# E-MONEY REGULATIONS AND COMPARISON BETWEENINDONESIA AND HONG KONG

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#### Abstract

**Purpose**— The purpose of this research is to find out the differences and similarities in two different regions: Indonesia and Hong Kong.

**Design/methodology/ approach**— Data is collected from various of sources, from online journals, published journals, to online news etc. Because this thesis istrying to bring the latest informations as possible, so online news are one of the essential sources.

**Findings**— The findings revealed the e-wallet facilities' differences and similarities in two regions, in terms of facilities coverage, maturity and ease of useand adoption.

**Value**— For the benefits of audiences, this thesis is providing some of the latest informations we could find online by the time this thesis is written, for the best of author's knowledge.

**Keywords** E-Wallet, Indonesia, Hong Kong, E-Money, Financial, Regulation, Qualitative, Comparison

Paper type Research paper

#### INTRODUCTION

The payment methods are changing somewhat rapid now, because now is the age of being cashless, and cash is more like a thing of the past, even our wallet in these recent years have been slimmer and slimmer until it is only capable of contains our cards, and no more space for paper currencies and coins, because the demand now for physical currencies are not as huge as the old time.

## THEORETICAL FRAMEWORK

Before any of the discussions, we should at least understand the history of money, starts from barter, "Before the invention of money (coin or paper) there was barter, a form of exchange (i.e. trade) without the use of a monetary medium such as paper money or coinage" (John Taskinsoy, 2019).

This method is really old and vintage exchange method or process, but it does not use any fixed value to proceed any of the exchange activities, however, it was designed to process the exchange of similar value of items, simply say the value was depend on the seller and buyer, because it was basically a trade, until the first physical consistent value of money was created, then it changed the game, since then the whole world started using physical money to pay for everything with a price tag on.

## **Digital economics**

It refers to basically whatever things we purchase online, like music, movies, e-books, softwares etc. Everything that do not have a physical form with copyrights and/or DRM.

The new economics of "digits," encompassing those goods (like software, books, and music) that are capable of being reduced to 1's and 0's (meaning electrons) –or what we call "digitaleconomics" (McKenzie& Lee, 2001, p. 1).

# **Understanding of the Traditional Payment Methods**

The reason why people still tend to use the traditional payment methods

instead of e-money these days, the reasons can be divide into several factors: Habits from the old times, simply to say, people get used to it, and they think cash is still safer to use than e-money, which is basically true, however there are uncertainties in life like thefts, broken money and even hygiene issues.

"Bartering is the oldest form of trade (i.e. dates back to the prehistoric people), however trade became simple and widespread with the creation of money which has evolved from coinage (i.e. silver, gold, copper, etc.), paper (banknote), credit(i.e. credit cards, revolving business line of credit, debit cards, etc.) and virtual (i.e. Bitcoin) crypto-currencies (Smith, 2008)" (John Taskinsoy, 2019, p. 4).

## The rise of e-wallets

"e-wallets refer to mobile applications that can be used to do financial transactions such as mobile top-ups, money transfer, bills payments, merchant payments, e- commerce payments, loan repayment collection and/or payrolls services." (Cheng, Khim, Thai, 2018).

Since the first smartphone has successfully debuted into the market with just four buttons and a "giant" touch screen in 2007, compare to a bunch of buttons in the past like those feature phones, with the way of control just was not logical for human and computer interactions at some level.

Now smartphones are getting smarter day by day, they even became our wallet behind the screen, with the work of cellular networks and camera and sensors. Because we are simply got used to the time when smartphone is probably the firstthing we will touch every morning when our eyes opened instead of brushing ourteeth.

## Millenial

"Millennials are those who were born from 1980 to 2000" (Stein, 2013). "Millennials are tech-savvy undergraduate students whose priorities are speed, ease, efficiency and convenience, thus more likely to adopt mobile commerce." (Cheng, Khim, Thai, 2018, p. 3). The age of people that are the most comfy with technology and gadgets, they are more intent to use cashless payments like mobile applications in their smartphones over cash, while coins and paper bills were themost important topic if not the hottest topic to talk about in the last few decades, now e-wallet is the new wave for us to discuss about for the next few decades if not centuries.

## **METHODOLOGY**

The method that is used in this research are interpretive and qualitative research, which is explanations and discussions, "One source of potential confusion is that there are many different approaches to doing qualitative research. This is because not all qualitative research questions are of the same type, and because different qualitative researchers come from a wide range of researching traditions" (Hancock, Ockleford, Windridge, 2009, p. 9). With provided facts and informations from past journals and online news in case of the need of the latest informations.

## **Data collection**

"Documentation. A wide range of written materials can produce qualitative information. These can be particularly useful in trying to understand the philosophy of an organisation as may be required in ethnography. They can include policy documents, mission statements, annual reports, minutes of meetings, codes of conduct, web sites, series of letters or emails, case notes, health promotion

materials, etc. (Hancock, Ockleford, Windridge, 2009, p. 19)". With the method of the research and the demand of the topic, it is good to have some up-to-date informations to be used and mentioned in this thesis, because technologies are changing everyday or even every second, so just using published journals are not going to help much, but they are still needed, for provide longterm facts to support the arguments.

# **Analysis**

"Interpretivism denotes an approach to studying social life with the assumption "that the meaning of human action is inherent in that action" (p. 134. Schwandt, 2001)" (Alvermann& Mallozzi, 2010, p. 1). To explain the arguments with the real life example, interpretive study is needed for explain the facts around us, to see what are the people actually thinking about, with the proves of what they are doing and reading everyday.

## **FINDINGS**

The findings show that in two regions, the way and habits of spending are somewhat different, the way that Hong Kong people think of e-money is not about what it can do, but instead how it runs in the background, so basically they are more caution in the details; however in Indonesian's perspective, is that they are tend to welcome e-wallets to enter their life, as it provides much easier way to payinstead of counting coins and paper bills every time.

However at the detail, we will have Hong Kong as a mirror or guideline for Indonesia to take a look and learn from, as Hong Kong's typical merchants especially those big name merchants' cashier table will have basically every possible payments you can find worldwide, in either physical currencies, cards or digital payments.

## Infrastructure

## Infrastructure in Hong Kong side

There are basically two types of payment technologies, QR code and N.F.C., with "Quick Response Code, widely known as "QR" code, is a two-dimensional digital image that can be easily scanned by any mobile device's camera. Once scanned, it will quickly direct to the data embedded in the code." (Cata, Patel&Sakaguchi,2013, p. 1).

It requires user to use the camera on their smartphone to scan the square icon to pay; while "NFC stands for Near Field Communication. It's very similar to Bluetooth and WiFi those kinds of wireless signals, NFC works by sending information over radio waves" (Chen, 2016, p. 9).

It requires user's smartphone to have N.F.C. chip built into the smartphone, so when user is trying to pay, they just simply need to tap their phone against the contactless terminal to complete the payment.

And the infrastructure in Hong Kong is also evenly well, based on the lifestyle in Hong Kong that almost everyone get used to the fast-paced living rhyme, so they prefer everything to be as quick as possible.

## Infrastructure in Indonesia side

For the most common e-money payment method in Indonesia, it is going to be

QR code without a doubt, because of just how easy it is for merchants to implement the system into their stores, just print the QR code and have it stands at the cashier's table, then the customers will know what to do with the digital square symbol.

However since Indonesia is still a new comer in terms of adopting e-wallet facilities, even in the city area, sometimes the e-payment methods tend to broke down or occurring some errors sometimes, it could be signal problems or system errors, but typical merchants and consumers would not know much about those technology things, they simply just want to pay comfortably.

# E-money regulations of Hong Kong

The regulations in Hong Kong are set by their dedicated government department called H.K.M.A. (Hong Kong Monetary Authority in short), somewhat similar to Indonesia's Bank Indonesia, it works for authorising Hong Kong's currency and the production of the coins, also to secure and maintain the economy health of Hong Kong by maintain the conversion rate somewhere between HKD\$1 for USD\$7.8.

# E-money regulations of Indonesia

The regulations in Indonesia are set by Bank Indonesia, as it is the central bank of Indonesia, it does the similar jobs as H.K.M.A., the difference is that B.I. does authorise and produce all types of physical currencies in Indonesia, also when it comes to e-money, they also issues regulations on how e-wallets are certified to be used in the public to protect the citizens.

## **CONCLUSION**

After the researches and findings of the thesis, it shows some things that not only Indonesia has problems to solve for building e-wallet facilities as a new comer of country for building their facilities, however Hong Kong also has problems to solve as well, and it is mainly about the evolution, the changes.

## **Conclusion for Indonesia**

The problems reveals that in Indonesia, the e-wallet applications are too fragmented, each of the applications are standing alone on the home screen, and each of them service for different purposes and runs differently.

An example, when people go into a store and about to pay, there will be a big party of payment terminals or P.O.S. (Point of Sale) systems, and they need to find out which one of those applications inside their smartphones are supported at the store, and typical consumers are likely to get confused.

## **Conclusion for Hong Kong**

For Hong Kong's side, the infrastructure is good enough for typical consumers, however, the bad thing are that Hong Kong is actually ready to go on fully cashless, but there is some things that hold Hong Kong's back to not go on fully cashless or at least bring a card when you step out of your home, and that problem is a marketing issue, with the partnership between MTR company and Samsung Pay HK, they have been partnering for quite a long time now when this thesis is written, and the population of other iOS and Android users were not quite happy about it, because they were not Samsung's flagship smartphone owners, so they still need to bring a card out no matter where they go.

The second issue is that there are trust issues in Hong Kong, while the epaymentfacilities are well done in there, but sometimes people do not really trust in the technology with data, the findings show that Hong Kong people are cautious with what do the applications try to collect in their smartphone, because those data are their privacy, and it is same like telling completely everything to the system or even to the hidden public.

## **Suggestions for Indonesia**

The research shows that the biggest problem now for Indonesia is that the e-wallet applications are too fragmented, too separated, and the suggestions for it, is that Indonesia should build an actual e-wallet application to gather most if not all of the e-money applications into one place, so in consumers' smartphone, they only need to download one application and login their phone number once and for all to activate their accounts in all the logged-in applications in that one single wallet application. For the suggested solution, Bank Indonesia should be the one to make that application, because of the authority and power Bank Indonesia holds as a central bank of Indonesia.

# **Suggestions for Hong Kong**

The suggestions for Hong Kong is actually quite simple, but for the sake of certain companies' profit, it may not be as easy as we wanted it to be, even for local Hong Kong people, they were also confused about why would MTR company and Samsung have such weird deal to only let MTR company's smart Octopus card or smart transit card to appear digitally on Samsung's flagship smartphones, and ignore the rest of the smartphone markets, because from the official/unofficial market share shows that the average smartphone models that Hong Kong people purchased do have N.F.C. (Near Field Communication) chip inside, which means Octopus card, which has similar technology as Jakarta's transit card (Sony, 2018), can also be implement into the rest of the smartphone market in Hong Kong.

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