

The State of the Art and Trend of Cashless Society in Thailand

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Abstract

This article focused on the investigation of the state of the art and trend of cashless society in Thailand. The findings stated that e-Money, though no data of PromptPay due to its application in 2017, was the most popular e-payment with 33.58%, followed by Inhouse Funds Transfer (ATM and Internet/Mobile/Telephone) with 28.98%, payment cards like Debit card and Credit card (with 16.15%), and BAHTNET with 0.12%. In addition, according to survey in 2017 by Siam Blockchain, 7.1% of 2,055 respondents started using cryptocurrency for buying goods in their daily lives. In conclusion, Thai Baht still has its intrinsic values because of strong trust of Thais on its values.

Keywords: Cashless Society, Cryptocurrency, Thailand

Introduction

Money is everything for every nation, including Thailand. Nowadays one of the hottest issues in Thailand is cashless society as one of vital public policies under “Thailand4.0” of current Thai government. Cashless society is the society that virtual/electronic/digital payments are trustfully employed by people and financial institutions in common. However, cashless society is not a new public policy for Thailand. It has developed by many Thai governments since the usage of Credit Card of Diners Club (Thailand) Ltd. in 1968 during Field Marshal Thanom Kittikachorn’s government (Wyatt, 2003; Citigroup Inc., 2018). In addition, it becomes one of the hottest centers of attention for Thailand in 2010s due to strong deny from Bank of Thailand (BOT) for the Bitcoin Co. Ltd.’s proposal about legalization of Bitcoin in Thailand in the year of 2013 and strong support from General Prayuth Chan-o-cha’s government on the usage of PromptPay in the year of 2017 for achieving her “Thailand4.0” policy (Bitcoin Co. Ltd., 2013; Bunyamanee, 2017). However, the transformation of a developing country like Thailand from cash-based society to full cashless-based society is in doubt. Therefore, the objective of this paper is to investigate the state of the art and trend of cashless society in Thailand.

Methodology

Documentary research and two descriptive statistics (frequency, percentage) were employed in this study for discussing the state of the art of cashless society in Thailand from data of Bank of Thailand.

Money and Its Classification

Money is the heart of every nation since the era of kingdom. It is the mechanism that all people-both rulers and citizens-must employed for collecting scare resources and accumulating wealthy since around 3000 B.C. at Mesopotamia, now Iraq, by using silver and barley as money. Money must perform as a medium of exchange for goods and services, a unit of account, and a store of intrinsic value. Money can be classified into two key categories-tangibility (as cash and cashless money) and third-party dependency (as third-party-based money and third-party-free money).

First, tangibility employs physical aspect of money for associating money together in groups as follows: cash (since 7th century with currency note in China-onwards) and cashless (since 1950s with the emerging of credit card-onward). The difference between cash and cashless money is that cash is treated as a form of goods / commodities whereas cashless is considered as a form of service. As a form of goods, cash needs two things (1) at least a central operator / a bank or financial institution / a third party for issuing itself, and (2) if the value of cash is backed by gold and silver, etc. with their own intrinsic values, it is called “currency” in the form of coins or paper. However, the word “fiat currency” will be used for cash if its value is backed by nothing. It must be believed by people as users towards government. In another word, the value of fiat currency depends on the rise and fall of government. It lacks its intrinsic value.

In contrary to cash, cashless money can be paid via conventional fiat currencies (such as Thai Baht, Euro, US Dollar) by a variety of channels (such as credit cards, PayPal-both Web Site and App, PromptPay) or cryptocurrency / crypto currency by Web Site and/or apps. The examples of cryptocurrency are Bitcoin, Ethereum, Ripple, Bitcoin Cash, Cardano, Litecoin, NEM, Stellar, IOTA, NEO, EOS, Dash, Monero, TRON, Bitcoin Gold, Ethereum Classic, Qtum, ICON, Lisk, RaiBlocks, OmiseGO, Binance Coin, Verge, Ardor, Zcash, Siacoin, Stratis, Bytecoin, BitConnect, Populous, VeChain, Status, Tether, Steem, BitShares, Dogecoin, KuCoin Shares, Waves, Augur, SmartCash, Ox, DigiByte, Dentacoin, Komodo, Dragonchain, Veritaseum, QASH, Electroneum, Ark, Golem, Hshare, Loopring, WAX, Walton, Decred, Basic Attention Token, Gas, PIVX, ZClassic, Byteball Bytes, SALT, Dent, Aion, Bytom, FunFair, Factom, Ethos, Kyber Network, ReddCoin, GXShares, Power Ledger, MediBloc, RChain, Syscoin, Request Network, MonaCoin, Enigma, Aeternity, Kin, Nxt, MaidSafeCoin, Nexus, DigixDAO, Substratum, Nebulas, Experience Points, TenX, GameCredits, aelf, Bancor, Iconomi, ZCoin, Gnosis, Cobinhood, Civic, Particl, Neblio, Emercoin, ChainLink, DigitalNote and etc. However, traditional digital payment still use the same mechanism as the conventional fiat currencies whereas cryptocurrency needs a public asset ledger-a distributed transaction database for maintaining accountability and transparency. The reason is that cryptocurrency is not both issued by a bank or financial institution and backed by any metal like gold/silver. It is just an algorithm in an open source project (Turoff & Mitroff, 1975; Akinola, 2012; Valacich & Schneider, 2014; Marakas & O'Brien, 2014; Franco, 2015; McDonald, 2015; Popper, 2015; Tapscott, 2015; King, 2016; Laudon & Laudon, 2016; Parker, Van Alstyne, & Choudary, 2016; Vigna & Casey, 2016; Jain & Jain, 2017; Wheatley, 2017; CoinMarketCap, 2018).

Last, money can be also categorized as groups by third-party dependency-third-party-based money (from barley and metal-such as silver and gold-to traditional fiat currency) and third-party-free money / cryptocurrency / crypto currency. Third-party-based money comprises both cash and conventional-fiat-currencies-oriented cashless money such as credit card, debit card, and so on. In this kind of money, government / ruler (with nation bank as a part of government) is the third party who do control money in its quantity, value, velocity and do maintain trust of people on money. As I mentioned earlier, the items set by the authority as money for buying goods, services, assets and paying debts around 3000 B.C. were barley and silver. Later, gold was used as money. However, it was inconvenient to use in practice. For example, you could not cut off a segment from a gold bar whenever you want to buy goods or services. From this problem, every nation fixed this problem by employing money in form of banknote and coin, backed by her gold-called gold standard era. However, this measure was unsuccessful in international trade due to the problems of gold shortage and fluctuation of exchange rate from price change of gold. After that, this problem led to the agreement of Bretton Woods conference in 1944 about gold-dollar exchange standard during 1947-1971 that the price of gold was officially fixed at 35 US dollar an ounce of gold whereas other

countries determined their exchange rates to US dollar by buying it for money reserve instead of gold. This measure was set for preventing the price of gold from rising above that official fixed price in order to maintain world economy's stability. In addition, credit card since 1958 and debit card since 1966 emerged in this era as the dawn of cashless money. However, due to US government spending in Vietnam War, President Richard Nixon stopped gold-dollar exchange standard on August 15, 1971. The Nixon's shock led to the arbitrary production of money by every government. Fluctuation of exchange rate, inflation, and economic crisis from the abuse of economic policy from third party has been the initial effects.

However, the ultimate effect is the emerging of third-party-free money / cryptocurrency / crypto currency. The weakest point of third-party-based money is the abuse of power of government with lack of good governance, especially transparency and accountability. There are many examples of economic crises such as Tom Yam Kung Crisis in 1997, Hamburger Crisis in 2008. Due to these economic crises after 1971, especially the 2008 crisis, many people have no faith left in government-based money like cash and conventional-fiat-currencies-oriented cashless money. Therefore, the emerging of Bitcoin, one of the most popular cryptocurrencies, by Satoshi Nakamoto on 9 January 2009 have been popular until now. It is the outstanding symbol of independent money from government for third-party-free money / cryptocurrency. No need for central bank and government can occur by using public ledger for terminating corruption and promoting good governance-especially transparency and accountability (Wyatt, 2003; Gramlich, 2007; Fleckenstein & Sheehan, 2008; Shiller, 2008; Ritter, Silber, & Udell, 2009; Sobel, Gwartney, Stroup, & Macpherson, 2009; Zandi, 2009; Center for Financial Training, 2010; Cohen, 2011; Rickards, 2011; Salvatore, 2011; Franco, 2015; Vigna & Casey, 2016).

Discussion

This part will firstly discuss about the state of the art of cashless society in Thailand by using the data from Bank of Thailand. After that the trend of cashless society in Thailand with the emerging of cryptocurrency is then shown.

The state of the art of cashless society in Thailand

Cashless society in Thailand has its starting point of the usage of cashless money since 1968 with credit cards. The cashless money of Thailand has been legalized by government on only cashless money with conventional fiat currencies such as banking cards-credit cards and debit cards, Telephone banking, Bank of Thailand Automated High-value Transfer Network (BAHTNET), PromptPay-the latest money transfer service via ATM, Internet banking, and Mobile banking with the usage of only mobile phone number or citizen ID number, no need of bank account number (Bank of Thailand, 2017). All of them are the centralized financial system under direct control of third parties like BOT and government.

Therefore, the state of the art of cashless money with conventional fiat currencies in Thailand could be shown by the volume of payment transactions of all types of the above mentioned cashless money. According to the latest BOT's data on 30 Nov 2017, shown in Table 1 with no data of PromptPay due to its application on January 2017, the findings found that e-Money was the most popular e-payment with 33.58%, followed by Inhouse Funds Transfer (such as ATM and Internet/Mobile/ Telephone) with 28.98%, payment cards like debit card and credit card (with 16.15%), and BAHTNET with 0.12%.

Table 1 The volume of e-payment transactions (Unit: Thousand Transactions)

Type of e-payment	Volume in 2016
1. e-Money (cash in plastic card or other electronic instruments such as e-Purse, e-wallet, or Smart Card)	1,076,298 (33.58)
2. Inhouse Funds Transfer (ATM and Internet/Mobile/Telephone)	929,005 (28.98)
3. Payment cards (debit card and credit card)	517,561 (16.15)
4. Bulk Payment (direct credit, direct debit, ITMX Bulk Payment /SMART)	379,662 (11.84)
5. Interbank Funds Transfer / Online Retail Funds Transfer: ORFT (ATM, Internet/Mobile Phone, Counter)	298,975 (9.33)
6. BAHTNET-3 rd Party	3,819 (0.12)
Total	3,205,320

Source: BOT (2017)

According to the above findings, Thai people generally favor self-immediate payment/transfer services more than future payment in a line of credit or third-party-based immediate payment/transfer services. The marketing mix factors (the four Ps) will be employed here for explaining this phenomenon as follows (Kerin, Lau, Hartley & Rudelius, 2013).

First, product and price (cost of usage), immediate payment services like e-Money and Inhouse Funds Transfer can satisfy Thai people's needs by no charge of interest or three percent direct charge on user per each transaction/purchase as credit cards-a kind of payment cards. In addition, for debit cards-another type of payment cards, holders could not pay for goods and services by their cards in every shop due to the type of debit cards reader. Many machines can read only debit cards with chip, not debit cards with magnetic stripe. The reason is that all current magnetic-stripe cards will be replaced by chip cards by the end of 2019 (Pinijparakarn, 2016). For another thing, PromptPay, now with connection with e-wallet, is no need of having credits for accessing the service. That is one reason that the number of its user has rapidly increased since 2017. Another reason for the expansion of PromptPay users might be many Thai users hardly read the terms and conditions about no liabilities of many banks in any damage from computer-related problems (such as cyber-attacks like hacking and virus, data disclosure by bank, error and downtime of the IT infrastructure and collapse of ITMX-the official Prompt Pay provider), except for damages caused by the bank's intention or severe negligence. It is a case-by-case investigation with an excessively long time (Leesa-nguansuk, 2016; Chantanusornsiri, 2016; Chantanusornsiri & Sangwongwanich, 2016). In this sense of user's responsibility, PromptPay and cryptocurrency are quite the same. In contrary to PromptPay, the credit card holders must have credits before accessing the service. Hence, the number of credit card holders are always less than users of PromptPay and/or e-Money.

Next, promotion of PromptPay, connected with e-wallet, is better than payment cards and Interbank Funds Transfer in term of money transfer because no fee for interbank and inter-region funds transfers for the amount which is less than 5,000 Baht per transaction because it cut the service fee for interbank off, approximately 10 satang per transaction. Two Baht or less is the fee for transfer between more than 5,000 baht to 30,000 Baht. Five Baht or less is for transfer of between more than 30,000 Baht and 100,000 Baht. In addition, 10 Baht or less is for transfers of more than 100,000 baht or more but not higher than the determined rate by bank who is the PromptPay service provider (Bank of Thailand, 2016).

Last, Place is not a barrier for e-Money and Inhouse Funds Transfer due to Internet and abundance of ATM. However, payment cards are not accepted by every shop. For example, if you want to buy some food at Kasetsart University's canteen number I, or New Bar, at Bang Kaen Campus, Bangkok, you cannot use your credit card while you can use PromptPay for paying for food.



Figure 1 PromptPay at the Kasetsart University's central canteen number 1

In summary, the state of the art of cashless society in Thailand is that third-based money like fiat currency-such as credit card, debit card, telephone banking, BAHTNET-is still the mainstream money of Thailand due to direct control and support of BOT and government.

The trend of cashless society in Thailand

Bitcoin and other cryptocurrencies are the very interesting alternatives of Thais due to the distrust of people in conventional financial system of Thailand from economic crisis in 1997 and problems-related good governance of financial sector and government. Thai government produce her own money like cash and conventional-fiat-currencies-oriented cashless money without gold support. That is why some Thais who do not believe the third party's decisions like bank, BOT, and government has started using cryptocurrencies since at least 2013 that BOT denied lawful Bitcoin trade by Bitcoin Co. Ltd. in Thailand. From a recent survey by Siam Blockchain during 5-12 July 2017, approximately 7.1% of 2,055 respondents started using cryptocurrency for buying goods in their daily lives whereas the rest used cryptocurrency for making money (Siam Blockchain, 2017). It becomes a significant symbol of challenging absolute power or sovereignty of Thai state due to its borderless characteristics. It is the same as what Neo-the chosen one-did for out of the matrix, a great movie in 1999 (Warner Bros., n.d.). The reason of its importance is that Thai nation-state - according to her recorded history-has been founded by the rulers on their capability of centralization of money, especially the establishment of Ratsadakhorn-bhibhathana Building as a center for modern tax collection reform during the reign of King Rama V. It is the first time that Thai people can determine their own fate by their own money (cryptocurrencies) without third party like government. Now nothing can stop Thais for using cryptocurrency (Wyatt, 2003; Sobel et al., 2009; Salvatore, 2011; Bitcoin Co. Ltd., 2013; Franco, 2015; Vigna & Casey, 2016).

However, for Thailand, cryptocurrency-oriented admirers are like a neo-classical school. They cannot stand by their own feet. In another word, it is impossible for anarchy. It is the fact that they are free to do lots of transactions in the following affairs like money transfer, buying and selling goods and services-even money-with low or no transaction costs because

cryptocurrency is a good product with low or no money transfer (price), independence from third party with good governance systems-especially transparency (promotion), and borderless world for doing business (place) (Baradat, 1994; Slann, 1998; Kerin et al., 2013). Now Thai Baht and all of cryptocurrencies have had the same characteristics since 2013 that they has their intrinsic values because of trust of Thais on their values, not from gold support. The holders of these cryptocurrencies must converted them into real money or conventional fiat money due to the strong trust of most of Thais in Thai Baht and low trust on cryptocurrencies. In accordance with low trust on new digital money of Thais, the public policy window of Thai government has closed again since 2013 by the announcement of BOT on 12 February 2018 for strictly prohibiting all banks and financial institutions of Thailand from investing in cryptocurrencies. It is just a preventive measure from Thailand's central bank because no cryptocurrency is now banned in this country (Chantanusornsiri, 2018; Bank of Thailand, 2018). However, the coming solution for cryptocurrencies is not included in the draft of Thailand-20-year-national-strategy (2017-2036) (Office of Secretary of National Strategy Committee, 2018). It clearly stands for lack of long plan for the emerging and expansion of cryptocurrencies, though they have been already used by a group of Thais.

Conclusion

Money always consists of two principles the same as a double-headed coin-centralization and decentralization. Centralization of money is a set of paradigm since 3000 B.C. that has been challenged by Bitcoin and his successor since 2008. However, cryptocurrecies is not a real threat for Thai conventional fiat money. It is a significant warning towards Thai government capability to serve, maintain and adapt itself for demands of Thais, especially good governance status and public financial management.

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