CHALLENGES OF ISLAMIC E-WALLET IN CATALYZING THE GROWTH OF MALAYSIA'S DIGITAL ECONOMY

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ABSTRACT

Financial technology has the potential to empower ordinary individuals while also contributing to the growth of national economies by enabling secure and efficient access to financial products. The advancements in e-wallet technology have simplified online payments and transactions, since it is a financial transaction application that can function on any device connected to the internet. The main issue is that, in spite of the vital role that digital payments and e-wallets play in propelling the country's digital economy, Shariah-compliant e-wallets are not widely available in Malaysia's fintech ecosystem. By utilizing library search, this paper aims to analyses how the advancement in financial technology especially e-wallet will drive the growth of Malaysia's digital economy. In the context of Islamic finance, this study found that Islamic e-wallet adhere to Islamic principles and values, however, it faces several challenges in catalysing the growth of Malaysia's digital economy. This study adds to our understanding of the difficulties faced by Islamic e-wallets in spurring the development of the digital economy.

Keywords: Fintech, E-wallet, Islamic E-wallet, Digital Economy, Shariah (Islamic Law), Regulation

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INTRODUCTION

Fintech refers to technologically driven innovation in the financial services industry that has the potential to provide new products, apps, processes, or business models that have a significant impact on the way financial services are provided (Financial Stability Board, 2019). It transforms traditional transaction methods into a mobile and eco-friendly system (Hopalı et al., 2022). The emergence of FinTech can be traced back to 1990 when the Internet and e-commerce business models started to gain traction conversions (Nashirah et al., 2020).

Malaysia's fintech sector has been expanding at a remarkable pace, which has helped the country's economy grow. In Malaysia, a large number of Fintech businesses even provide services to clients abroad. Most importantly, the sector produced a large number of jobs and positively impacted the expansion of the national economy. Malaysia presently leads the world in Islamic Fintech in terms of market maturity and is in the top five Islamic Fintech markets in terms of transaction volume, according to Fintech News Malaysia (2022). In accordance with Fintech Report Malaysia 2022, the Organization of Islamic Cooperation (OIC) countries' expected Islamic Fintech transaction volume in 2020 was US$49 billion. By 2030, the halal economy, currently valued at US$3.1 trillion, is expected to grow to US$5 trillion. These figures prove that the fintech industry can help drive the country's economic growth.

According to data from International Monetory Fund (2020), digital payments and e-wallets are playing a crucial role in paving the way towards digitizing the economy in Malaysian Fintech Ecosystem. While this escalation seems to be appealing for fintech market, in case of e-wallet as part of fintech movement), to date only very few non-bank issuers in Malaysia have announced any *Shariah* (Islamic law)-compliant e-money or e-wallet status (ISRA & MDEC 2020). Owing to this issue, this study aims to analyses how the advancement in financial technology especially e-wallet will drive the growth of Malaysia's Digital Economy. This study also aims to analyze challenges of Islamic e-wallet in catalyzing the growth of Malaysia's digital economy.

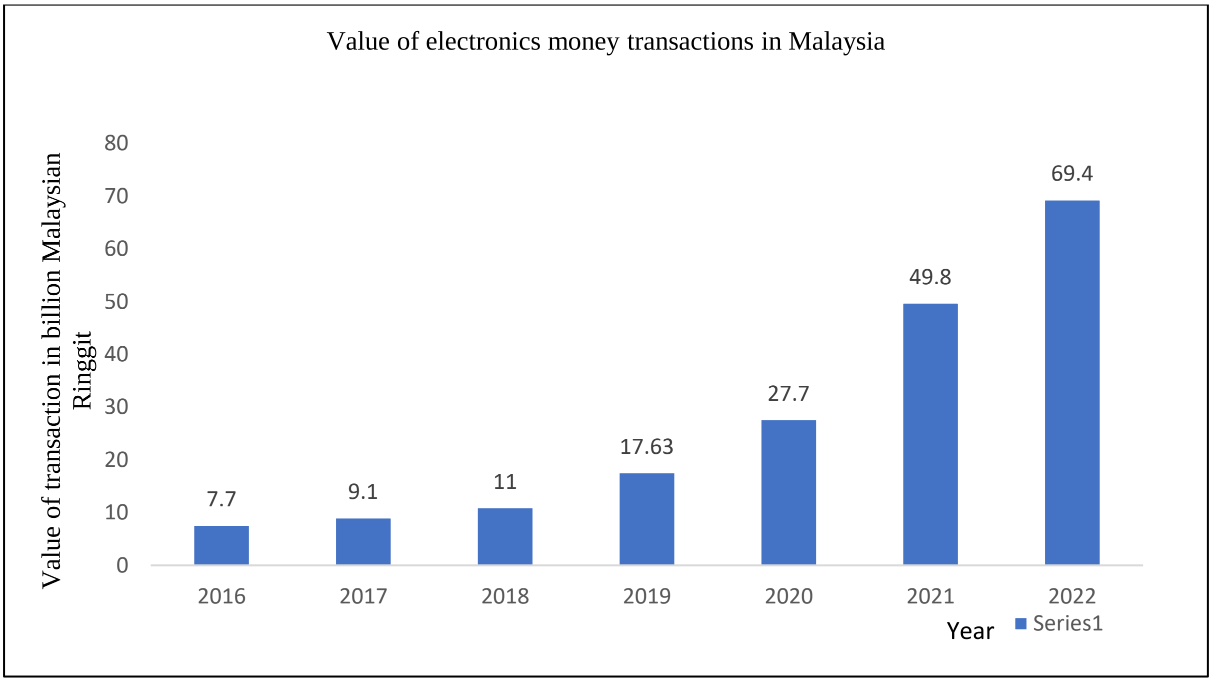
The paper is organized as follows. Following this introduction, the second section provides the prospect of e-wallet to the Malaysian economy. While third section covers Islamic e-wallet and Digitalization of Malaysia's Economy, fourth section explains the challenges of Islamic e-wallet in catalyzing the growth of Malaysia's digital economy. Section fifth is the conclusion, and it summarizes the key points articulated in this paper.

THE PROSPECT OF E-WALLET TO THE MALAYSIAN ECONOMY

In Malaysia, the digital economy is one of the key economic pillars, which ambition to contribute 22.6% to the country's GDP and create half a million job by 2025 as outlined in the Malaysia Digital Economy Blueprint prepared by Economic Planning Unit, Prime Minister's Department (2019). The ultimate objective of the digital economy is to increase the efficiency of social production through the use of cutting-edge, mostly digital technology and inventions. (Yong et al., 2020).

The value of electronic money transactions in Malaysia reached nearly 70 billion Malaysian ringgit in 2022, an increase of around 20 billion from the previous year (See Figure 1). The most widely used e-wallets in Malaysia are Touch n' Go and Grab Pay. E-money is typically kept in e-wallets. The rise in the value of transactions in 2022 indicated that e-wallets are being utilized more frequently in the nation as a cashless payment option.

With the start of the COVID-19 pandemic in 2020, Malaysia's e-commerce GDP share increased by 3%. Because more people were making online purchases during the movement control order (MCO), the popularity of e-wallets was impacted by this current trend in e-commerce. (Statistica 2023a). Although restrictions have now been lifted, paying for e-commerce sites is still the leading reason for consumers in Malaysia to use their digital payment systems as demonstrated in Figure 1. As e-wallets transactions rose to an average of 25%, put evidence that consumers will continue to use digital payments (The Malaysian Reserve 2021).



Source: Statistica (2023a)

Figure 1: Value of electronic money transactions in Malaysia from 2016 to 2022

Digitally Enabled to Capture Fintech Growth Through E-wallet

A significant component of the Malaysian economy nowadays is the e-wallet market. Despite being in their infancy, digital payment methods have become more popular in Malaysia in recent years, thanks to e-wallets. Smartphone applications provide e-wallets, which let users use their phones to pay using their phones at approved merchants both online and offline. In Malaysia, several non-bank entities, mostly FinTech startups and large technology companies, have introduced several mobile wallets. Bank Negara Malaysia (BNM) reports that from 5 in 2016, to 35 in 2018, there are seven times as many non-bank e-money issuers providing payment solutions via mobile applications. (International Monetary Fund 2020).

Malaysia is well-positioned to take advantage of the opportunities presented by fintech, as evidenced by its high ranking (31 out of 139 countries) in the World Economic Forum's Network Readiness Index. This aggregate metric gauges an economy's proficiency with information and communication technology. With high internet and mobile penetration rates and extensive smartphone usage, connectivity indicators are generally solid. The availability of digital infrastructure has allowed internet banking usage to surge over time; in 2018, it surpassed 90%, quadrupling from a decade earlier. Further expansion in the e-wallet market would be facilitated by the anticipated deployment of fast 5G technology and reasonably priced mobile data (International Monetary Fund 2020). Due to the widespread use of mobile phones, mobile banking is effectively promoted as a cost-free method of sending and receiving payments. One way to reduce the requirement for a point-of-sale (POS) terminal system is to use a Quick Response (QR) payment code (Wei & Tsu 2018).

The Initiatives from The Government and Other Responsible Bodies Overseeing the Fintech's Development.

The growth of mobile wallets has been supported by regulatory efforts to develop the use of mobile payments in Malaysia. The policy document outlines requirements has been issued by Bank Negara aimed to ensure the safety and reliability of e-money issued by EMI and preserve customers' and merchants' confidence in using or accepting e-money for the payment of goods and services (Bank Negara Malaysia 2022). In addition to the efforts of Bank Negara Malaysia, the Malaysia Digital Economy Corporation (MDEC) has encouraged the use of Fintech in the nation by interacting with international investors, entrepreneurs, and innovators. The Fintech ecosystem's expertise and awareness, investment opportunities, and innovation lab for ongoing development are all provided by MDEC. Together with Bank Negara Malaysia and the UN Capital Development Fund, the MDEC also developed the Financial Innovation Lab to expedite the development of cutting-edge digital financial services solutions that improve the everyday lives of low- and moderate-income individuals. (MDEC 2020). Wawasan Kemakmuran Bersama 2030 seeks to achieve a fair and equitable economic development among all societal levels by 2030, and one of the Key Economic Growth Activities is the digital economy (Ministry of Economic Affairs, 2019).

Increasing Malaysian Population

The growing population of Malaysia presents a significant opportunity for the e-wallet industry there. With 32.6 million people living there now, Malaysia is experiencing rapid population expansion (see Table 1). There are greater needs as the population grows. Concurrently, Malaysia is evolving into a digital nation, with an annual increase in the number of smartphone and internet users since 2012. Approximately 86.6 percent of people used their mobile device to access the internet in 2020. This number is anticipated to increase by more than 89% by 2025 (Statistica 2023b). Amidst the nationwide lockdowns brought on by COVID-19, reports indicated that 3 million more people will sign up for mobile banking services in 2020, pushing e-wallet penetration and usage to all-time highs. Over 400,000 new companies registered to take payments using QR codes, up 164% from the previous year, showing that more merchants are embracing the trend (Abdullah, & Basirun 2021). This is anticipated to accelerate e-wallet adoption and use in the future.

Table 1: Population Growth, Smartphone Users and Handphone-Internet Users in Malaysia

Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Population (million)	29.07	29.47	29.87	30.27	30.68	31.11	31.53
Smartphone users (% of total phone users)	26	37.4	53.4	52.3	68.7	75.9	78
Internet users in smartphone (% of smartphone users)	68.8	78.5	90.1	92.4	94.8	94.6	

Source: (The World Bank in Alam, Awawdeh & Muhamad 2021)

E-WALLET AND ISLAMIC FINANCE

A digital wallet, also known as an electronic wallet (e-wallet), is a type of financial transaction application that can operate on any internet-connected device. The developments of e-wallet have made online payments and transactions easier**.** It provides a secure means of storing payment information and passwords in the cloud. Mobile wallets, which are a subcategory, are primarily used on mobile devices while digital wallets can also be accessed from computers. The purpose of e-wallets is to replicate the functionality of a physical wallet, credit or debit card (Kammer et al., 2015). The advantages of digital wallets is that they enable users to make payments while shopping without the need to carry physical cards. Users can enter and store their credit card, debit card, or bank account information in their digital wallets. To make payment through e-wallet application, user need to transfer money from their debit/credit card or bank account into the application where the transferred money will be converted into e-money and put into an e-wallet account which can be use to make payments via online or in physical store (Noor et al., 2022).

E-wallets which drive further innovation in the payment industry are making contactless payments more accessible and convenient. E-wallets can offer a range of features beyond basic payment functions, catering to a variety of consumer needs and preferences including money transfer, investment, insurances services, digital identitification and a lot more depending on the services provider and the specific type of e-wallet. Users can utilize the several e-wallet programs available to them for a variety of tasks, such as ordering takeout, paying bills, scheduling transportation, and more (Salodkar et al., 2015).

Islamic finance possesses all the necessary components, and when paired with Fintech, it can lead to the global economic prosperity of people around the globe (Rabbani et al., 2021). The demand for Islamic financial products and services, including e-wallets, has been growing in recent years, driven by the increasing awareness and popularity of Islamic finance and the growing Muslim population around the world. This has led to the emergence of more Islamic e-wallet providers in the market, which may increase their popularity in the future.

Islamic e-wallets adhere to Islamic principles and values, providing customers with a halal alternative to conventional e-wallets. These e-wallets ensure that all financial transactions are in compliance with shariah principle, which prohibits the charging or paying of interest (*riba*), engaging in speculative activities (*maysir*) and uncertainty (*gharar*) (Kammer et al., 2015). They also ensure that transactions are ethical, transparent, and socially responsible. This means that Islamic e-wallets may have different features and services compared to conventional e-wallets. For example, Islamic e-wallets may offer Zakat payment features, which allows users to calculate and pay their Zakat, a form of obligatory charity in Islam, directly through the e-wallet (Kammer et al., 2015). Islamic e-wallet may offer Shariah-compliant investment options and may avoid investments in industries deemed haram, or forbidden in Islam, such as alcohol, tobacco, gambling, adult entertainment, firearms, banking and conventional insurance (Principal Asset Management Berhad, 2023).

Islamic e-wallets also cater to the needs of Muslims who are looking for *Shariah*-compliant financial services, providing them with a convenient and accessible way to manage their finances. According to study by Nashirah and others (2020), the characteristics of e-wallet payment shows no ambiguity and no unclear operational activities from the Islamic financial engineering perspective as it is secure, reliable and user-friendly. A recent studies on the use of e-wallet conducted by Shamsuddin and others (2022), the users' intentions to use the e-wallet that can bring benefit *(jalb al-maṣlaḥah)* to people are not contradicting *Shariah*. The rise of Islamic e-wallets reflects the increasing demand for financial products and services that align with this Islamic principles and values, particularly among Muslim consumers.

CHALLENGES OF ISLAMIC E-WALLET IN CATALYZING THE GROWTH OF MALAYSIA'S DIGITAL ECONOMY

Possible *Shariah* Issues

In general, Islamic financial services and conventional ones are largely different due to the former's *Shariah* (Islamic law) compliance, namely prohibition of *riba* (interest), *gharar* (uncertainty) and *maysir* (gambling) in carrying out financial transactions (Uddin 2015), including fulfilled terms and conditions of the *aqad* for contracting parties (Mohamad 2019). In the simple context of conventional e-wallet application, it is a type of electronic card, which is utilized for transactions done online through a computer or smartphone. This pre-paid account needs to be linked to service providers' accounts to make payments (The Economic Times n.d). While the Islamic e-wallet providers may be offered by bank and non-bank institutions, many *Shariah* concerns arise for the latter, given that the former are governed by Bank Negara Malaysia. Considering Islamic e-wallet is still in its early development (International Monetary Fund 2020), *Shariah* issues arise in many aspects of the transactions. There is some doubt regarding the extent to which non-bank issuers place the deposit or invest the money in such a way that it complies with *Shariah* (Mohamad 2019). The income from advertising or marketing fees for promoting businesses, in the form of refill bonus and lucky draw promotions (Mirza 2019) and transaction in the contracting parties (W.Ramli et al. 2021) are doubted of being element of *riba*.

Although there are guidelines and regulations issued by regulators through which fintech has to operate, the industry still confronts certain inadequacies in the legal frameworks for Islamic fintech. Two clauses in the Fintech Regulatory Framework do not complement Islamic fintech since it is missing a provision about prevailing *Shariah* standards and *Shariah* governance requirements (Abdullah, O 2017). In addition, the existing framework does not address the fintech issue of *Shariah* compliance in terms of operations and practices such as reasonable standards of service and full disclosure, together with the supervision of *Shariah* compliance over funding and reporting requirements (Laldin 2017). Likewise, *Shariah* parameters or guidelines that detail the contract from a *Shariah* point of view on the e-wallet application are still absent in the Islamic fintech industry (W.Ramli et al. 2021). Therefore, a very critical issue here is how these fintech solutions will be delivered in a responsible and more cost-effective manner to ensure they truly comply with *Shariah* (MDEC 2020).

According to *Shariah* Advisory Council of Bank Negara Malaysia (2020), one of the applicable *Shariah* contracts for e-money is the agency contract (*wakalah*), whereby the approved issuer acts as an agent to make payment on behalf of the user (*wakil bi ad-daf`i*) to the merchant. This issue of the contract (*wakalah*) that underlies the e-wallet is among shariah issues raised for the adoption of e-wallet for financial transaction. The lack of clear disclosure regarding the underlying contract of the e-wallet systems is a concern. If the system is based on a *wakalah* contract, then there may not be any issue. However, if the system utilizes a *qard* contract, the rewards offered could be deemed as *riba* (usury). This is because those who raise this issue consider that the return on rewards constitutes a form of *riba* (interest) for the loan given to the e-Wallet operator (Asmadi, 2019). Noor et al. (2022) contend the usage of qard contracts in conjunction with incentives or rewards provided by the e-wallet provider. Based on their findings, no oversight mechanism is in place to guarantee that e-wallet providers adhere to the decisions made by Bank Negara Malaysia. Their study to analyses *Shariah* compliance status of Touch n 'Go, Grabpay and Boost e-wallet according to the concept of *wakalah* revealed that none of the e-wallet service provider met the *wakalah* contract standards set by BNM.

Islamic E-wallet is Considering as New in The Market as Opposed of Conventional Ones

The Islamic finance sector is relatively new and not yet operating at a large scale. It faces challenges such as a lack of legal and tax regulations, limited financial infrastructure, insufficient access to financial safety nets and central bank liquidity. Even when available, these resources may not fully consider the unique features of Islamic finance (Kammer et al., 2015). Islamic fintech ecosystem is still in its infancy although it has great potential for rapid growth (Salim, K, Abojeib, M.& Baharom, 2020).

In Malaysia, although most of the financial technology (or fintech) activity has been concentrated in the e-wallet and payments space, to date only very few non-bank issuers in Malaysia have announced any *Shariah* (Islamic law)-compliant e-money or e-wallet status (ISRA & MDEC 2020). Base on the Fintech Malaysia Report 2019, which looks at the breakdown of fintech players, there are only 6 Islamic fintech companies out of a total of 198, or only 3% players which including Islamic e-wallet involved in Islamic fintech (Fong 2019). It seems that Islamic financial institutions are yet not taking enough advantage of such technologies (Adam 2021). The entire Islamic finance sector continues to suffer this similar obstacle. Naturally, the conventional finance sector is far more established, having existed for centuries.

Even though fintech is a relatively new field, conventional finance still has a significant amount of influence over the sector when counting the number of firms involved in fintech. As a result, Islamic e-wallets are relatively less common compared to conventional e-wallets because the market for Islamic finance is smaller and less developed than the conventional finance market. Islamic finance is a niche market that serves customers who require financial products and services that comply with *Shariah*, or Islamic law, which prohibits certain financial practices such as interest-based transactions. A study by Bella and Efendi (2021) also indicated that compared to their conventional counterparts, Indonesians have not used Islamic e-wallets extensively.

Inadequacies in The Legal Frameworks for Islamic Fintech

Although there are guidelines and regulations issued by regulators through which fintech has to operate, the industry still confronts certain inadequacies in the legal frameworks for Islamic fintech. Two clauses in the Fintech Regulatory Framework do not complement Islamic fintech since it is missing a provision about prevailing *Shariah* standards and *Shariah* governance requirements (Abdullah 2017). In addition, the existing framework does not address the fintech issue of *Shariah* compliance in terms of operations and practices such as reasonable standards of service and full disclosure, together with the supervision of *Shariah* compliance over funding and reporting requirements (Laldin 2017). Likewise, *Shariah* parameters or guidelines that detail the contract from a *Shariah* point of view on the e-wallet application are still absent in the Islamic fintech industry (W.Ramli et al. 2021). Therefore, a very critical issue here is how these fintech solutions will be delivered in a responsible and more cost-effective manner to ensure they truly comply with *Shariah* (MDEC 2020).

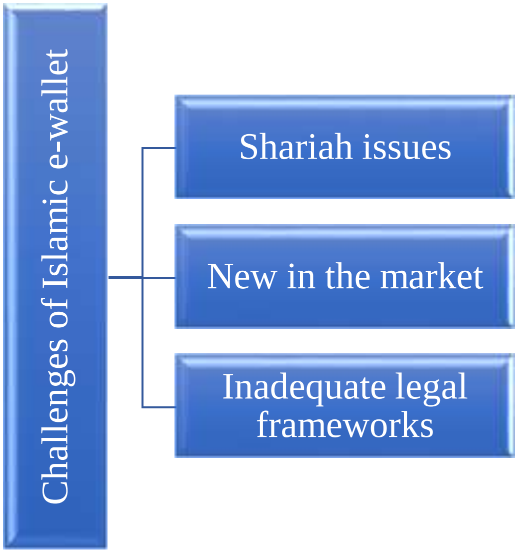


Figure 2: Challenges of Islamic E-wallet in Catalyzing the Growth of Malaysia’s Digital Economy

CONCLUSION

In conclusion, e-wallets, or digital wallets, have made it easier and more convenient for people to make payments, transfer money, and manage their finances. E-wallets have been instrumental in catalyzing the growth of the digital economy by promoting technological innovation, improving paymenet system, increasing access to financial services and made financial transactions faster and efficient. This research sheds light on the promising prospects of Islamic e-wallets in catalyzing the growth of Malaysia's digital economy. With the increasing adoption of digital financial services and a growing population, e-wallets present a significant opportunity for Malaysia to capture the fintech growth and drive economic development. However, several challenges have emerged, including inadequacies in the legal frameworks for Islamic fintech.

The Islamic e-wallet transactional framework in the fintech industry to some extent needs to be mindful of *Shariah* rules and in this way realize confidence in the industry and the wider society. The perception of Islamic e-wallets as relatively new in the market compared to conventional ones need also been a barrier for the demand of Islamic eWallet. Despite these challenges, the research underscores the importance of addressing regulatory gaps and building trust in Islamic e-wallets to unlock their full potential. It emphasizes the need for robust legal frameworks that ensure compliance with Islamic principles, consumer protection, and fair competition.

Additionally, efforts to raise awareness and educate the public about the benefits of Islamic e-wallets can help overcome the perception barriers and promote their wider adoption. In conclusion, the research emphasizes the significance of Islamic e-wallets as a catalyst for Malaysia's digital economy growth, while recognizing the need for addressing regulatory challenges and raising awareness. It provides valuable insights for policymakers, regulators, businesses, and researchers interested in the potential of Islamic e-wallets in shaping Malaysia's fintech landscape and driving economic progress in a *Shariah-compliant* manner. While this study adds to our understanding of the difficulties faced by Islamic e-wallets in spurring the development of the digital economy, it still has a number of limitations. Most notably, it may not have taken into account all external factors that could have an impact on the results, such as regulatory changes or technological advancements. Looking forward, opportunities for future study emerge. Longitudinal research tracking e-wallet adoption over time could provide valuable insights. Comparative analyses between Islamic and conventional e-wallets, alongside qualitative research exploring cultural and religious influences, could deepen understanding. Further investigation into tailored regulatory frameworks and consumer behavior patterns would also enhance knowledge. Addressing these opportunities and limitations could enrich our comprehension of Islamic e-wallets' role in Malaysia's digital economy and inform effective policy and strategy development.

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