

The Perception and Attitude of Consumers toward the Intention to Use Digital Payment System in Cashless Society Era in Thailand

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Abstract

The purpose of this research is to study the perception and attitude of customers toward digital payment systems in the cashless society era. The data set of 400 samples are collected. The findings show that Thai consumers are perceived of digital payment system at a high level. Furthermore, Thai consumers understand the digital payment system at a high level of understanding. Additionally, they also perceived the digital payment system policy at a high level. The results show a significant relationship among perceiving and attitude toward digital payment system and intention to use digital payment system.

Keywords: Digital Payment System, Cashless Society, Perception, Attitude, Intention to Use

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Introduction

Typically, the digital economy specifically helps businesses mitigate the isolation inherent to most online data analysis activities. Furthermore, it is an online community-based e-commerce platform that brings together products from a vast array of stores into one digital platform. The types of business expand to several varieties of e-commerce, app stores, online advertising, cloud computing, participative networked platforms, high-speed trading, and online payment services. Moreover, the growth of digital technology in the business field has heightened demand for new big data being used for business intelligence. The increasing recognition of the role of the digital economy, which enables the interactions among consumers, and suppliers as an important co-value creation has derived the implications of these interactions in numerous settings, including online activities. The digital economy is growing rapidly and frequently features comments about brands and products. Moreover, consumers increasingly rely on and are interested in collaborations (Cheong & Morrison, 2008). Since the change of technologies and widespread diffusion of the digital economy, it led to innovation in business models, which in turn allows consumers and businesses to connect around the world at any time (Harris & Rae, 2009). Why should businesses focus on the digital economy (DE)? The growth of the DE in the business field has heightened demand for new big data being used for business intelligence.

The digital economy provides the business ability of the transformational effects of a new way to use the data as in the fields of information and communication. It gives rise to a certain form of new business models, which is important to the business to adapt to the new environments. The increasing of the digital economy has an impact which is the need of having some physical establishment in a country where business is done. However, operating in the digital economy which is based on electronic services as final products means that they do not any longer need physical establishment in the foreign countries where they are active.

The financial industry has witnessed the so-called “Fintech revolution” in recent years. The landscape of the traditional financial industry has been largely transformed. The digital payment and transaction system have been affecting many businesses, especially in financial and banking. Many banks, all around the world are shutting down cash machines and branches (Scott, 2018) since they need to cut costs to boost profits. Branches require staff. Replacing them with standardized self-service apps allows the senior managers of financial institutions to directly control and monitor interactions with customers. Alipay has become the world’s largest mobile payment system. Together with WeChat Pay, they dominate China’s \$5.7trn mobile payment sector. Alipay has an existence in over 70 countries including the United Kingdom, United State of America, Japan, South Korea, and Australia. Due to the popularization of mobile payment facilities, many Chinese cities have become a cashless society, as 40% of Chinese people carry almost no cash when going out (Lu, 2018).

Nevertheless, to accomplish the mission of the digital economy, the consumers are another crucial factor to involve and drive the success since technological development has impacted all aspects of life, especially the shifts in payment systems. It has been increasingly popular to use digital payment methods, even cash remains used for smaller transactions. This has caused the cash payment instrument to change to non-cash payment instruments (Wulandari et al., 2016). Tee and Ong (2016) reviewed that the digital payment system eliminates the usage of money as a medium of exchange for goods and services by allowing digital payments. The digital payment system is rapidly displacing coins and notes across the globe Woutersen (2018). This change is caused in the economic system to cashless society era regarding digital payments and the increasingly popular new modes of payment. Additionally, Thailand is similar to other countries in that growing middle classes are stimulating the uptake of new banking and payment services to shift to the majority of society has adapted to the new forms of technology and have embraced the possible transformation into a cashless society. Therefore, this

study is focused on the attitude and perceptions of Consumers toward the digital payment system in the cashless society era in Thailand.

Digital Economy

Typically, the digital economy involves five parts, including hardware infrastructure, software infrastructure, service infrastructure, promotion and innovation, and society and knowledge (Boonnoon, 2014). Hardware infrastructure refers to information-technology infrastructure that is used to support a digital economy such as high-speed broadband Internet, and digital gateways. Software infrastructure refers to online channels, online transactions such as verification systems to identify individuals online, and cyber-security in order to boost up e-Commerce transactions. Service infrastructure would create a platform to support the private sector, while the promotion and innovation part is the developing the digital skills of entrepreneurs to improve their productivity and workflow process efficiency through the supply chain, which will utilize digital tools and go along with the banking system, services, and manufacturing. Society and knowledge refer to the universal access ability, which allows people various online channels at an affordable price. The integration of activities at various levels generates the value that makes specific business models profitable (Boonnoon, 2014).

The increasing recognition of the role of the digital economy, which enables the interactions among consumers, and suppliers as an important co-value creation has derived the implications of these interactions in numerous settings, including online activities. The digital economy is growing rapidly and frequently features comments about brands and products. Moreover, consumers increasingly rely on and are interested in collaborations (Cheong & Morrison, 2008). New business models have emerged demonstrating common features – mobility, use of data to generate value, and network effects.

Cashless Society

Since the change of technologies and widespread digital platforms in the digital economy, it led to innovation in business models, which in turn allows consumers and businesses to connect around the world at any time (Harris & Rae, 2009). Economists, academia, researchers, and more see the establishment of such a society as inevitable, and indeed in countries where digital payments have reached a higher degree of acceptance the eventual portion of cash does not seem too distant in the future. A cashless society is not only active in the business sector but also can be narrowed down to consumer cashless financial transactions. Moreover, the use of cash-based payments has declined in the recent decade. The use of non-cash payments has seen a substantial increase and is gradually taking over the payments market.

The majority of society has adapted to the new forms of technology and has embraced the possible transformation into a cashless society. Tee & Ong (2016) have shown there is no conclusive evidence on how the adoption of cashless payment would have a positive effect on the economy. The use of cash-based payments has declined in the recent decade, while the use of non-cash payments has seen a substantial increase. The number of non-cash payments in Europe only has seen an 8.5% increase in 2015 in comparison with the previous year (European Central Bank, 2016).

Olsen (2011) agreed that a cashless society would lower costs of production and distribution of money, as well as the cashless society, would cut companies' costs by narrowing down several staffing levels. The leading of the very first cashless society is Sweden. This is down to financial innovation, and more importantly, their developed electronic payment system. Sweden has been known to dislike cash to such an extent that it would be the one country that could take on negative interest rates (Dalebrant, 2016). Moreover, the vast majority of the Sweden nation's banks have long stopped allowing customers to withdraw or pay in cash over the counter. Sweden has seen the circulation of notes and coins as a percentage of gross domestic product (GDP) drop year after year, as Swedes make fewer withdrawals and look to digital methods of transactions (Browne, 2018). They use digital payment systems on mobile phone applications such as

iZettle makes it easier for small business owners to operate cash-free (Gosheh, 2018). Furthermore, the growth of contactless payments in Ireland is a good example of just how quickly the landscape is changing (Horgan, 2018).

In Asia, there is witnessing the growing trend of cashless payment with an increasing array of services. China and South Korea are heading toward a cashless society at a faster pace than others due to high internet speeds and penetration rates, as well as a critical mass of smartphone ownership (Bangkokpost, 2018). China is one of the world's largest mobile payment markets. China is seen as the first nation to move towards a completely cashless society. Mobile payment transactions reached a record 81 trillion yuan (US\$12.8 trillion) in 2017 (Lee, 2018). Payments have been made on mobile-phone applications such as WeChat Pay and Alipay.

In Thailand, the volume of mobile payments for June 2017 reached 694 billion baht (US\$22.1 billion). It is a significant increase from 440 billion (US\$14 billion) the previous year (Ward, 2018). In 2017, it launched PromptPay. Prompt Pay allowed citizens to receive cashless payments from government agencies. They could also send money to other users with only required the recipients' mobile number, or Citizen ID number (Ward, 2018). For the consumers' market, they are generally used mobile-phone applications from the banks such as mobile banking, internet banking, and also made by Rabbit Line Pay, 7-Eleven App Wallet, Blue Pay, and Mangmoom Card. However, the infrastructure is still a barrier to the increase in the cashless society in Thailand.

Digital Payment System

The digital payment method is traced back to 1918 when the currency was initially moved in the U.S by the Federal Reserve Bank. From then on, electronic payment has been widely used as it has enabled commercial banks with an alternative payment method than cheques (Kabir et al., 2015). Digital payment has proved to have switched roles in society. During the mid-1960s the role of electronic payment would have been seen as a substitute for cash. Whereas, nowadays electronic payment is seen as a safe, faster mode of payment and is the preferred option (Tee & Ong, 2016). In fact, digital payment is not a new way transaction

method. Credit cards and debit cards have been used as a substitute for cheques and cash. Debit and Credit cards have been a preferred method of payment for numerous years. Credit card and debit card accounted for the largest share of global non-cash transactions in 2014 and was the payment method with the most rapid growth. However, nowadays digital payment is seen as a safe, faster mode of payment and is the preferred option (Tee & Ong, 2016).

Digital and technology innovation has a large role in the developing cashless society. There are new and improved ways to make payments that aim to replace the use of physical cash. The innovation of payment systems that involve advantageous factors to consumers has the opportunity to advance in the market of payment habits and procedures. Typically, the digital payment system is transforming economic consumption, with smartphone users increasingly relying on these applications for their daily transactions. As many payment innovators are competing in the market, there must be a way to advance by allowing the newest technology to adopt features that have greater suitability to making the payment process rapid. Some of the most popular applications include Google Wallet, Apple Pay, Samsung pay, WeChat pay, Alipay, and so forth. The system is used not only to transfer money between individuals but also to pay salaries and bills, purchasing products and services, and make cross-currency remittances. Non-bank entities have relied on their existing broad consumer bases in areas such as e-commerce to expand into the mobile payment arena. Along with the consumer side, digital payments can be advantageous to the consumer as it is seen as quick and convenient. Nemcova and Dvorak (2013) found that consumers have taken much interest in the contactless payment method as it provides an improved shopping experience since the new payment platform is faster and efficient service, it is to encourage consumers purchasing behavior. In sum, one key advantage of a digital payment system is that a digital payment system is generally part of an ecosystem, an ecosystem that can continuously communicate with the user and provide additional, personalized information.

Research Methodology

The research design is drawn from quantitative research methodology. The survey is used to establish a baseline on the current perception and attitude of consumers toward the digital payment system in the cashless society era in Thailand. The total sample for this study consists of 400 samplings. The participants in this study are voluntary and anonymous.

Results

A total of 400 usable questionnaires are obtained. Table 1 shows the distribution of usable responses by demographic; 49% report their gender as male, 47.75% report their gender as female, and 3.25% report their gender as others. In terms of respondent's level of education, 38.75% report college as their level of education. 46% report undergraduate as their level of education, 15.25% indicate they are in a graduate degree. Regarding their occupation, 24% report their occupation is in government sectors, 62.25% are in private company sectors, 10.25% are in owned business, and 3.5% are others.

Table 2 shows the consumers' perception regarding the use of digital payment systems (mean = 4.33), they agree that it is easy to use and implement the digital payment system process (mean = 4.34). Generally, the consumers understand about a cashless society and are ready for the use of cashless (mean = 3.90). The consumers have a positive attitude toward using digital payment systems for their transactions and purchasing in their life (mean = 4.13). Furthermore, the consumers have an intention to use digital payment systems (mean = 4.06).

Table 1 Frequency Distribution of Respondents

Demographic	Frequency	Percentage
Gender	Male	196
	Female	191
	Others	13

Demographic		Frequency	Percentage
Educational Level	College	155	38.75
	Undergraduate	184	46.0
	Graduate	61	15.25
Occupations	Government sectors	96	24.0
	Private companies	249	62.25
	Business owners	41	10.25
	Others	14	3.5

Table 2 Means, Standard Deviations, and Median Response with Items

Digital Payment System	Mean	SD.
Perceived Usefulness	4.33	0.94
Perceived Ease of Use	4.34	0.69
Cashless Society Readiness	3.90	0.74
Attitude toward Using Digital Payment System	4.13	0.64
Intention to Use Digital Payment System	4.06	0.62

Table 3 The Results of Adjusted Model Fit Index

Chi-Square	P-Value	CMIN/DF	GFI	AGFI	NFI	IFI	CFI	RMSEA
87.738	0.000	2.512	0.911	0.907	0.921	0.913	0.901	0.054

According to Table 3, the results exhibit that all the measurements have significant loadings to their corresponding construct. Overall, the model has a satisfactory fit with GFI = 0.911, AGFI = 0.907, NFI = 0.921, IFI = 0.913, CFI = 0.901,

and RMSR = 0.054. Those are all very good, which is representing a reasonable model-data fit. Therefore, the model fit indexes for the path model indicated an acceptable approximation of the proposed relationship among the constructs and the results should be interpreted meaningfully.

Table 4 *Estimates of Regression Weights*

			Estimate	S.E.	C.R.	P	Label
Attitude toward Digital Payment System	<---	Consumers' Perception of Digital Payment System	0.303	0.131	2.246	0.00**	par_10
Attitude toward Digital Payment System	<---	Cashless Society Readiness	1.455	0.915	2.825	0.00**	par_11
Intention to Use Digital Payment System	<---	Attitude toward Digital Payment System	0.657	0.188	2.694	0.00**	par_12

Note: * shows p-value < 0.05 ** shows p-value < 0.01

The hypotheses were tested by using SEM to analyze the structural relationship between constructs. The results of hypothesis testing are reported in terms of z-value (Critical Ratio) at the level of significance of 0.05 or lower as shown in Table 4.

The results indicate that all construct relationships are found to be positive. The results suggest that there is a significant relationship between consumers' perception of digital payment systems and attitude toward digital payment systems ($p < 0.01$) as the direction of the relationship is positive.

The results indicate all construct relationships are found to be positive. The results suggest that there is a significant relationship between cashless society readiness and attitude toward digital payment systems ($p < 0.01$) as the direction of the relationship is positive.

The results show a significant relationship between attitude toward digital payment system and intention to use digital payment system ($p < 0.01$). This indicates that attitude toward digital payment system has a positive influence on the intention to use digital payment system in their financial transaction and purchasing.

Among the significant relationships, the standardized coefficients are 2.246 (consumers' perception of digital payment system to attitude toward digital payment system), 2.825 (cashless society readiness to attitude toward digital payment system), and 2.694 (attitude toward digital payment system to the intention to use digital payment system). The paths represent a direct link in the proposed model. It can be concluded that the perception and attitude of consumers toward digital payment systems in a cashless society lead to the intention of using the digital payment system.

Discussions and Recommendations

There are two points of view regarding digital payment systems in the cashless society era, one is for businesses, and another is for consumers. Digital technology is about a change in business scenarios, dynamic business demands, and innovative ways to quickly cater to these changing needs. Businesses are needed to transform the way of conducting the business and supposed to improved productivity and a concomitant increase in business opportunities and business performance. The digital payment system is beyond using a physical credit or debit card, which businesses need to adapt in the drive towards a cashless society. As well as, retailers and businesses must emphasize how to cope with an accelerating shift to online shopping. Along which that, most purchasing including all payments transactions are except for some contactless payments. Therefore, businesses need to think about the consumer experience to keep the transaction and process efficient and contain their customers' satisfaction. Furthermore, business owners should plan to collect other consumers' data such as customer journey, consumers' behavior and to use

for their marketing. They have to able to determine how to transform large amounts of data into information that can be assimilated into the daily business processes promptly with high-quality information. Additionally, they should be enabling the connected digital business approach, across all functions, and a connected interaction with the ecosystem of the business can only happen if the businesses are connecting the value dots and docs well, regardless of job function.

On the consumer side, digital payment may not be suitable for everyone. For lower-standard-income people, cashless transactions are not practical since they have a high demand to use cash in daily life, which may be possible for them to refuse to use digital payment because they are more comfortable with using cash. According to the finding, although consumers feel that they are ready for digital payment in a cashless society in the short future, the cashless society readiness (mean = 3.90) is the lowest mean score. Therefore, the government or businesses should ensure faster and safer financial transactions for their citizens and consumers. Furthermore, another consideration is that some people may concern about their privacy when they purchase a merchant since the digital payment system is completely traceable and can be reconciled; therefore, it may affect the intention of using a digital payment system. Furthermore, a digital payment system should be ensured that it is fully secure provided the necessary precautions are taken by the user. As the increasing digital transactions and Fintech area, proper fraud prevention, including device fingerprinting and consumer protection mechanisms, needs to be the first consideration. However, the government and private sectors should work together to change the consumer habit to a newer way to transact and it will involve a learning curve.

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