

E-WALLET MODELS: AN APPRAISAL OF SHARIA-RELATED ISSUES

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Abstrak: Tulisan ini bertujuan untuk mengevaluasi model bisnis dompet elektronik yang ada dan memberikan analisis awal tentang isu-isu syariah, khususnya terkait dengan hubungan pihak-pihak yang terlibat dalam kontrak (operator, pelanggan dan pihak ketiga). Karena dompet elektronik juga merupakan faktor penting untuk meningkatkan inklusi keuangan di antara berbagai tingkat anggota masyarakat (kaya dan miskin), maka ada peningkatan kebutuhan untuk menganalisis model dompet elektronik yang ada dan praktiknya. Tujuan akhirnya adalah untuk menjaga hak semua pihak dan mendukung pembuat kebijakan untuk menyusun parameter dompet elektronik yang sesuai dengan hukum Islam. Tulisan ini mengadopsi pendekatan penelitian kualitatif, khususnya analisis isi dan wawancara. Pengumpulan data meliputi telaah dokumen, wawancara, dan observasi. Tulisan ini mengevaluasi empat model dompet elektronik di Malaysia dan menganalisis masalah syariah yang muncul dari model tersebut. Ada beberapa masalah syariah yang dapat ditemukan dari model-model tersebut, yaitu terkait dengan akad yang digunakan, status dana yang dipegang oleh penyedia dompet elektronik, status simpanan di bank dan perolehan pendapatan. Temuan dari makalah ini dapat digunakan sebagai dasar bagi para sarjana dan pembuat kebijakan untuk memberikan pedoman dompet elektronik yang sesuai syariah.

Kata kunci: dompet elektronik; uang elektronik; keuangan Islam; parameter Syariah

Abstract: This paper aims to evaluate the existing e-wallet business models and to provide a preliminary analysis of sharia issues, specifically related to the relationship of the involved parties in the contract (operators, customers, and third parties). As e-wallet is also a critical enabler to increase financial inclusion among the different levels of society members (richer and poor), thus there is an increasing need to analyze the existing e-wallet models and their practices. The final aims are to preserve all parties' rights and support the policymakers to structure e-wallet parameters that comply with Islamic law. This paper adopts qualitative research approaches, specifically content analysis and interviews. The data collection includes, among others, document reviews, interviews, and observations. The paper evaluates four e-wallet models in Malaysia and analyzes arising sharia issues from those models. In the models, several sharia issues can be found, which are related to the contracts used, the status of funds held by e-wallet providers, deposits in banks, and revenue generation. Findings from this paper serve as a basis for scholars and policymakers to provide guidelines for sharia-compliant e-wallets.

Keywords: E-wallet; e-money; Islamic finance; sharia parameters

Introduction

Technology has grown rapidly over the years and thus requires sharia justifications related to those current technologies. The current situation needs accelerated and dynamic sharia judgment and views on new issues parallel to the technology path. The 4th Industrial Revolution (4IR) brings forward the idea of Artificial Intelligence (AI) and the Internet of Things (IoT) and the changes in regular financial transactions. Financial Technology (FinTech), which emerged in the 1990s and was derived from 4IR, has transformed manual financial transactions into fingertips transactions. FinTech also revolutionizes various sectors, including banking and finance. Digital transformations introduce a new lifestyle in how financial transactions are performed. Traditionally, goods can only be purchased by exchanging goods with fiat money. Today, some applications are being developed to support online transactions. These include e-money, prepaid top-ups, and e-wallets.

Data showed that mobile banking usage had increased drastically from 13.6 million users in 2011 to 2.2 billion in 2018 (Bank Negara Malaysia, 2020). As a result, the volume of cheque issuance decreased to 42% in 2011 (Wei & Peng Tsu, 2018). The current data also shows an increasing number of e-wallet issuers in Malaysia. The number of registered non-bank e-money issuers increased from 25 issuers in 2016 to 44 issuers at the end of 2018 (Bank Negara Malaysia, 2019). This number is increasing to 54 issuers in 2021.

Based on the Financial Sector Blueprint 2011 – 2020, the Central Bank of Malaysia (BNM) has decided to increase the effectiveness of the national payment system. One of the plans is to achieve 200 e-payment transactions per capita in 2020. This plan signals that the BNM is very serious about digitalizing the Malaysian economy. An increasing smartphone penetration rate in Malaysia is one of the factors for e-wallet usage among Malaysians. In addition, cost saving factor also encourages the e-wallet offering and usage. For example, the Quick Response (QR) code payment method reduces the need for a terminal system for Point of Sales (POS), thus reducing infrastructure costs.

Reviews of past studies show that limited studies have been done on e-wallets from a sharia perspective. Some issues discussed in

past studies relate to contracts used and conceptual sharia discussion. In addition, previous studies should have offered more in-depth analysis and empirical findings (Razali et al., 2020; Zulkefli et al., 2019). Thus far, there needs to be a study focusing on developing Sharia-compliant e-wallet guidelines found in the previous literature. This shows some gaps in the study. As there are changes in transaction mechanisms in e-wallets, there are potential sharia issues that may arise from time to time which needs guidelines to protect the rights of all parties.

In general, there are several parties involved in e-wallet transactions; (i) providers or operators of e-wallet, (ii) users of e-wallet (customers), and (iii) merchants (sellers). No uniform e-wallet models are expected, as they can evolve from time to time. This paper thus analyzes issues of implementing the different models from a sharia perspective by evaluating the existing e-wallet models in Malaysia. Several aspects are looked at: types of e-wallet models, the process of transactions, user benefits, and operators' income generation. This study is based on the theoretical roots of *the wakālah* (agency) contract in Malaysia and adopted interview and observation approaches for data collection. In brief, there are four types of e-wallet models identified in the market by this study with different features and potential sharia issues. Findings highlight aspects that lead to sharia issues. Understanding the facts of sharia issues is essential to monitor the compliance status.

This study is significant as it establishes the conceptual relationship of the contracts in e-wallet offerings. The paper provides contributions to sharia scholars and policymakers to move towards developing the parameters that can protect the rights of all the involved parties and encourage participation in e-wallet transactions. This paper opens some room for future research in the angles where the study area needs to be adequately grasped comprehensively, such as from the sharia compliance, governance, and legal perspective to monitor e-wallet offerings. This paper is organized as follows. The paper starts with an introduction. The second section elaborates on e-wallet development in Malaysia, then discusses past studies. The third section elaborates on the research methodology, followed by findings, proposal on Sharia compliant e-wallet and ends with conclusions.

Method

This paper adopts qualitative approach as main method for the study. In the first phase, the study conducts library research in the form of books, journals, and other publications, including recognized websites. The data is also gathered from e-wallet operators' websites and applications. Some participatory observation was done on fundamental practices of various e-wallets from different operators. In the second phase, interviews were conducted with major e-wallet operators to gain an in-depth understanding of e-wallet operations and their relationship with the merchants. This method requires the researchers to select relevant respondents to meet the first objectives. This study does not use specific numbers and sample size due to its nature as a qualitative study. Five respondents were selected using purposive sampling techniques (Robson, 2002). Robson (2002) noted that no set number of interviews is needed for a flexible design study. Samples can be divided into several categories; e-wallet providers that are listed in the Bank Negara Malaysia's list, unlisted providers and trading companies. Interview sessions took place between August 2019 to February 2020

The details of the participatory companies are as follows:

Table 1. E-Wallet Operators and Number of Merchants

No.	E-Wallet Operator	Number of Merchants
1	Operator A	12,000
2.	Operator B	80,000
3.	Operator C	Not available
4.	Operator D	Not available
5.	Operator E	125,000

Source: Based on early interviews, e-wallet operator representatives

The interview protocol has been provided prior to the interview sessions. The questions are open-ended, semi-structured questions that cover several aspects. The questions consist of few main aspects. The questions are (i) how the transaction is performed; (ii) what kind of benefits users get from participating in e-wallets; and (iii) how the operators can gain income from the offered services. Confirmation of

the existence of potential sharia issues in e-wallets has been made with the experts from the regulatory body.

E-Wallet Development in Malaysia

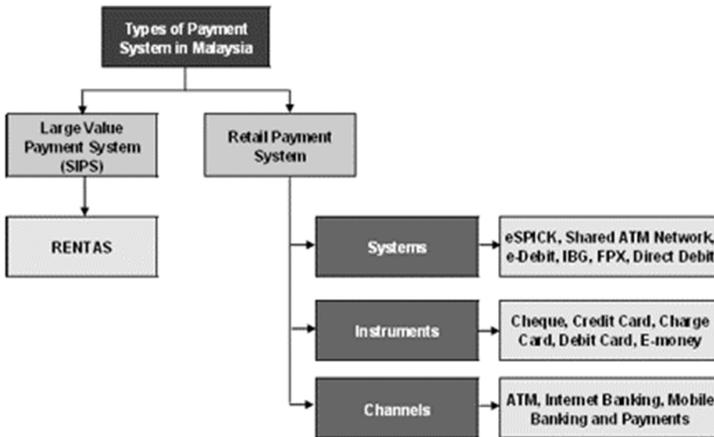
Smartphone penetration, in addition to the cost-saving factors, encourages e-wallet offering and usage in Malaysia. Furthermore, there is an increasing rate of e-wallet usage in Malaysia, especially during Movement Control Orders (MCO) due to the Covid-19 pandemic (Ismail, 2021). What are the sharia-related issues associated with e-wallet business models? E-wallets, digital wallets, e-mobile, digital money, and e-money are regularly used in cashless payments. These terms, in particular, have different meanings and are used in different contexts (Grant, 2019). First, e-wallets can be used through e-money. E-wallet is a wallet application that requires a 'top up of cash money' to the application either using online banking or a prepaid card. The transferred money will be converted into e-money, put into an e-wallet account, and used to make payments online or in person. This e-wallet replaces the physical wallet, which allows one to save money by simply using the application without having to carry physical cash to make a transaction (Kamarulbaid, 2019). Money must be deposited into the e-wallet (online) before being converted and kept as e-money, which allows for any payment transaction. The value of e-money in an e-wallet equals the actual value of the deposited money. Second, in some cases, e-wallet is based on credit and debit cards. The payment source comes from the user's debit or credit card when a payment transaction is made.

A digital wallet is a technology used to store payment information such as credit card numbers, debit card numbers, and loyalty cards, and is commonly stored in the Cloud. A digital wallet can be defined as a system that stores information and keywords for various payment methods by users. Mobile wallet is a smartphone-based app that allows users to make 'tap to pay' payments to merchants and often uses Near Field Communication (NFC) technology.

E-money or digital money refers to digital payment instruments different from physical money. Based on the Central Bank of Malaysia (Bank Negara Malaysia, 2016a), e-money is a payment instrument containing the value of money that the users previously paid. E-money can be used using a card or an application for both physical and online

payment. E-money users can make payments for purchases of goods or services from online merchants who receive payments via e-money. When an e-money user makes a payment, the value of e-money in a particular application (such as e-wallet, top-ups, or prepaid card) will be deducted directly from the outstanding balance. BNM provides the guidelines on e-money and e-wallets in the E-Money Guideline as a framework for e-wallet offerings. Among Malaysia's leading players in e-wallets are Boost, GrabPay, Touch 'n Go, MaybankPay, and Setel. The basic e-wallet model shows that at least three parties are involved in an e-wallet, i.e., the users, e-wallet operators, and merchants. However, other parties and relationships may evolve from the different e-wallet models in the market.

Figure 1. Retail Payment System Framework in Malaysia



*Source: BNM (2019b)

While extensive studies have been done on e-wallets in Malaysia, most focus on challenges and marketing perspectives on e-wallets (Nizam et al., 2019). Andrew et al. (2019), in their paper on a systematic review of market acceptance of e-wallets, found that studies on mobile payments in Malaysia have emerged since 2007. Specifically, their observations from 2015 to 2019 show that there are 93 papers on e-wallet acceptance among the public in Malaysia have been written by the researchers. The current paper by Tenk et al. (2020) on e-wallets in Malaysia also touched on e-wallet adoption among smartphone users. Most studies on e-wallets are broad and do not touch on Islamic finance. Md. Nor et al. (2021) studied

e-wallets from a legal perspective. Several legal issues can emerge from the e-wallet framework in Malaysia, as emphasized by this study. Among them are the liability of the Board of Directors of e-wallet operators, an extension of credit, interest payment, charging fees, exclusion of liability, breach of mandate, and sharia compliance position of trust account deposit.

Minimal studies have been done on e-wallet adoption from the Islamic perspective in Malaysia or worldwide. Abu Bakar et al. (2020) focus on the e-wallet transactional framework. Their study views the e-wallet transactional framework from an Islamic financial engineering perspective. This paper, however, needs to mention Islamic principles and guidelines in their e-wallet transactional process evaluation. Another study on e-wallets has been performed by Zulni and Achiria (2020). Their paper views e-wallet practices from Islamic business ethics perspectives and provides a conceptual view of e-wallets. The paper proposes four axioms related to e-wallets from the Islamic perspectives: unity, justice or balance, free will, and responsibility. The two abovementioned studies discuss e-wallets from theoretical and conceptual perspectives only.

Albeit there is importance to discussing e-wallet practices from sharia, limited studies have been done specifically from the sharia perspective. Zulkefli et al. (2019), Mustafa et al. (2021), W. Ramli et al. (2021), Muhammad & Muhammad (2001) and Mustafa et al. (2021) view e-wallet applications from the perspective of sharia. Zulkefli et al. (2019) conduct the document analysis of the product disclosure sheets of the selected e-wallet in Malaysia and BNM guidelines. They consequently posit the presumptions on types of sharia contracts and concepts for the selected e-wallet. This study highlights several contracts and concepts identified from their analysis, including *wadi'ah*, *ujrah*, *qard*, and *hibah*. The paper, however, should have discussed the status of the banks where the e-wallet operators place the deposits. In different perspective, Razali et al. (2021) analyze the e-wallet application from the eye of *maqāsid al-sharīah*, specifically from the perspective of *hifẓ al-māl* (protection of wealth). Using the method of document analysis of the BNM's guidelines and operators' websites, they analyze e-wallet applications from four aspects: - money (*thaman*), forbidden activities, property protection, and *maṣlahah*. Both studies (Razali et al., 2020; Zulkefli et al., 2019) assume that e-wallet complies with sharia. This perspective is also shared by Muhammad and Muhammad (2021).

Table 2. Current Studies on E-Wallet from Sharia Perspectives

Authors	Findings	Methodology
Hamsin et al. (2023)	- Studies e-wallet from the perspective of sharia and data protection within Indonesian context.	Library research
Muhammad & Muhammad (2021)	- Studies e-wallet from the perspective of sharia - Attempt to propose sharia contracts on e-wallet from sharia perspective	Library research
Mustafa et al. (2021)	- Studies e-wallet from the perspective of sharia - Attempt to propose sharia contracts on e-wallet from sharia perspective	Inductive approach
W. Ramli et al. (2021)	- Studies e-wallet from the perspective of sharia - Attempt to suggest guideline on e-wallet from sharia perspective	Observation approach
Razali et al. (2021)	- Studies e-wallet from the perspective of <i>maqāṣid al-sharīah</i> (preservation of wealth) - Views four aspects – money, forbidden activities, property protection, and <i>maslahah</i>	Document analysis
Abu Bakar et al.(2020)	Studies e-wallet from an Islamic financial engineering perspective	Theoretical discussion
Zulni & Achiria (2020)	Conceptual view on e-wallet from Islamic business ethics Axioms for e-wallet practices: justice or balance, free will, and responsibility.	Theoretical discussion
Zulkefli et al. (2019)	- Studies e-wallet from the perspective of sharia - Discuss several contracts and concepts that relate to e-wallet – <i>wadi'ah</i> , <i>ujrah</i> , <i>qard</i> , and <i>hibah</i>	Inductive approach

*Source: Based on authors' comparison

Md. Noor et al. (2021) studies e-wallet from legal perspective. This study highlights and establishes the relationship between the parties

from the agency perspective and highlights issue of deposit placement. W. Ramli et al. (2021) studies sharia issues related to e-wallet based on observation on six e-wallet providers. They provide suggestions on e-wallet guidelines related to several aspects such as governance and purchase transactions. Even though their study discuss on e-wallet contract, they did not deliberate specific types of the sharia contracts that should be adopted by the e-wallet providers. Similar with Zulkeffi et al. (2019), Mustafa et al. (2021) also provides proposal on the contract used in e-wallet. They suggested contract of *wadi'ah* as the main contract between the user and issuer (providers of e-wallet). Similar with Zulkeffi et al., the study by Mustafa et al. (2021) did not use empirical study as the data collection method. Current study by Hamsin et al. (2023) touches on the issue of sharia and data protection on sharia e-wallet. They highlight that e-wallet is permissible in sharia as long as it does not contain elements of *gharar*, *maysir*, *tadlis*, *rishwah*, or *israf*. Interestingly this study also highlights issues of security for the users of e-wallet.

Except a few, most of the existing studies have been focused on theoretical discussion and bound within the analysis of guidelines and observation on operators' websites. The limitations show some gaps that future studies should fill. The method and analysis should also adopt the empirical approach and reflect the detailed angles of the products or models. This approach will provide a solid foundation for the research before providing any sharia justification.

As rightly proposed by Naim *et al.* (Mohamed Naim, Long, et al., 2016; Mohamed Naim, Md Hussain, et al., 2016), it is essential to analyze various current financial products development in order to propose Islamic guidance on those matters. As Islamic finance is guided by sharia, an in-depth evaluation of the current e-wallet perspective and sharia issues on e-wallets are essential to conclude what should and should not be practiced. One of the steps is to establish the relationship between operators, users, and merchants based on the viable contract used prior to sharia parameters and guidelines formation.

From the theoretical perspective, wealth preservation is very significant in sharia. Ensuring the protection rights of each party is very important to ensure nobody will be mistreated in the contract. Taking this route, this paper views that the underpinning basis of the e-wallet practices is derived from the agency contract (*wakalah*). Understanding

of the *wakālah* contract under the contemporary view can be grasped from the BNM Standard on *Wakālah*, which highlights; i) The subject matter of the *wakālah* contract must be sharia compliant, and ii) The subject matter of the *wakālah* contract must be determined upfront by the principal, made known to and accepted by the agent (Bank Negara Malaysia, 2016). AAOIFI, in its Standard No. 22 AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions, 2018), provides conditions for the *wakālah* perspective:

Any contract that a person is permitted by sharia to be involved in personally can be performed through an agency. 3/3/3 It should be something that can be disposed of through the agency. This includes all types of financial contracts and dealings that a person can perform personally. It should not involve a sharia-banned practice, like trading in impermissible commodities or committing usurious lending.

These guidelines from the involved bodies on *wakālah* are important to posit the e-wallet model and activities. This paper adopts qualitative research approaches to achieve its objective of identifying any sharia legal issues that arise from e-wallet practice. The primary data collections of this study are documentation reviews, interviews, and observations (Sekaran & Bougie, 2009). Content analysis and descriptive analysis are used for analysis purposes, especially on sharia contracts to categorize e-wallet practices within the ambit of *u'qūd mamma* (prevailing contracts) or *their mamma* (new contract types). These methods are used by exploring the terms and conditions of their product. Interviews with the operators' representatives and observations are conducted to identify the existing model.

E-Wallet Models in Malaysia

The simple e-wallet model consists of three main parties; e-wallet operators, users, and merchants. From the basic concept of the *wakālah* contract, either paid agency or unpaid agency, agents become the trustee to manage the task given by the principal. This implication is tallied with the status of *the wakālah* contract as a trust-based contract (*ʿaqd al-āmanah*). Interview findings reveal that different models exist with other involved parties. The adoption of different types of models also requires sharia justification due to the usage of different contracts other than *wakālah*. Different sharia contract leads to different implications. Findings from interviews with the e-wallet operators disclose at least four models of

e-wallet practices in the market. The models are shown in Figure 2. A summary of the differences between the four models is shown in Table 3.

First model

The application (apps) is a virtual sale centre where interested merchants place their goods in the virtual sales center. Users can browse through the application to select their choice of goods. Users can pay directly through online banking via FPX (debit or credit card) or e-wallet. E-wallet payment can only be materialized when the buyer opens a virtual account in the app and puts a certain amount of money into it.

On one side, a merchant opens an account at a virtual point of sale for payment purposes. The merchant offers a merchant discount rate (MDR) to the operator. The operator generates revenue through the MDR. For example, if MDR is 2% of the price of goods sold and the cost of sale is RM100, then the merchant will receive only RM98. Respondents from Provider A confirmed that their operating model is similar to this model, except no MDR is applied to their merchants as the operator absorbs the merchant's charge.

Similarly, our observation of current practice revealed that providers such as Shopee Pay adopt a similar model. They also provide their e-shopping platform for both users and merchants. Payment to the merchants could be made via bank account and user's e-wallet.

Second Model

This app is a direct form of an e-wallet or purse. Interested users can browse the apps to deposit their money in the e-wallet. Payments can be made to registered traders with the operator via the apps. Users can purchase items of interest from merchants through e-wallet only. E-wallet and bank's relationship exists to facilitate funds transfer from the bank into e-wallets. E-wallet payments are made when the buyer opens a virtual account in the application and deposits funds into it. The buyer may purchase the goods or services the application provider provides or purchase from a third party registered with the e-wallet provider. The relationship between operators and merchants exists in two forms; (i) the direct relationship between operators and merchants, and (ii) the operator relationship with the merchant through a third party (TPA).

Provider D affirmed that this model is used in their current operating model. Under this model, Provider D used Kiple Pay as its payment gateway. Although it did not provide payment gateway services, Provider D offered its own products only, and they must be paid using their e-wallet.

This model also applies to prepaid cards such as Provider D. Prepaid cards play a role in keeping users' funds like e-wallets. The model also covers the deposit in telecommunications companies' e-wallets, like XOX E-Wallet and GoPayz.

Third Model

The third model is an e-wallet created by operators to sell their services or goods. Users must deposit their funds to the e-wallet of the operator's apps to enable the purchase. The customer's relationship with his/her bank is created to facilitate money transfer from the customer's bank account to the e-wallet. Our participative observation shows that MyCar, Starbucks, and AEON adopt this model.

Fourth Model

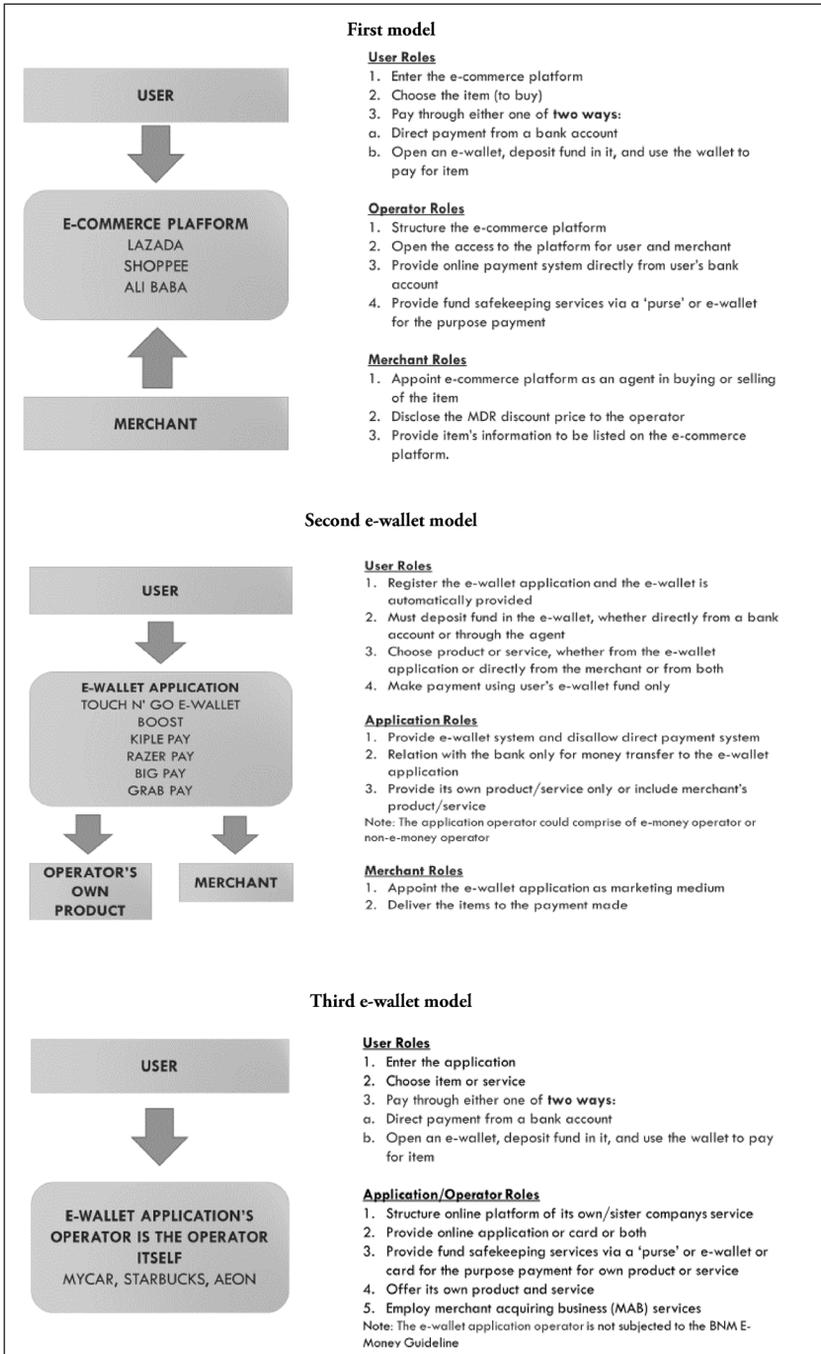
Based on the participative observation, some e-wallets do not hold the value of money on behalf of users. Samsung Pay, for example, uses Magnetic Secure Transaction (MST) technology to encrypt physical cards, such as payment and loyalty cards. The operator does not charge for the technology. This model is widely used, especially in South Korea.

Table 3. Differences between E-Wallet Models

Characteristics		First Model	Second Model	Third Model	Fourth Model
Own products/ Services			√	√	√
Others' products/ Services		√	√		
E-commerce Platforms		√		√	
Payments Method	E-wallet	√	√	√	
	Direct through accounts	√		√	

Source: Based on Interviews and Participative Observations (as of the year 2020)

Figure 2. E-Wallet Models



Source: Based on Interviews and Participative Observations

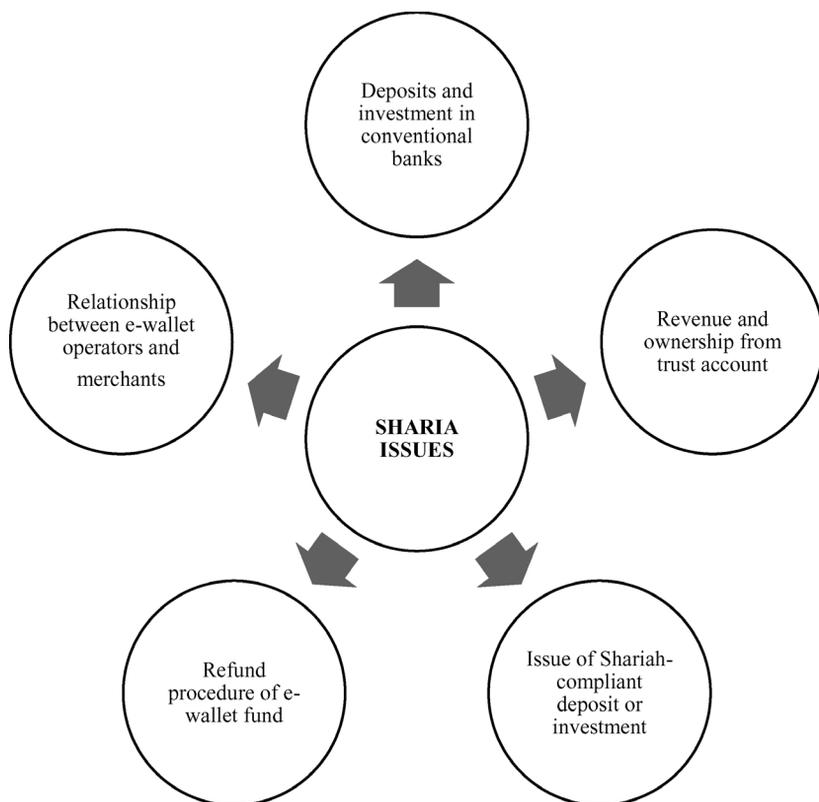
Sharia Issues in E-Wallet

Analyzing e-wallet models and adoption from the sharia view is essential to ensure an organized process of the *fiqh* adaptation (*taking fiqh*) can be established to develop sharia and governance guidelines in e-wallet offerings. *Fiqh* adaptation is the process of developing facts on matters that did not exist in the past, where the basis of judgment can be derived from the early literature. This step is essential to ensure no non-compliance issues concerning its offering, transactions, customer benefits, and income generation to the operators (e-wallet operators). This is an important aspect that should be part of parameters development for e-wallet offerings.

Analysis of confirmation interviews with regulators and a document analysis of the Islamic-based literature have been conducted to achieve the second objective of evaluating the sharia issues in an e-wallet. The analysis looks at the e-wallet models' relationship from two angles; (i) e-wallet user with the operator, and (ii) e-wallet operator with the merchant. This relationship can be viewed from the *wakālah* contract, where users act as principals and operators act as agents. As discussed earlier, users can use an app to make direct payments for purchases using; (i) online banking, (ii) credit card, or (iii) depositing some money into an e-wallet or prepaid. Operators as agents perform the subsequent process to ensure the transaction succeeds.

It is argued that there is no issue arising from the relationship between users and e-wallet operators if direct payment is made from the users to the operators and subsequently to the merchants. However, the status of e-wallets and funds stored therein requires further discussion. This issue is critical when operators offer commercial rewards such as cashback, rewards, discounts, and digital coins. Interviews with experts validated the potential sharia issues in e-wallets. Analysis shows that five issues can arise from e-wallet models. These are related to the status of the funds deposited or invested in a conventional bank account; the operator takes the revenue of the trust account of deposit account, conventional banks can create e-wallets without any need to ensure sharia-compliant deposit or investment, refund procedure of e-wallet fund and the relationship between e-wallet operators and merchants.

Figure 3. Sharia Issues Based on Analysis



The first issue relates to deposits and investments in conventional bank accounts. Under the trust concept, the trustee must exercise his trust under sharia contracts (Accounting and Auditing Organization for Islamic Financial Institution, 2015; Bank Negara Malaysia, 2016b). The operator does not necessarily place users' funds in a sharia-compliant bank. Thus, users' indirect involvement in sharia non-compliant activities through their agents is an issue.

Scholars have different views on the lender's obligation in the trust contract (*qard* and *wakālah*) to ensure the funds are used in a sharia-compliant manner (Naim et al., 2016b). The first group of scholars does not require the lender to know the purpose of using the funds under the concept of *wakālah* or *qard*. The second group requires the lender to know the purpose of using the fund under the concept of *wakālah* or *qard*.

BNM stressed that the subject matter of *the wakālah* contract must be sharia-compliant and the subject matter must be determined earlier by the principal, known and accepted by agents (Bank Negara Malaysia, 2016b). Based on this standard, the users' objectives to have sharia-compliant transactions should be adhered to from an early process of e-wallet registration until the end of the transactions, as long as the account is active.

The second issue relates to the trust account or deposit account's revenue. Findings show that the profit or revenue of the users' funds in a trust account or deposit account is acquired by the operator to balance the trust or deposit account. Since the trust account's funds are included in the operator's operating account, the operator will own payments in case of surplus. The excess in the operator's account has yet to be returned to the trust account as the deposit or investment revenue has offset it. This practice shows that operators benefit from users' funds. In this context, this study observed that there are several restrictions on the practices from the sharia view:

- a. Prohibition of *bay' wa salaf* as prohibited by the prophet Muhammad SAW as a client should grant a *qard* in his e-wallet to the operator to have the operator services (sale of services) with a discount, understood from the hadith *Sunan Abī Dawūd, 3504: The proviso of a loan combined with a sale is not allowable, nor two conditions relating to one transaction, nor profit arising from something which is not in one's charge, nor selling what is not in your possession.*
- b. *Wakālah* on non-sharia-compliant activities is prohibited. In this context, it refers to investing and managing the fund in a non-sharia-compliant manner, forbidden in Islam. The basis of this View can be grasped from *Surah al-Mā'idah: 88*, where Allah instructs Muslims to consume something lawful and reasonable.
- c. *Wakālah* with a party that does not manage the fund in a sharia-compliant manner. This View is also based on *QS al-Mā'idah: 88*.

In addition, there are no precise requirements for an e-wallets trust account or deposit account to be placed in a sharia-compliant account. Without this condition, e-wallet operators may place users' funds at

any Islamic or conventional financial institution. Would a Muslim consumer accept that the funds have been placed in a conventional financial institution? In this case, the current practices may trigger the conditions of *the wakālah* contract.

There are two main issues about the returns of the account (i) revenue from the trust account and (ii) return to e-wallet operators. The BNM Guidelines on E-Money (Bank Negara Malaysia, 2016a) do not allow investment in e-wallet funds. However, the funds can be invested based on specific provisions, and the profits shall be returned to the e-wallet account. The third issue relates to ownership of revenue from the trust account. If the trust account is placed in a conventional financial institution, can the user, in his capacity, ensure that the deposit, investment, and returns comply with sharia rules? The question also arises whether e-wallet operators benefit from e-wallet funds invested in those financial institutions. Is the trust account passive and does not provide returns to e-wallet operators and financial institutions? What is the concept used if there is a profit or return from this trust account? This aspect should be discussed further in the future.

The fourth issue relates to the refund procedure for the e-wallet fund. Funds in the trust account belong to e-wallet users. If the users want to terminate their e-wallet, then the remaining money in the account should be returned to the users. Did this scenario happen, or was the money counted out? Is there any specific procedure and charge (if any) applicable?

The fifth issue relates to e-wallet operators that hold payment money to merchants. Some e-wallet operators hold the payment received from e-wallet users as placement before distributing it to merchants or related parties. This practice leads to the previous issue of ownership of revenue from trust accounts.

Sharia Compliant E-Wallet Parameter: A Proposal

This study identified several sharia issues arise in the current practices of e-wallet. Five sharia main issues have been identified and deliberated. Based on the previous discussion, this study proposes sharia compliant e-wallet parameter. In addition, the study also

provides guideline for Muslim communities in selecting and using the e-wallet facilities. The parameter and guidelines are shown in following subsections.

Parameter for Sharia Compliant E-Wallet

Sharia compliant e-wallet refers to an e-wallet that offers the facilities to the users based on sharia principles. The proposed parameter for sharia compliant e-wallet is established according to five aspects; (i) the involved parties and format, (ii) e-wallet contracts and structure, (iii) fund management (trust, deposits and investment), (iv) purchase transactions, and (v) sharia governance.

There are guidelines proposed for operators as they are the main parties involved in e-wallet transaction together with users. The operator should ensure that users who fulfil legal capacities (have an *al-ahliyyah*) to execute and participate in the contract only can use e-wallet facilities and thus perform purchase transactions. In addition, the operators must ensure that there is no element of coercion and persuasion involve in promotional activities to attract users. Lastly, the operators must ensure there is a mechanism in e-wallet platform that can show the user's consent in placing e-wallet deposits and do transactions.

The operators of the e-wallet should ensure that the contracts used in e-wallet structure are based on sharia contracts. There are several contracts that are proposed in this study for e-wallet arrangement (i) *wakālah bi al-ajr* structure, (ii) *wadi'ah* structure, (iii) *qard* structure and (iv) *wadi'ah* structure ending with *qard*. The operator should clearly disclose types of contracts used and the implications of the contracts to the users.

E-wallet operators should emphasize several aspects related to e-wallet fund management. Firstly, fund management of e-wallet must be performed in accordance with sharia principles, these include in deposit accounts, trust accounts and investment accounts. Secondly, the operators should gain consent from users if they use users' deposit for investment purposes. Thirdly, the operators must also clearly state any fees and charges imposed to the users. Refunds mechanisms should also be disclosed clearly. Under this parameter,

deposits and investment should be performed through Islamic financial institutions.

Next, purchase transactions (goods, services and prices) should be performed according to sharia principles. Firstly, the operators must ensure that goods and services that are offered and displayed in the platforms to users in e-wallet application are sharia compliant and do not involve elements of *ribā'*, *gharar*, *maysir* and unauthorized goods and drinks. Secondly, the process of sales transaction should follow sharia principles including the advertisement and promotion. Lastly, the price should be made known to users, without hidden fees and charges.

Sharia governance is an important organ to ensure e-wallet operations follow the principles of sharia. The providers are suggested to appoint sharia advisors who have a background in sharia knowledge, especially in *Fiqh al-Mu'āmalāt*. It is suggested the sharia governance establishment in the e-wallet platform is monitored by the regulators such as BNM. The approach becomes assurance on e-wallet sharia compliance.

Guidelines for Muslim Communities

E-wallet transactions in general is allowed if these e-wallet operate based on sharia. As users, Muslims should aware and avoid any prohibited activities in their economic transactions. There are several aspects should be considered by the users when they choose e-wallet for their purchase transactions. Three main aspects that should be considered by users when they participate in e-wallet transactions (i) the contracting parties, types of contracts used and format, (ii) e-wallet fund management (trust, deposits and investment) and (iii) purchase transactions.

From the aspect of the contracting parties, types of contracts and format of the contract, users should understand on the contract used between them and providers, as well as the obligations of each party in the contract. In addition, they should understand their rights and conditions that are imposed by the e-wallet providers.

Users should choose e-wallet that comply with sharia principles on fund management practices. Users are ought to choose an e-wallet that

deposits and invest their funds in a sharia compliant manner (funds are deposited and invested in Islamic banking institutions). In practice, e-wallet operators do not necessarily keep user funds in a sharia compliant manner unless it is clearly stated by the e-wallet operator. Users have the right to seek clarification on e-wallet practices from the providers. Lastly, users should ensure that their purchase activities being made following the sharia rulings. These include buying goods and services that are permissible by sharia.

Conclusion

This paper identifies four e-wallet models currently being adopted in the market. In addition, five issues have been articulation from the sharia perspective that covers transactions, customer benefits, fund management and income generation to the operators (e-wallet operators). As e-wallet is a critical enabler in order to increase financial inclusion and are being used widely by large numbers of users, there is an urgency need for sharia scholars to provide a concrete solution to resolve those sharia issues. Once the *fiqh* adaptation (*taking fiqh*) is justified and decided, the conditions of each underpinning contract should be fully honoured.

This paper proposes suitable contracts and structure such as *wakālah*, *ijārah al-khadamāt*, *wadī'ah* and *wadī'ah* ended with *qard* structure with proper fund management to structure an e-wallet as a sharia compliance financial transaction tool. *Wakālah bi al-ajr* refers to an authority given to someone to act on behalf of the principal for a fee (fee-based agency), and *ujrah al-khadamāt* refers to specified services rendered against a fee. In the case of a *wakālah* contract, there will be breaches if the operators cannot fulfill the promises they have made to their users. In addition, *wadī'ah* is a safe keeping contract, where the funds are considered as safekeeping by the providers. This study highlights that in addition to the goods offered that should be sharia-compliant, the regulator should also emphasize and monitor the e-wallet models, contracts used, and other activities the providers perform.

This paper argues the need for sharia compliant e-wallet parameter development based on the previous analysis and discussion. This

paper proposes two main aspects related to sharia compliant e-wallet parameter, including the parameter for e-wallet (involving operators) and guidelines for users in selecting and using the e-wallet platforms. The parameter incorporates several aspects consist of (i) the involved parties and format, (ii) e-wallet contracts and structure, (iii) fund management (trust, deposits and investment), (iv) purchase transactions, and (v) sharia governance. The establishment of the parameter is important to preserve rights of the involved parties in e-wallet transactions. In addition, it will increase confidence and trust of users on e-wallet. This paper suggests future studies to propose specific guidelines and solutions on sharia issues in e-wallets. In addition, other methods such as quantitative study can be used for future research.

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