

PROSPECTS FOR SHARIAH-COMPLIANT E-WALLET: ISSUES AND RECOMMENDATIONS

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ABSTRACT

The purpose of this study is to address the concept of e-wallet from a Shari'ah perspective and its potential Shari'ah concepts, issues, and challenges and to provide relevant recommendations to overcome those issues and challenges. A qualitative research method is adopted in this study to address the concept of e-wallet, Shari'ah contracts, issues, and challenges from the Shari'ah perspective. The collected data of this study is analyzed through an explanatory research approach to fulfill the objectives of this study. The study finds that the Shari'ah compliant e-wallet is realizable from the Shari'ah perspective. Although a *wadi'ah* contract is used for deposit/safekeeping purposes, in this study the concept of *qard* seems to be a better choice for a contract between user and issuer. However, the cashback and rewards are some issues that arise while using the *qard* contract since a borrower (issuer) is not allowed to return additional benefits/amount to the lender. In this regard, the study concludes that the benefits of e-wallets either might come from the merchant or the issuer. If those benefits are given by the issuer out of his generosity, and without any condition from the borrower (user), the offer of such benefits will be permissible, on the other hand, if it comes in return for a condition, that will be impermissible. Moreover, the benefits provided by the merchants seem to be permissible due to sale contracts in that transaction. The study also finds that a Shari'ah compliant e-wallet is required to transfer the funds to a trust account under an Islamic financial institution so that it does not issue an interest for that fund. Additionally, if the fund is allowed to invest, it should be invested in a Shari'ah compliant investment. The results of this study assist the e-wallet providers to consider Shari'ah compliance of the e-wallet. In particular, the findings reveal the possibilities of Shari'ah compliant e-wallet regardless of the issues and challenges it might face. Moreover, it provides room for users who are Islamic fintech enthusiasts. This research presents a deeper insight into *wadi'ah* and *qard* contract to be used as underlying contracts between e-wallet providers and users.

Introduction

The phenomenon of combining finance and technology (fintech) is an emerging industry characterized by rapid growth and significant contributions to the financial sector (Pati et al., 2021; Atiyah et al., 2024). The fintech index has become one of the most widely studied financial topics (Kharrat et al., 2023). The Financial Stability Board (FSB) defines fintech as “technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services” (FSB, 2017). Fintech plays a crucial role in enhancing payment infrastructure and banking operations, boosting productivity while reducing costs (Kharrat et al., 2023; Yudaruddin et al., 2023; Teigland et al., 2018). Following the inclusion of digital currencies in the financial market, electronic wallets (e-wallets) have now made significant inroads into the financial industry by offering ease of payment and additional bonuses. An e-wallet is a mobile application that allows users to store a relatively small amount of money, transferred from their bank account, and use it for payments through the application (Omar et al., 2012). The use of e-wallets is now widespread, especially among technology enthusiasts. They are also well accepted in many stores and business premises, making transactions more convenient for customers. These mobile applications enable users to scan and pay, tap and pay, transfer money, top up mobile credit, make online purchases, and more (Muzaldin et al., 2022; Sentanu et al., 2020). E-wallet issuers promote their services by offering cashback, bonuses, and other additional benefits and privileges to customers (Loke et al., 2022; Alam et al., 2021; Vana et al., 2018; Kai, 2018).

Considering the convenience that an e-wallet offers to users, it is important to study it from a Sharī‘ah perspective to determine whether its use aligns with Islamic precepts. In this regard, Islam not only permits innovation and creativity in technology but also provides guidelines that must be followed. Despite the many advantages of e-wallet for users, issuers, and merchants, several issues remain unresolved from a Sharī‘ah perspective, particularly concerning their operational procedures, including the internal mechanisms for providing rewards and cashback to users (Noor and Yusoff, 2022; Shamsuddin et al., 2020; Zulkefli et al., 2019). A Sharī‘ah-compliant financial service provider should ensure that Sharī‘ah principles are applied to all financial matters. Regarding e-wallets, researchers have examined various Sharī‘ah-related concerns and proposed specific Sharī‘ah contracts to be established between parties (Lamari & Adedokun, 2023; Razali et al., 2021; Ramli et al., 2021; Saleh & Saharudin, 2021). Additionally, current research suggests that e-wallet issuers and users are often reluctant to disclose the contractual agreements between them. Despite the lack of transparency, e-wallets and their associated services remain widely accepted due to technological advancements and the convenience they provide for payments.

Therefore, it is essential for this issue to be rigorously examined through various research efforts, as it may lead Muslim e-wallet users to unknowingly engage, *inter alia*, in *ribā* (interest) and other non-Sharī‘ah compliant activities. Hence, this paper aims to study the concept of e-wallets from a Sharī‘ah perspective, along with their potential principles, issues, and challenges, while also providing recommendations to address these concerns.

Literature Review

The Concept of E-Wallet

The current fintech industry and its various segments are embraced by financial institutions and the general public due to the flexibility and convenience of financial transactions. E-wallets are among the most promising fintech tools, emerging through the rapid evolution and widespread adoption of cashless payments and digital transactions by traders and consumers globally (Shekhar et al., 2020). Several terms are used to refer to e-wallets, including virtual wallet, mobile wallet, and electronic cash (e-cash) (Pham et al., 2021).

According to researchers Nguyen, (2023), Kaur et al., (2020) and Mumtaza et al., (2020), an e-wallet is a digital wallet built into smartphones (including tablets) which enables users to transfer money between accounts and make purchases both online and offline. These smartphone applications serve as an electronic version of a physical wallet, allowing consumers to use stored funds for various transactions. In other words, an e-wallet functions as a deposit or storage medium where users electronically keep their

money and financial information electronically — such as credit cards debit cards, or bank account details—enabling them to perform electronic, online, or physical transactions without the need to re-enter their financial information for each payment.

Historically, electronic wallets or mobile wallets can be traced back to 1977, when Coca-Cola released a limited number of vending machines that allowed customers to make mobile purchases (Humbani & Wiese, 2018; England, 2023). The development of fintech transformed the traditional banking system into a digital, technology-based system through online banking, mobile payments, and PayPal. After the global financial crisis in 2008-2009, financial institutions recognized the need to restructure financial systems to create better models with enhanced security. In 2009, the fintech world was introduced to Bitcoin (Nakamoto, 2008; Narayanan et al., 2016). The advancement of fintech led to the creation of Google Wallet, Apple Pay, Samsung Pay, AliPay, and many other e-wallets (Alam et al., 2021). Regarding the rapid growth of e-wallets, PricewaterhouseCoopers (PWC) in its 2019 report based on a global survey, found that transactions through mobile payments consistently increased from 11% in 2015 to 24% in 2019. The study revealed that the acceptance rate of e-wallets rose in selected countries, including China (86%), Thailand (67%), Vietnam (24%), and the Middle East (20%) in 2019 compared to previous years. Additionally, the study found that the majority of respondents from these selected countries primarily used mobile payments for paying utility bills.

According to researchers Alam et al., (2021), Sentanu et al., (2020), and Abd Razak et al., (2021), there are various rationales and advantages behind consumers' use of e-wallets. Since e-wallets are fast, cost-effective and time-efficient, they fulfill a key consumer need when making payments (Nizam et al., 2019). E-wallets facilitate a range of transactions, from buying groceries to purchasing flight tickets, computers, and valuable items on online shopping platforms (Karim et al., 2020), as well as transferring funds between banks (Jayaseelan, 2017). Moreover, e-wallets reduce transaction costs and processing time by eliminating middlemen and avoiding direct cash exchanges between traders and customers. Additionally, individuals no longer need to carry a physical bank card when shopping, as they can simply use their mobile phones (Pham et al., 2021). The benefits of e-wallets extend beyond users to merchants as well. The quick transfer of payments via e-wallets facilitates the cash conversion cycle, benefiting merchants in managing working capital (Bommer et al., 2022). However, despite these advantages, certain challenges remain for e-wallet users. Some shops may not accept e-wallet transactions, mobile data or Wi-Fi may be unavailable during transactions, and there is a risk of device theft if security measures are inadequate. Additionally, in cases of hacking, user information may be misused (Kagan, 2023).

An e-wallet requires a smartphone or tablet for installation, where the user's information is securely stored. For the protection of e-wallet users, a password is mandatory. The two main components of an e-wallet—software and an information database—store personal details such as name, bank account information, contact number, addresses, credit or debit card details, payment methods, and account balance. E-wallet applications are typically available for download from platforms such as the Apple Store, Google Play, Huawei App Gallery, and Microsoft Store. Users can reload their e-wallets through several methods (Pham et al., 2021), including visiting a shop that provides reload services, transferring money from their bank account via an Automated Teller Machine (ATM), using a bank card (debit or credit) to transfer funds, using the Financial Process Exchange (FPX) for fund transfers, or utilizing a dedicated reload machine for e-wallet services. To ensure transaction security, some e-wallets send a One Time Password (OTP) to the user's registered contact number, while others verify transactions through passwords or biometric authentication, such as fingerprints. Users should be aware that e-wallet availability varies — some businesses may accept a specific e-wallet while others may support different platforms. Therefore, users need to identify which e-wallet has broader coverage for their convenience. Additionally, e-wallets facilitate payments across various services, including grocery stores, utilities, charity donations, parking, tolls, travel tickets, shopping, and more.

In addition, previous studies have examined e-wallets from various perspectives, including consumer behavior (Esawe, 2022; Teng, & Khong, 2021; León, 2021), excessive spending (Aji & Adawiyah, 2022; Lee et al., 2022; Hidajat & Lutfiyah, 2022) and customer satisfaction (Ariffin et al., 2021; Valencia, & Layman, 2021; Yadav & Arora, 2019; Bagla & Sancheti, 2018). Other areas of research include security concerns (Undale et al., 2021; Nachappa and Lathesh, 2018; Salodkar et al., 2015), factors influencing e-wallet adoption (Kınış, and Tanova, 2022; Pham et al., 2021; Kaur et al., 2020; Soodan and Rana, 2020;

Karim et al., 2020; Nizam et al., 2019), ethical and religious implications (Aji et al., 2020; Halaweh, 2013) and legal and operational challenges (Nguyen, 2023; Noor et al., 2021; Octora et al., 2021; Sunaryo & Nuraini, 2020; Selvadurai, 2013).

E-wallet from the Shari'ah Perspective

The Islamic financial system embraces fintech tools just as other financial institutions do. However, the acceptance of fintech in Islamic finance depends on adherence to the principles and guidelines set by Shari'ah. Shari'ah strictly prohibits injustice, interest (*riba*), gambling (*maysir*), uncertainty (*gharar*), and unethical activities. Conversely, it promotes justice, honesty, ethical values, fairness, and cooperation in a righteous manner (Ayub, 2007; ISRA, 2016). Therefore, if a fintech tool aligns with these principles and guidelines, it is welcomed in the Islamic financial system. However, if any of these principles are breached, rectification of such practices becomes necessary. Otherwise, non-compliant actions are deemed prohibited within the Islamic financial framework.

The rules and regulations of the Islamic financial system must be observed in all aspects of e-wallet operations. Transactions must adhere to Shari'ah contracts, with Shari'ah experts overseeing and supervising the e-wallet's internal mechanisms and activities. In other words, a Shari'ah advisor or dedicated unit within the institution must regularly monitor all aspects of the e-wallet, including its operational frameworks, business flows, agreements, profits and losses, rewards and discounts, and other financial matters related to its functionality. Additionally, since an e-wallet holds e-money, the rules of currency exchange (*al-sarf*) apply. This means that the exchange of money in similar types must be of equal value and conducted simultaneously. Furthermore, if e-money is considered *qard* (a loan) to the e-wallet issuer, the same amount must be returned upon request. Any additional amount, gifts, or charges cannot be imposed as conditions in the contract in cases of late payment or other circumstances, except when given voluntarily by the borrower. If the e-wallet is used for purchasing commodities or services, the transaction must comply with the laws governing sale contracts, such as *musawamah* (simple sale), *tawliyah* (sale at cost price), *murabahah* (cost-plus sale), *waq'ah* (discounted price), and *ijarah* (lease) (Ayub, 2007; Saleem, 2013; ISRA, 2016).

Researchers have explored various aspects of e-wallets, particularly their Shari'ah compliance and related concerns. Many have scrutinized the practice of rewards and cashback, highlighting them as unsettled Shari'ah issues in e-wallet transactions. For instance, Zulkefli et al., (2019) proposed a preliminary model for a Shari'ah-compliant e-wallet, while Shamsuddin et al., (2022) suggested several contractual frameworks for e-wallets. Abu Bakar et al., (2020) examined the internal mechanisms and engineering of e-wallets, noting the potential for Shari'ah compliance. Additionally, researchers such as Hamsin et al., (2023), Shamsuddin et al., (2022) and Ramli et al., (2021) have identified various challenges concerning e-wallets from a Shari'ah perspective. Similarly, Noor et al., (2021) highlighted both legal and Shari'ah-related issues affecting e-wallets. Some scholars (Abd Latif & Ahmad 2022; Amira, n.d.; Amin, n.d.; Mirza, n.d.; Alfatakh, n.d.; Mohamad, 2019) have questioned the permissibility of e-wallets under Shari'ah law and discussed the implications of rewards, cashback, and discounts offered by e-wallet issuers. Moreover, the study by Mohd Noh et al., (2022) identified potential instances of *gharar* (uncertainty) in e-wallet practices.

Based on the above discussion, it is evident that many scholars have explored the issues and challenges surrounding e-wallets from various perspectives, yet several concerns remain unresolved. However, a detailed examination of specific contractual frameworks and potential solutions within those contracts has yet to be thoroughly addressed. Therefore, it is crucial to identify applicable contracts and Shari'ah principles to guide e-wallet practices, ensuring that issuers adhere to these guidelines by introducing Shari'ah-compliant e-wallets.

Methodology

This study adopts a qualitative research approach to examine the concept of e-wallets, as well as the Shari'ah-related issues and challenges in ensuring their compliance with Shari'ah law. Given that e-wallets are a modern financial tool, the study's literature is primarily sourced from classical and contemporary books, journals, conference proceedings, online resources, webinars, and resolutions issued by Islamic financial institutions. Additionally, the policy document *Electronic Money*, published by the

Central Bank of Malaysia (Bank Negara Malaysia – BNM), is included in the literature to provide a legal perspective on the subject and to compare its framework with the Sharī'ah contracts applicable to e-wallets. Furthermore, the research extensively examines e-wallet-related websites, issuers' official platforms, and mobile applications to analyze the *modus operandi* of e-wallets, including their functionalities, benefits, and security measures. The researchers aim to collect data from reputable and indexed journals, as well as books written by both classical and contemporary Sharī'ah scholars. This approach informs a comparative analysis between current e-wallet practices and Sharī'ah law. Additionally, the study integrates insights from relevant e-wallet websites to review their policies and guidelines. As a preliminary study based on library research, it explores the possibility of applying two specific contracts and identifying optimal solutions to address existing issues and challenges. Consequently, while this study focuses on foundational knowledge from library research, it provides a basis for future research to explore the practical applications of e-wallet compliance with Sharī'ah principles.

Regarding data analysis, this study adopts an explanatory research approach. This approach assists researchers in addressing the topic comprehensively and in-depth (Cooper & Schindler, 2001; Jonker & Pennink, 2010). In this study, the explanatory research approach is employed to elaborate on the concept of e-wallets, explore their potential Sharī'ah-compliant contracts, and identify essential solutions to the issues and challenges associated with their application in accordance with Sharī'ah principles and guidelines.

Results and Discussion

The Function of an E-Wallet

It is understood from the earlier sections that four key parties are involved in e-wallet operations:

1. E-wallet issuer – The entity that develops the e-wallet application and provides various financial services. The issuer is responsible for managing user funds and processing payments to merchants as needed, playing a crucial role in facilitating e-wallet transactions.
2. Users or Consumers – individuals who use e-wallets for regular payments and transactions, such as purchasing food, paying bills, and booking tickets. Users reload their e-wallet accounts through various methods discussed in the literature and must ensure their funds are protected from misuse.
3. Banks – Financial institutions that collect and safeguard user funds. Banks ensure that these funds remain accessible for transactions whenever required.
4. Vendors, Merchants, and Entrepreneurs – Businesses that accept e-wallet payments for their goods and services. E-wallets adoption by vendors enhances convenience for users, making digital payments more seamless.

Figure 1 illustrates the process by which users reload their e-wallets using payment methods permitted by the e-wallet issuer. The reloaded funds are then transferred to a trust account held by a bank associated with the e-wallet issuer. These funds remain untouched for any other purposes, except when permitted by the central bank. As a result, the funds are securely maintained and always available for users to conduct transactions via their e-wallet. Users can make purchases from vendors listed in the e-wallet app by scanning a QR code or entering the vendor's account number. The transaction is completed in a few simple steps, and once payment is confirmed, the merchant promptly receives the funds.

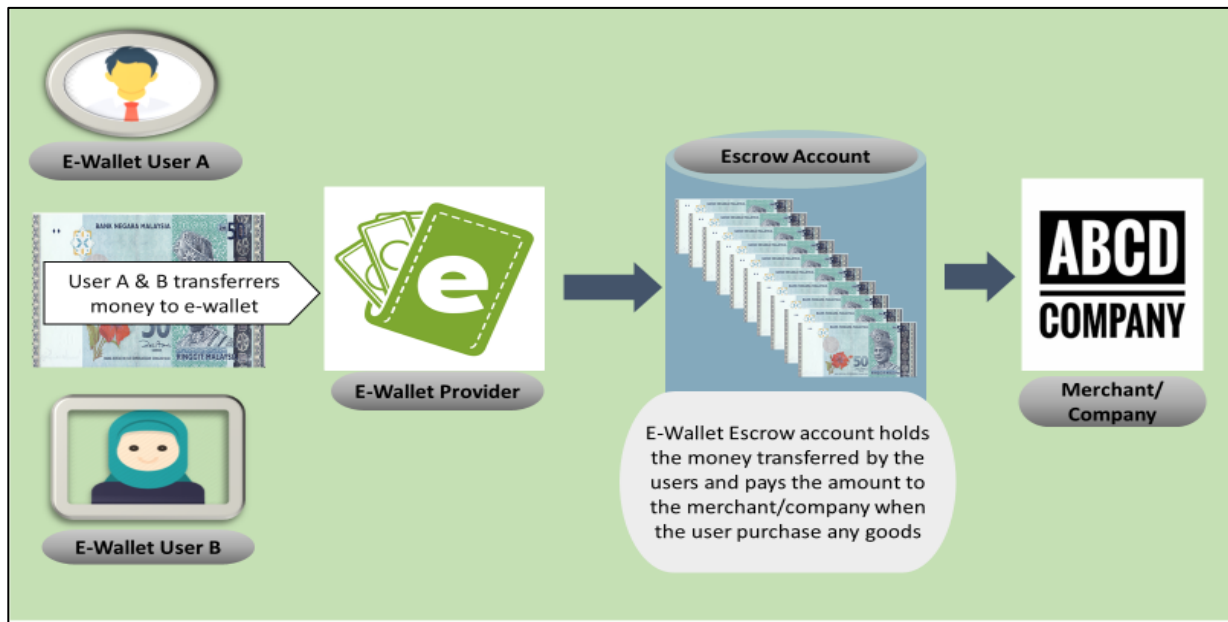


Figure 1. Basic functions of e-wallet within four parties

Based on the above figure, several key matters related to the Sharī'ah perspective need to be discussed, including:

- (a) The contractual agreement between the e-wallet issuer and its users;
- (b) The contractual agreement between the e-wallet issuer and its merchants;
- (c) The use of a trust account for the safekeeping of funds; and
- (d) The offering of cashback and rewards by e-wallet issuers.

To examine the contractual agreements among various parties, it is essential to provide an overview of Sharī'ah-compliant contracts. This research aims to highlight key aspects of Sharī'ah contracts, particularly *wadī'ah* (safekeeping) and *qard* (loan). Accordingly, the following section will further discuss contracts that are suitable for the issuer and its users in a Sharī'ah-compliant e-wallet facility. However, due to the scope limitations of this research, the contractual agreement between the issuer and the merchant is not included.

Sharī'ah Contracts For E-Wallet

The application of Sharī'ah contracts and principles is essential in determining whether a financial transaction is Sharī'ah-compliant. The incorporation of Sharī'ah principles and contracts distinguishes Islamic financial transactions from conventional ones, thereby ensuring compliance (Todorof, 2018; Muryanto, 2022). Consequently, a valid Sharī'ah contract is necessary for an agreement to be considered compliant. Given the nature of e-wallet transactions, certain Sharī'ah contracts, such as *wadī'ah* (safekeeping) and *qard* (loan), can be applied. This section aims to propose two contractual frameworks for e-wallet issuers and users while examining the potential benefits, issues, and challenges associated with their implementation.

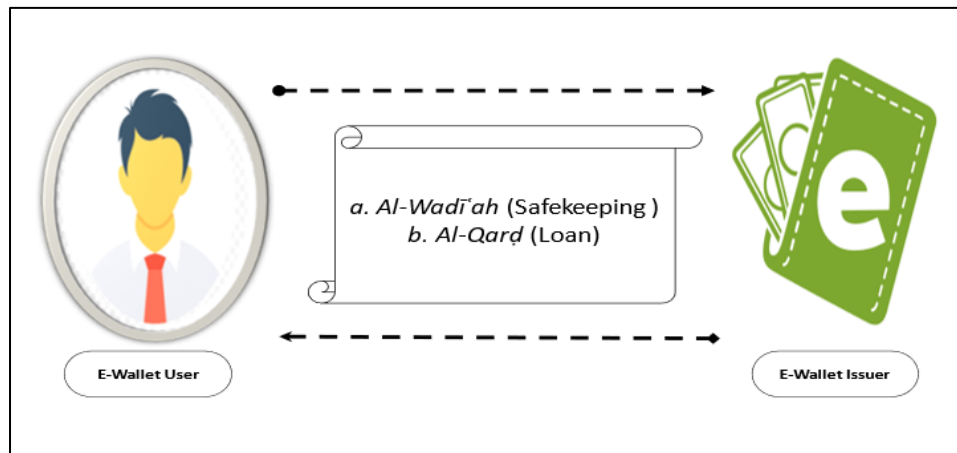


Figure 2. The Potential Shari'ah contract between E-Wallet Issuers and Users

(a) *Wadī'ah* (Safekeeping)

Wadī'ah is a type of contract in which a person entrusts his goods to another party or grants them authority to safeguard those goods, based on trust or voluntary guarantee from the custodian (Ibn 'Ābidīn, 2003; al-Qarāfī, 1994; al-Buhūtī, 1983). Evidence from the *Qur'ān*, *ḥadīth*, and *ijmā'* (consensus of scholars) establishes the permissibility of *wadī'ah* in Shari'ah (al-Zuhailī, 2001; ISRA, 2016). According to the majority of scholars, including the Mālikī, Shafī'ī, and Ḥanbalī schools, *wadī'ah* consists of four essential pillars which are (i) the depositor, (ii) the custodian, (iii) the goods or the property, and (iv) offer and acceptance (al-Zuhailī, 2001; Saleem, 2013). Hammād (1993) summarizes several characteristics of *wadī'ah*, noting that classical scholars considered it as form of agency contract. These characteristics include firstly the non-binding nature as the *wadī'ah* contract is non-binding, allowing any contracting party to terminate it at any time. Secondly, the custodian's liability, since the contract is based on trust, the custodian is not liable for loss or damage to the goods unless negligence, misconduct, or a breach of specific terms (*mukhālafah al-shurūṭ*) occurs. Thirdly, benevolent nature, as *wadī'ah* is classified as a *tabarru'* (benevolent) contract, emphasizing mutual assistance, goodwill, and the alleviation of hardships. As such, the depositor is not required to compensate the custodian for safekeeping services. Lastly, transition to a guarantee, while *wadī'ah* is based on trust, if the custodian utilizes or mixes the entrusted assets with others, it transforms into a form of *ḍamān* (guarantee), making them responsible for its safekeeping.

Regarding the use of *wadī'ah* for financial purposes, the BNM in 2016 outlined its stance in the Policy Document on *Wadī'ah* which states that: -

“16.1 A *wadī'ah* contract shall be construed as a *qard* contract and shall be governed by the principles of *qard* if—

- (a) the *wadī'ah* asset is a fungible asset (*mal mithli*) such as money; and
- (b) the custodian is allowed to utilise the asset.”

Based on the above discussion, this study aims to apply the *wadī'ah* contract to e-wallet practices, particularly in the contractual agreement between users and issuers. The findings indicate that the concept of *wadī'ah* can be implemented in e-wallets, provided certain conditions are met—namely, when users reload their e-wallets, and the funds are placed in a trust account under the e-wallet issuer's name. In arrangement, users deposit their e-money with the issuer as a *wadī'ah* fund, without incurring any fees, since *wadī'ah* is categorized as a voluntary safekeeping arrangement. Moreover, *wadī'ah* suitable for e-wallet transactions because, in principle, the e-wallet issuer is not permitted to utilize the deposited funds. This restriction ensures that the issuer does not exercise any discretionary control over the funds, reinforcing its *wadī'ah* compliance. Hence, as long as the e-wallet issuer refrains from utilizing the funds—whether permitted or not—the *wadī'ah* contract remains a valid basis for establishing Shari'ah-

compliant e-wallet system. However, if issuer is authorized to invest or use the funds from the trust account for specific investment portfolios, the *wadī'ah* arrangement transitions into a *qard* (loan) contract, as outlined in Clause 16.1 of *Wadī'ah-Policy Document* issued by the BNM.

(b) *Qard* (Loan)

Qard (loan) is a voluntary contract in which a person permits his money or assets to be used by another party. The recipient must then repay the loan either with an equivalent item or the exact borrowed assets itself (al-Qarāfi, 1994). The recipient has the full usage rights over the assets or funds provided through *qard*. However, if the borrowed item is an asset that can be used without depleting or consuming it, it is classified as *i'ārah* (borrowing) rather than *qard*. In *qard*, the recipient is required to return the borrowed money or asset in its original amount or equivalent value without any additional payments or quantities. If the borrowed item is fungible, the repayment must be made in an identical form. Otherwise, the borrower must reimburse its assessed value (Wizārah al-Awqāf wa al-Shu'ūn al-Islāmiyyah, 1989). Furthermore, the borrower is not permitted to provide any additional payments such as gifts, bonuses, or extra compensation—to the lender. In this regard, BNM (2018, 6) states that: -

“14.5 The borrower under a *qard* contract must not grant *hibah* to the lender that is conditional to the *qard* contract, in the form of cash, in kind or benefit”.

However, the gift or bonus may come from the borrower voluntarily, without any request or coercion from the lender. In this regard, BNM (2018, 6) highlights that: -

“14.6 The granting of *hibah* to the lender that is solely based on the borrower’s discretion is allowed.

14.7 The borrower must not disclose, promote or market the indicative rate or prospective granting of *hibah*.”

Based on the above discussion, a *qard* (loan) contract can be applied to the agreement between the e-wallet user and issuer, as previously mentioned. A *wadī'ah* (safekeeping) contract transitions into *qard* either when the custodian combines the funds or utilizes them. In this case, the e-wallet issuer collects funds from multiple users and stores them in a single account, resulting in the commingling of users’ funds. Therefore, the *qard* contract is well-suited to govern the financial relationship between the user and issuer. Additionally, the e-wallet issuer carries the responsibility of maintaining and ensuring that the funds remain available for users, similar to a borrower who must return a loan upon request. At this stage, there is no inherent issue in applying a *qard* contract to the agreement between the issuer and user within the e-wallet framework. However, concerns arise cashback and rewards are offered by the e-wallet issuer to users upon reloading, purchasing, or performing other transactions. Such situations resemble a loan that yields benefits for the lender (*qardun jarra naf'an*) (al-Suyūṭī, 2004). If these benefits are stipulated as a condition between the borrower (issuer) and lender (user), they may be classified as *ribā* (interest), which is prohibited in Shari'ah. Thus, in the context of e-wallets, the issuer effectively a borrower under a *qard* contract, and if the cashback, rewards, or bonuses provided to users are considered as *ribā*, they would constitute a Shari'ah non-compliant practice. Consequently, such incentives must be avoided to ensure the transaction remains in compliance with Shari'ah principles.

Shariah Compliant Issues and the Way Forward

Before discussing cashback and rewards, it is important to first examine how funds managed by the issuer are handled. Typically, these funds are kept in a trust account with a bank. The BNM suggests diversifying the placement of funds across multiple banks to mitigate the risk, stating: “16.6 An EMI is recommended to spread out the placement of the funds received in exchange of e-money issued, in bank accounts maintained at several banking institutions to mitigate risk exposure to any single banking institution” (BNM, 2022, 20). Thus, the issuer must distribute the funds received from users across multiple banks rather than keeping them in a single institution to minimize risk. Furthermore, the funds in trust accounts remain untouched by the e-wallet issuer, as certain restrictions imposed by BNM ensure that they remain available and secure. In this regard, BNM states that: -

“16.2 A non-bank EMI shall deposit the funds collected in exchange of e-money issued in a trust account with a banking institution after receiving it from a customer in accordance with the following requirements–

- (a) the trust account shall be established in accordance with the Trustee Act 1949;
- (b) the funds can only be used for the following–
 - i. refund to customers;
 - ii. payment to merchants for settlement of transaction conducted by the customer, including for repayment of any advance settlement by relevant intermediaries (e.g. payment system operator, acquirer) involved in making the payment to merchants; or
 - iii. payment to another e-money account or bank account arising from a credit transfer transaction conducted by the customer”.

Based on the above guidelines, an e-wallet issuer is required to channel user funds into a trust account under a banking institution. These funds cannot be utilized except for specific purposes, such as refunding the user, facilitating payments upon purchases, or transferring funds to another account, either an e-wallet or a bank account. It is important to distinguish how these funds are handled either for users themselves or for investment purposes. As for the former, the funds deposited by are intended for future transactions, and thus must remain available at all times. The latter, on the other hand, BNM is hesitant to allow e-wallet issuers to invest these funds, as they must be readily available for users. Additionally, the funds must remain secure and avoid risks that could compromise their availability. However, BNM permits the use of funds for investment purposes under specific conditions, restricting investments to entities with lower risk exposure. This directive is outlined in Clause 16: 2 of the *Policy Document* which states: -

“(c) the funds can only be invested in high quality liquid ringgit assets, which are limited to–

- i. deposits placed with banking institutions;
- ii. debt securities issued or guaranteed by the Federal Government or the Bank;
- iii. Cagamas debt securities; and
- iv. other instruments as may be specified by the Bank;” (BNM,2022,19-20)”.

Given the issuer’s responsibility to users and their critical role in protecting funds, the investment of these funds in other financial institutions is highly constrained and not particularly encouraged. Moreover, BNM also provides specific guidance regarding revenue generated from such investments. It states: “any revenue earned from the investment of the funds in the trust account can only be used for activities specified under paragraph 16.2 (b) unless the funds are in excess of the total outstanding e-money liabilities” (BNM, 2022, 19-20). Accordingly, revenue from investments is first allocated to the users’ fund and used for customer-related purposes. In cases where the revenue exceeds total outstanding e-money liabilities, the issuer has discretion over utilization. Regarding trust account maintenance, issuers are permitted to use funds only if their liabilities toward users remain fully covered. The *Policy Document* of BNM further states: “payment for any costs, charges, and expenses incurred in connection with the administration of the trust account can be made from the trust account only if the balance in the trust account after deduction of the cost, charges, and expenses is sufficient to cover all outstanding e-money liabilities” (BNM, 2022, 19-20).

Based on the above discussion on the concept of *qard*, and *wadī‘ah*, as well as the guidelines set by BNM, several Shari‘ah-related issues arise in the adoption of these concepts and guidelines with a Shari‘ah-compliant e-wallet framework. The researchers aim to examine these concerns concisely and propose solutions to address the associated issues and challenges, as follows:

(a) Relating the *qard* contract to the Policy Document of BNM (2022), a borrower in a loan contract is typically allowed to use the funds at their discretion. Consequently, an e-wallet issuer would ordinarily be expected to utilize the funds as needed. However, the policy document imposes restrictions on the issuer's access to these funds, which diverges from the conventional nature of *qard* in financial transactions. Thus, the *qard* (loan) contract is not completely applicable to the agreement between the issuer and user, as the funds are not entirely under the issuer's control for discretionary use. Unlike a typical *qard* contract, where the borrower has full authority over the loaned amount, the e-wallet issuer is restricted from using the funds freely (Ibn 'Ābidīn, 2003; al-Qarāfī, 1994; al-Anṣārī, n.d.; Ibn Muflīḥ, 2003). Nevertheless, the *qard* concept remains relevant due to several factors, including the user's consent to deposit their money with the user, the availability of funds for users when needed, without any safeguarding charges, the issuer's obligation to return the funds or make payments on behalf of users without imposing extra fees. However, certain exceptions may apply to the *qard* concept in e-wallet transactions, given that the issuer—who functions as the borrower—is restricted from utilizing the funds as they wish due to regulatory constraints imposed by BNM.

(b) In principle, funds held in a trust account are not permitted to be utilized by the issuer. However, if an exception is granted by the relevant authority, the trustee may be allowed to do so. In the context of e-wallets, the issuer is generally discouraged from using these funds for investment or any other purpose, except as explicitly permitted by the central bank. Under such circumstances, a Shari'ah-compliant e-wallet issuer may invest the funds in Shari'ah-compliant investments, provided that the remaining balance is sufficient to meet users' needs and that any profits earned from the investment align with the principles of *qard* (loan). If the trust account is invested in Shari'ah-compliant businesses and generates profits, there would be no issue in channelling those profits back into the trust account for the benefit of users. In this regard, Bank Negara Malaysia (BNM) recommends distributing any earned profit to the fund and states: "any revenue earned from the investment of the funds in the trust account may only be used for activities specified under paragraph 16.2(b) unless the funds are in excess of the total outstanding e-money liabilities" (BNM, 2022, 19).

(c) Considering the characteristics of a trust account that holds e-money deposited by users, there is a possibility that the account may generate interest. If interest is earned, adopting such a practice in an e-wallet would be non-compliant with Shari'ah principles, as interest is strictly prohibited in Islam. Therefore, the distribution of such interest among users would not be permissible. Conversely, if the trust account does not accrue interest from the bank, there would be no Shari'ah issue with the issuer using the account to safeguard funds collected from users. Furthermore, if the issuer wishes to offer additional benefits—such as incentives provided by merchants, issuers, or third parties to promote their business and services—such benefits would generally not pose a Shari'ah concern, provided they are granted voluntarily and are not subject to any contractual conditions between the user and issuer.

(d) Shari'ah scholars recognize certain allowances for benefits received by a lender, although there are differing opinions on the matter. According to scholars, benefits provided by a borrower without any stipulation from the lender can occur in several scenarios. One such scenario is when the borrower voluntarily offers additional benefits while repaying the debt. Scholars generally agree that such voluntary benefits are permissible, based on the practice of the Prophet (PBUH) and his encouragement of *qard* (loan) repayment in a generous manner (Ibn 'Ābidīn, 2003; al-Dimyātī, 1995). A ḥadīth narrated by Jābir Bin 'Abdullāh that "the Apostle of Allah (PBUH) owed me a debt; he paid me back and made an addition (of this)" (Muslim, 2015). In another ḥadīth, the Prophet (PBUH) encourages his companions to pay in a greater manner while paying his own debt, he says: "... Give him, for the best amongst the people is he who repays his debts in the most handsome manner" (al-Bukhārī, 2015). However, scholars debate situations in which benefits are given before repayment, particularly when intended to extend the debt tenure, when provided due to an existing loan, or when the borrower seeks an additional loan from the same lender. According to scholarly consensus, offering such benefits in these contexts is not permitted.

However, if these benefits arise from a long-standing tradition or customary practice between the borrower and lender—established prior to the loan agreement—they may be permissible for the borrower to offer (Ibn Juzai, 2013; Ibn Abdul Barr, 2002; Niẓām, 2000; al-Buhūtī, 2000). In this regard, a ḥadīth narrated by Yaḥyā bin Abū Ishāq Al-Hunā'ī, "the Messenger of Allah (PBUH) said: 'If anyone of you borrow something then he gives (the lender) a gift or gives him a ride on his riding-beast, he should not

accept the gift or the ride, unless they used to treat each other in that manner beforehand” (Ibn Mājah, 1997).

Based on the above discussion, if cashback and rewards are offered to users voluntarily by issuers within *qard* (loan) —without any stipulated conditions from users—such incentives may not lead to Shari‘ah compliance concerns. Additionally, since the issuer does not have full access to the funds, the contract does not entirely align with the traditional nature of *qard*. Therefore, offering cashback and rewards might not constitute *qard jarra naf‘an* (a loan that generates benefits for the lender). This is because the issuer is not granting such benefits to users as a condition of the loan but rather providing them voluntarily. Furthermore, these benefits may originate from merchants and other service providers as gifts to both existing and potential customers. Since such incentives do not fall under *qard jarra naf‘an*, they are permissible. It is important to note that merchants and service providers are allowed to offer discounts, gifts, and promotional benefits to their customers, as their agreements with users typically fall under sale contracts, rather than *qard* contracts. In sale contracts, contracting parties are permitted to negotiate business terms, including auxiliary benefits.

As mentioned earlier, cashback and rewards in e-wallets may come from merchants, issuers, or third parties. These benefits are not provided based on a contractual condition between the user and issuer; rather, they are voluntary gifts from the issuer or merchant. The absence of any stipulated condition between the issuer and user validates the offering of such benefits, regardless of whether they originate from the issuer, merchant, or a third party. Regarding issuers—who function as borrowers—they are permitted to demonstrate generosity when repaying users, who act as lenders, as encouraged by *hadīth*. A *hadīth* states: “The best amongst you is the one who pays the rights of others generously” (al-Bukhārī, 2015). Thus, issuers may voluntarily offer benefits to users without any Shari‘ah concerns. With respect to benefits provided by merchants, it was previously noted that sellers and buyers may negotiate the terms of a sale and associated benefits, provided the transaction does not involve *ribā* (interest), *gharar* (uncertainty), *maisir* (gambling), or any other unethical elements. Therefore, receiving such offers from merchants in an e-wallet context does not present a compliance issue. However, BNM strictly prohibits issuers from providing monetary benefits to users, the *Policy Document* states: “26.1 An EMI shall not—(c) extend credit to the customer or any other person, or pay interest, profit or any other form of returns on the e-money balances, that would add to the monetary value of the e-money” (BNM, 2022, 37). Consequently, benefits must take alternative forms, such as “buy one, get one free” offers or vouchers for future purchases. These types of benefits—commonly provided by e-wallet issuers—do not increase the monetary balance in users’ e-wallet accounts, ensuring compliance with BNM regulations.

Figure 3 illustrates the key issues that the researchers aim to address in this study. It provides explanations from a Shari‘ah perspective, guiding e-wallet issuers in establishing a Shari‘ah-compliant e-wallet framework.

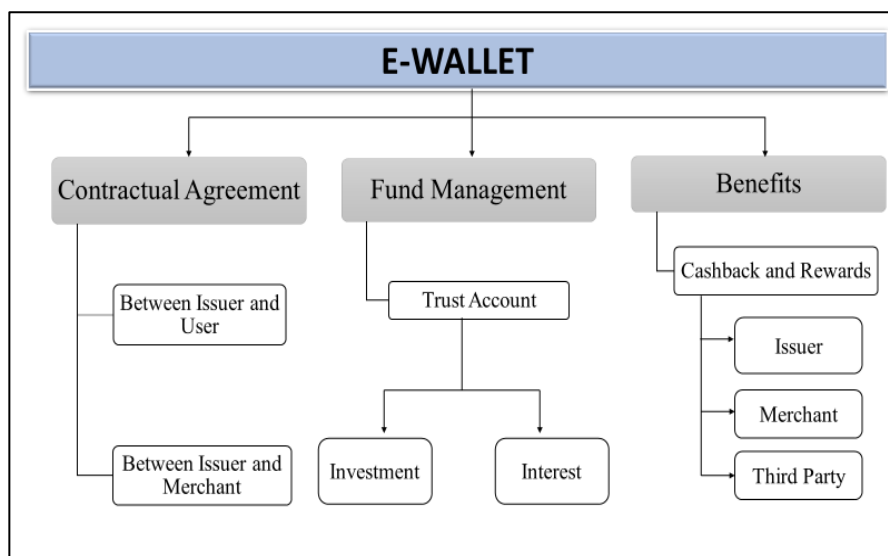


Figure 3. Shari‘ah issues and challenges in e-wallet

Conclusion

The rise of financial technology (fintech) has revolutionized financial institutions, driving the digitalization of financial services and facilities. Islamic financial institutions have also embraced fintech, integrating it into their financial systems to meet the needs and demands of customers, investors, and fintech enthusiasts. However, ensuring Shari'ah compliance in financial products and services is imperative. Providers of Shari'ah-compliant financial services must adhere strictly to the guidelines and resolutions set by Shari'ah scholars and Islamic financial institutions, as non-compliant activities are not tolerated in the Islamic financial system. Despite the widespread adoption of e-wallet applications, their compliance with Shari'ah principles requires further justification. While the Shari'ah framework for e-wallet facilities has been studied over the years, several unresolved issues remain and require extensive deliberation.

This study finds that a Shari'ah-compliant e-wallet is achievable, provided its mechanism aligns with Shari'ah principles and guidelines. Since the objective of this research is to identify suitable Shari'ah contracts, potential issues, and their resolutions, the study focuses specifically on the contract between the issuer and user, as well as the issue of cashback and rewards. Among the various Shari'ah contracts, *wadi'ah* and *qard* have been selected for analysis. However, since *wadi'ah* typically does not permit the borrower to utilize the funds, the *qard* contract appears to be a more suitable alternative. The *qard* contract has distinct rules and regulations governing both borrower and lender—in this case, the issuer and user. Generally, a borrower is granted full access to the borrowed funds for discretionary use and is required to return the exact amount to the lender upon request. However, in e-wallet applications, regulatory authorities impose strict limitations on fund usage to ensure the safety and availability of user funds. As a result, the *qard* concept is not fully realized in the sense of granting unrestricted access to the issuer. Despite these limitations, the *qard* concept remains a suitable framework for e-wallet transactions between users and issuers, considering the nature and functionality of e-wallets.

Regarding the issue of cashback and rewards in e-wallets, the *qard* contract raises concerns related to *riba*, as a borrower is not obligated to repay a loan with added benefits. Based on the findings, two scenarios may arise in this context: (1) benefits provided by issuers and (2) benefits offered by merchants who provide services through the e-wallet platform. For the first scenario, issuers are neither required nor permitted to grant cashback and rewards to users, as doing so is classified as *riba*, which is prohibited in Islam. However, an exception applies if issuers voluntarily provide cashback or rewards without any conditions imposed by users. In this case, such benefits are considered permissible as they stem from the issuer's generosity. Regarding the second scenario, when benefits originate from merchants, the contract between merchants and users is categorized as a sale contract, which allows discounts, gifts, and other incentives, provided they comply with Shari'ah principles. Therefore, these benefits are permissible and do not present any Shari'ah compliance issues.

Regarding fund management in a Shari'ah-compliant e-wallet, if issuers are allowed to invest funds, they must ensure that investments align with Shari'ah principles. Any revenue generated from such investments may be channeled into the trust account or allocated for other purposes, provided the trust account maintains sufficient funds to meet users' needs. Additionally, Shari'ah-compliant e-wallet issuers should collaborate with Islamic financial institutions that offer trust account facilities free from interest-bearing contracts. This study is limited to analyzing the contract between users and issuers, as well as the implications of cashback and rewards offered by issuers. It primarily focuses on the *wadi'ah* and *qard* contracts. Future research may expand its scope to include the contract between merchants and issuers and further explore practical considerations in applying Shari'ah principles to e-wallet services, such as facilitating Shari'ah-compliant transactions and business ventures through e-wallet platforms.

References

- Abd Latif, A. A., & Ahmad, S. (2022). Interest's controversy in E-Wallet application (Kontroversi manfaat dalam perisian aplikasi E-Wallet). *BITARA International Journal of Civilizational Studies and Human Sciences*, 5(2), 51-65.
- Abd Razak, S. N., Ghazali, N. A., Shakarudin, N. A., & Zalaruddin, M. N. I. (2021). Influencing factors to E-Wallet adoption among generation Z. In the *Proceedings of the 8th International Conference*

- on *Public Policy and Social Science (ICOPS) 2021*, UiTM Seremban Campus, Negeri Sembilan, (pp. 89-93).
- Abu Bakar, N., Rosbi, S., & Uzaki, K. (2020). E-Wallet transactional framework for digital economy: A perspective from islamic financial engineering. *International Journal of Management Science and Business Administration*, 6(3), 50-57.
- Aji, H. M., & Adawiyah, W. R. (2022). How e-wallets encourage excessive spending behavior among young adult consumers?. *Journal of Asia Business Studies*, 16(6), 868-884. <http://dx.doi.org/10.1108/JABS-01-2021-0025>
- Aji, H. M., Berakon, I., & Riza, A. F. (2020). The effects of subjective norm and knowledge about riba on intention to use e-money in Indonesia. *Journal of Islamic Marketing*, 12(6), 1180-1196.
- Alam, M. M., Awawdeh, A. E., & Muhamad, A. I. B. (2021). Using e-wallet for business process development: Challenges and prospects in Malaysia. *Business Process Management Journal*, 27(4), 1142-1162.
- Al-Anṣārī, Z. M. (n.d.). *Asnā al-maṭālib fī sharḥ rawḍ al-ṭālib*. Dār al-Kitāb al-Islāmī.
- Al-Buhūtī, M. I. Y. (1983). *Kashshāf al-qinā' 'an maṭn al-iqnā'*. 'Ālam al-Kutub.
- Al-Buhūtī, M. I. Y. (2000). *Sharḥ munthaā al-irādāt*. Mu'assasah al-Risālah Nāshirūn.
- Al-Bukhārī, M. I. I. (2015). *Ṣaḥīḥ al-Bukhārī*. Dār al-Ḥaḍārah.
- Al-Dimyātī, U. M. S. (1995). *Ḥāshiyatu i'ānatuṭṭālibīn*. Darul Kutub al-'Ilmiyyah.
- Alfatakh, A. (2019). "E-Wallets: Did you forget us again?". Islamicbankers. <https://islamicbankers.me/2019/01/15/e-wallets-did-you-forget-us-again/#comments>
- Al-Qarāfī, S. A. (1994). *Al-Dhakhīrah*. Dār al-Gharb.
- Al-Suyūṭī, J. A. B. (2004). *Al-Jāmi' aṣ-ṣaghīr fī aḥādīthil bashīr an-nadhīr*. Dārul kutub al-'Ilmiyyah.
- Al-Zuhāilī, W. (2001). *Financial transactions in Islamic jurisprudence*. Dār al-Fikr.
- Amira, N. (n.d.). "Shariah concerns regarding ewallet". Assidq. <https://www.assidq.com/blogDetail/320>
- Ariffin, S. K., Abd Rahman, M. F. R., Muhammad, A. M., & Zhang, Q. (2021). Understanding the consumer's intention to use the e-wallet services. *Spanish Journal of Marketing-ESIC*, 25(3), 446-461.
- Atiyah, G. A., Abdul Manap, N., Ibrahim, A. I., & Rahman, A. (2024). Legitimacy of smart contracts from the perspective of Islamic Law: A Case Study of Blockchain Transactions. *Al-ISTINBATH Jurnal Hukum Islam*, 9(1), 155–155. <https://doi.org/10.29240/jhi.v9i1.8726>
- Ayub, M. (2007). *Understanding Islamic finance*. John Wiley & Sons Ltd.
- Bagla, R. K., & Sancheti, V. (2018). Gaps in customer satisfaction with digital wallets: Challenge for sustainability. *Journal of Management Development*, 37(6), 442-451.
- Bommer, W. H., Rana, S., & Milevoj, E. (2022). A meta-analysis of eWallet adoption using the UTAUT model. *International Journal of Bank Marketing*, 40(4), 791-819. <https://doi.org/10.1108/IJBM-06-2021-0258>
- Cooper, D. R., & Schindler, P. S. (2001). *Business research methods*. New York, USA: McGraw-Hill.
- England, J. (2023, April). "Unfolding e-wallets and the evolution of the payments sector". Fintechmagazine. <https://fintechmagazine.com/articles/unfolding-e-wallets-and-the-evolution-of-the-payments-sector>
- Esawe, A. T. (2022). Understanding mobile e-wallet consumers' intentions and user behavior. *Spanish Journal of Marketing-ESIC*, 26(3), 363-384. <http://dx.doi.org/10.1108/SJME-05-2022-0105>
- Financial Stability Board (FSB). (2017). "Financial stability implications from FinTech". Basel. <https://www.fsb.org/2017/06/financial-stability-implications-from-fintech/>
- Halaweh, M. (2013). Ethical concerns raised by using NFC technology for mobile payments: An empirical study. *Journal of Information Technology Management*, 24(4), 1-11.
- Ḥammād, N. (1993). *Aqd al-wadī'ah fī al-sharī'ah al-Islāmiyyah*. Dimashq: Dār al-Qalam.
- Hamsin, M. K., Halim, A., Anggriawan, R., & Lutfiani, H. (2023). Sharia e-wallet: The issue of sharia compliance and data protection. *Al-Manahij: Jurnal Kajian Hukum Islam*, 17(1), 53-66.
- Hidajat, T., & Lutfiyah, N. (2022). E-wallet: Make users more consumptive?. *ECONBANK: Journal of Economics and Banking*, 4(1), 15-22.
- Humbani, M., & Wiese, M. (2018). A cashless society for all: Determining consumers' readiness to adopt mobile payment services. *Journal of African Business*, 19(3), 409-429.
- Ibn Abdul Barr, Y. B. A. (2002). *Al-Kāfī fī fiqh Ahlil Madīnah al-Mālikī* (2 ed.). Darul Kutub al-'Ilmiyyah.

- Ibn 'Ābidīn, M. (2003). *Hāshiyah Ibn 'Ābidīn - Radd al-Muhtār 'alā al-Durri al-Mukhtār*. Dār 'Ālam al-Kutub.
- Ibn Juzai, M. I. A. (2013). *Al-Qawānīn al-fiqhiyyah*. Dār Ibn Hajm.
- Ibn Mājah, M. B. Y. (1997). *Sunan Ibn Mājah*. Maktabah al-Ma'ārif.
- Ibn Muflīh, I. I. M. (2003). *Al-Mubdi' Sharh al-Muqni'*. Dār 'Ālam al-Kutub.
- International Shariah Research Academy for Islamic Finance (ISRA). (2016). *Islamic Financial System: Principles and Operations* (2nd ed.). ISRA.
- Jayaseelan, R. (2017, July). "The e-wallet race hots up". The Star. <https://www.thestar.com.my/business/business-news/2017/07/29/the-e-wallet-race-hots-up/>
- Jonker, J., & Pennink, B. (2010). *The essence of research methodology: A concise guide for master and PhD students in management science*. Berlin, Germany: Springer Science & Business Media.
- Kagan, J. (2023). "What is a digital wallet?". Investopedia. <https://www.investopedia.com/terms/d/digital-wallet.asp>
- Kai. (2018, December). "Best e-wallet in Malaysia: The complete guide". Techrakyat. <https://techrakyat.com/reviews/best-e-wallet-malaysia/>
- Karim, M. W., Haque, A., Ulfy, M. A., Hossain, M. A., & Anis, M. Z. (2020). Factors influencing the use of E-wallet as a payment method among Malaysian young adults. *Journal of International Business and Management*, 3(2), 1-12.
- Kaur, P., Dhir, A., Bodhi, R., Singh, T., & Almotairi, M. (2020). Why do people use and recommend m-wallets? *Journal of Retailing and Consumer Services*, 56(102091), 1-11. <https://doi.org/10.1016/j.jretconser.2020.102091>
- Kharrat, H., Trichilli, Y., & Abbes, B. (2023). Relationship between FinTech index and bank's performance: A comparative study between Islamic and conventional banks in the MENA region. *Journal of Islamic Accounting and Business Research*, 15(1), 172–195. <https://doi.org/10.1108/jiabr-03-2022-0081>
- Kınış, F., & Tanova, C. (2022). Can i trust my phone to replace my wallet? The determinants of e-wallet adoption in north cyprus. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(4), 1696-1715.
- Lamari, E. M. M., & Adedokun, S. M. A. (2023). E-Wallet and transaction with it in Shariah Perspective. *Al-Qanātir: International Journal of Islamic Studies*, 30(1), 90-104.
- Lee, Y. Y., Gan, C. L., & Liew, T. W. (2022). Do E-wallets trigger impulse purchases? An analysis of Malaysian Gen-Y and Gen-Z consumers. *Journal of Marketing Analytics*, 11, 1-18.
- León, C. (2021). The adoption of a mobile payment system: the user perspective. *Latin American Journal of Central Banking*, 2(4), 100042. <https://doi.org/10.1016/j.latcb.2021.100042>
- Loke, M. Q., Lok, X. L., Ma, Y., Fadli, M. F. B., Sushen, B., Vaishnavi, N., & Yadav, R. (2022). Case study of touch 'n go in Malaysia: Are you a user of e-wallet?. *International Journal of Accounting & Finance in Asia Pacific (IJAFAP)*, 5(3), 97-106.
- Mirza, A. A. I. (n.d.). "E-Wallet application: Does it obey shariah?". E-muamalat. <http://e-muamalat.islam.gov.my/ms/bahan-ilmiah/artikel/453-aplikasi-e-wallet-adakah-ia-mematuhi-syariah>
- Mohamad, M. H. B. (2019). "Some Sharia considerations concerning e-wallet". IKIM. <http://www.ikim.gov.my/new-wp/index.php/2019/08/22/some-sharia-considerations-concerning-e-wallet/>
- Mohd Noh, M. S., Razif, N. F. M., & Ruslan, M. A. (2022). Probability of gharar in e-wallets: a preliminary study (keberangkalan gharar di dalam e wallet: satu penelitian awal). *ALBASIRAH JOURNAL*, 12(2), 25-36.
- Mumtaza, Q. M. H., Nabillah, S. I., Amaliya, S., Rosabella, Y., & Hammad, J. A. (2020). Worldwide mobile wallet: A futuristic cashless system. *Bulletin of Social Informatics Theory and Application*, 4(2), 70-75. <https://doi.org/10.31763/businta.v4i2.204>
- Muryanto, Y. T. (2022). The urgency of sharia compliance regulations for Islamic Fintechs: A comparative study of Indonesia, Malaysia and the United Kingdom. *Journal of Financial Crime*, 30(5). <https://doi.org/10.1108/jfc-05-2022-0099>
- Muslim, M. I. H. (2015). *Ṣaḥīḥ Muslim* (Rā'id Ibn Ṣabrī Ed.). Dār al-Ḥadārah.
- Muzaldin, N., Rahman, S. A., Sarifudin, S. A., & Zaini, M. K. (2022). A study on behavioural intention to use mobile wallet with special reference to citizens in Shah Alam, Selangor, Malaysia. *Journal of Mobile Technologies Knowledge and Society*, 2022, 1-16.

- Nachappa, M., & Lathesh, C. (2018). Optimized e-transaction to have a secure safe: E-Wallet. *IJISSET-International Journal of Innovative Science, Engineering and Technology*, 5(9), 1-6.
- Nakamoto, S. (2008). "Bitcoin: A peer to peer electronic cash system (working paper)". Bitcoin.org. <https://bitcoin.org/bitcoin.pdf>
- Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and cryptocurrency technologies: A comprehensive introduction*. Princeton University Press.
- Nguyen, P.-V. (2023). An integrated and comprehensive fuzzy multi-criteria model for electronic wallet selection. *Computers, Materials & Continua*, 74(1), 2279-2301. <https://doi.org/10.32604/cmc.2023.030019>
- Nizam, F., Hwang, H. J., & Valaei, N. (2019). Measuring the effectiveness of E-wallet in Malaysia. In R. Lee (Ed.), *Big Data, Cloud Computing, Data Science & Engineering*. Springer.
- Nizām. (2000). *Al-Fatāwā al-hindiyyah*. Dār al-Kutub al-‘Ilmiyyah.
- Noor, K. A. M., & Yusoff, A. F. J. (2022). Status patuh Syariah E-Money akaun jenama E-Wallet popular di Malaysia (Sharia Compliant Status of E-Money in Popular Malaysian E-Wallet Account). *Journal of Contemporary Islamic Law*, 7(2), 11-18.
- Noor, M. Z. M., Naim, A. M., Muhamed, N. A., Mirza, A. A. I., Ahmad, A., Ali, S. R. S., & Shukor, A. R. A. (2021). Legal issues in E-Wallet Practices. *UUM Journal of Legal Studies*, 12(2), 229–252. <https://doi.org/10.32890/uumljs2021.12.2.10>
- Octora, R., Sewu, P. L. S., & Sugiono, J. A. (2021). Regulation on electronic system security for E-wallet in order to protect consumers from financial loss due to cyber fraud based on Indonesian law. *International Journal of Social Science and Human Research*, 4(9), 2272-2279.
- Omar, M. N., Abdul Kareem, M. A., Ismail, A. G., & Lahsasna, A. (2012). *E-Money in Malaysia: Shariah and economic analysis*. In the *Proceedings of the Fifth Foundation of Islamic Finance Conference (FIFC) 2012, Langkawi, Malaysia*, (pp. 1-15).
- Pati, U., Tejomurti, K., Pujiyono, P., & Pranoto, P. (2021). Fintech remittance Syariah : The solution of collection ziswaf overseas. *Brawijaya Law Journal*, 8(2), 282–294. <https://doi.org/10.21776/ub.blj.2021.008.02.07>
- Pham, T.-V., Hoang, N.-Y. N., & Do, H.-N. (2021). The “e-wallet generation”: How barriers and promoting factors influence intention to use. *The Review of Socionetwork Strategies*, 15, 413-427.
- Pricewaterhouse Coopers (PwC). (2019). "It's time for a consumer-centred metric: introducing 'return on experience' – global consumer insights survey". PWC. www.pwc.com/gx/en/consumer-markets/consumer-insights-survey/2019/report.pdf
- Ramli, W. N. W., Halim, H. H. A., Ismail, N. F., & Othman, S. (2021). The application of e-wallet in Malaysia: An analysis of shariah point of. *Al-Qanatr: International Journal of Islamic Studies*, 23(2), 44-54.
- Razali, M., Mohd, N. A., Hadigunawan, N., & Saidon, R. (2021). Maqasid shariah hifz mal in e-wallet application. *Islamiyyat: International Journal of Islamic Studies*, 43(1), 113 - 120. <https://doi.org/10.17576/islamiyyat-2021-4301-10>
- Saleem, M. Y. (2013). *Islamic commercial law*. Singapore: John Wiley & Sons Singapore Pte. Ltd.
- Saleh, M. A. M. A., & Saharudin, M. A. B. (2021). E-Wallet: A study on contracts involved within its operational mechanism. *Journal of Fatwa Management and Research*, 26(1), 1-16.
- Salodkar, A., Morey, K., & Shirbhate, M. (2015). Electronic wallet. *International Research Journal of Engineering and Technology (IRJET)*, 2(9), 975-977.
- Selvadurai, J. (2013). Legal and ethical responsibilities in mobile payment privacy. *Int J Sci Technol Res*, 2(6), 68-71.
- Sentanu, W., Sagala, S. A., Marjuki, D., & Gunadi, W. (2020). Analysis of the effects of benefit and risk factors on the use of e-Wallet. *International Journal of Advanced Research in Engineering and Technology (IJARET)*, 11(8), 721-737.
- Shamsuddin, M. M. J., Sitiris, M., & Yunus, S. M. (2022). E-Wallet in Malaysia: A proposed structure of contracts according to the juristic adaptation (takyif fiqhi). *Malaysian Journal of Islamic Studies (MJIS)*, 6(2), 15-37.
- Shamsuddin, N. F., Safian, Y. H. M., & Zakaria, M. Z. (2020). The analysis element of gharar in e-wallet contracts. In the *Proceedings of the 3rd International Conference of the Postgraduate Students and Academics in Syariah and Law (INPAC 2020)*, Universiti Sains Islam Malaysia (USIM), Negeri Seremban, Malaysia, (pp. 56-63).

- Shekhar, S., Manoharan, B., & Rakshit, K. (2020). Going cashless: Change in institutional logic and consumption practices in the face of institutional disruption. *Journal of Business Research*, 114, 60-79. <https://doi.org/10.1016/j.jbusres.2020.04.010>
- Soodan, V., & Rana, A. (2020). Modeling customers' intention to use e-wallet in a developing nation: Extending UTAUT2 with security, privacy and savings. *Journal of Electronic Commerce in Organizations (JECO)*, 18(1), 89-114.
- Sunaryo, H. N., & Nuraini, H. (2020). Legal protection of E-wallet user in digital transaction. In the *Proceedings of the International Conference on Environment and Technology of Law, Business and Education on Post Covid 19 – (ICETLAWBE 2020)*, Pulau Pinang Malaysia, (pp. 1-11.)
- Teigland, R., Siri, S., Larsson, A., Puertas, A. M., & Bogusz, C. I. (2018). *The rise and development of fintech: Accounts of disruption from Sweden and beyond*. Routledge, Taylor & Francis Group.
- Teng, S., & Khong, K. W. (2021). Examining actual consumer usage of E-wallet: A case study of big data analytics. *Computers in Human Behavior*, 121, 106778.
- Todorof, M. (2018). Shariah-compliant FinTech in the banking industry. *ERA Forum*, 19(1), 1-17.
- Undale, S., Kulkarni, A., & Patil, H. (2021). Perceived ewallet security: Impact of COVID-19 pandemic. *Vilakshan-XIMB Journal of Management*, 18(1), 89-104. <http://dx.doi.org/10.1108/XJM-07-2020-0022>
- Valencia, D., & Layman, C. V. (2021). E-wallet service innovation, service delivery, and customer satisfaction on customer loyalty within ShopeePay in Indonesia. *Ultima Management: Jurnal Ilmu Manajemen*, 13(1), 23-46.
- Vana, P., Lambrecht, A., & Bertini, M. (2018). Cashback is cash forward: delaying a discount to entice future spending. *Journal of Marketing Research*, 55(6), 852-868.
- Yadav, M. P., & Arora, M. (2019). Study on impact on customer satisfaction for E-wallet using path analysis model. *International Journal of Information Systems & Management Science*, 2(1), 248-251.
- Yudaruddin, R. (2023). Financial technology and performance in Islamic and conventional banks. *Journal of Islamic Accounting and Business Research*, 14(1), 100-116. <https://doi.org/10.1108/JIABR-03-2022-0070>
- Zulkefli, A., Rusmadi, H., & Aziz, A. A. (2019). Application of e-wallet: A preliminary analysis from the Shariah Perspective. *International Journal of Fiqh and Usul al-Fiqh Studies (IJFUS)*, 3(2), 98-105.