as PromptPay, Thailand's national electronic payment system, should identify the payment function positioning, improve the content of payment methods, increase publicity and promotion, and promote the advantages of cashless payment in the whole country more often.

Fourth, the cashless payment system must achieve accurate customer acquisition in various payment scenarios, understand user needs through big data analysis, and classify these needs into categories to serve high-quality user needs.

Finally, cashless payment is inseparable from the development of a perfect logistics distribution system. The government should assist logistics and distribution enterprises to improve work efficiency, reduce service errors, and ensure the safe delivery of goods (Fuqiang & Zhijuan, 2017: 60-68).

2 Learn from Alipay's Development Experience in China to Boost the Development of Thailand's Cashless Country

In recent years, the Chinese government has provided full effort to promote the construction of the digital economy and promote the development of cashless payment. In addition, China has consistently promoted the “One Belt and One Road” initiative and the “Building a Digital Silk Road” plan, hoping to use China’s power to promote the development of digital economy around the world.

Alipay is currently the largest cashless payment company in China. Alipay has been developing in China for so many years, and it has accumulated a lot of valuable experience and mature technology in the development of online payment. Before the outbreak of the Covid-19, Alipay was already operating in Thailand. Alibaba Group participates in the Thai mobile payment market through acquisitions or capital injections of Thai payment companies, and the effect is remarkable. Since the outbreak of the Covid-19, Alipay has accumulated a lot of valuable experience and technology in the cashless payment market in China and has the ability to bring these valuable experience and technology to Thailand to help Thailand develop cashless payment as soon as possible and promote the development of Thailand's digital economy, for Thailand's economic recovery after the Covid-19.

As far as China is concerned, the number of small and medium-sized enterprises is the largest, as well as the most innovative and active enterprise groups. The Chinese government encourages more small and medium-sized enterprises to cooperate with Alipay and other cashless payment companies to actively enter the cashless payment market and bridge the gap among companies. In the early days of its establishment, Alipay stated that it would support the development of Chinese small and medium-sized enterprises, so that small and medium-sized enterprises would feel that there is no difficulty in doing business. Over the years, especially after the Covid-19, more than 45% of SMEs have cooperated with Alipay, and more than 85% of people use Alipay every day. For this reason, China is currently in a state of development in a cashless society of more than 90%. Such promotion of Alipay to support the development of China’s cashless society can be analyzed on both ground of advantages and disadvantages. Generally speaking, China's cashless society is developing well, with a rapid development speed and a high degree of public acceptance. China is also the number one country in the development of a cashless society in the world, especially, after the country and Alipay experienced the Covid-19.

## **6. Conclusion**

At the macro level, China and Thailand should strengthen the top-level strategic design of cashless payment construction, promote China-Thailand international cooperation in digital technology and standards, focus on the development of digital economy through the “One Belt and One Road” initiative, to promote the construction of Thailand's digital economy infrastructure, and strengthen Thailand's international digital information security has expanded the opening up of Thailand’s local cashless payment field, which Thailand already has a good beginning from PromptPay. At the micro level, various electronic payment systems in Thailand are currently in the ascendant, and the market share of various payment systems is evenly distributed, and each system has obtained part of user data and financial information. Refer to the development experience of Alipay and the development experience of China's cashless society to eliminate the phenomenon of data oligopoly and data capital monopoly. The Bank of Thailand must master user transaction information and property transaction

records as a whole, improve the construction of the national electronic payment system of Promptpay, and monitor the dynamics of social wealth. Secondly, the vast majority of Thai people are still using cash to pay. It is also true that the Thai government has also tried very hard to encourage most Thais to move on to cashless experiences through various supporting schemes to boost the Thai economy during the Covid-19 period. It is anticipated the Thai government continue to do more in the future, in order to reduce social and ecological costs, and reduce banknote and coin production costs. What the Thai government must also continue to do is to build mobile Internet infrastructure in remote areas, publicize and educate the people on the benefits of using cashless payments, improve understanding and support for the digital economy. Only when more people in the rural areas in Thailand use cashless payment, Thailand can quickly become a cashless payment country. Finally, the Thai government must promulgate relevant laws and regulations to protect the safety of people's property and transaction information, to convince the people to use cashless transactions with ease. However, the experience for third party payment help improving the economic condition of SMEs in China and the reduction of corruption rate in the country are good lessons for Thailand to lesson from China.

## 7. References

- Bi, T. (2016). Thailand promotes electronic payment methods to combat tax evasion. *Financial and Accounting Letters*, 23-25.
- Deguang, W., Yanhong, F., & Jinlian, G. (2017). Analysis of Thailand's Economic Development Competitiveness and Main Economic Policies. *Economic Research Reference*, 105-111.
- Fuqiang, L., & Zhijuan, Z. (2017). An International Comparative Study of Innovation Capability from the Perspective of Global Innovation Index. *Global Science, Technology and Economy Outlook*, 32(10), 60-68.
- Oraphan, W. (2019). *National Science, Technology and Innovation Policy and Thailand 4.0 Agenda. Cover Story*, 15-17.
- Soumitra Dutta, Bruno Lanvin, & Sacha Wunsch-Vincent. (2018). 2018 Global Innovation Index. *World Intellectual Property Organization Report*.
- Wirun, P., Yuefang, W., & Honggang, X. V. (2017). Shaping and cognition of the image of Chinese outbound tourists from the perspective of the host country. *Tropical Geography*, 37(4), 462-472.