

# Determinants intention usage of Islamic E-Wallet Among Millennials

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### ABSTRACT

**Purpose:** The main purpose of this study is to investigate the behavioural intention of the millennials in Malaysia toward the acceptance of Islamic e-wallet usage using Unified Theory of Acceptance and Use of Technology (UTAUT) via Structural Equation Model.

**Design/methodology/approach:** The data have been collected by the 384 millennials in Malaysia. A person has aged between 25 until 40 years old is considered the millennials group. The method that used in this paper is the Unified theory of acceptance and use of technology (UTAUT). There will be five independent variables: performance expectancy, effort expectancy, social influence, facilitating condition, and Shariah-compliant. Shariah-compliant variables have been added to the study because the study investigates the Islamic e-wallet where it is needed the Shariah-compliant elements. Before the data is analysed into measurement, preliminary analysis such as Exploratory Factor Analysis (EFA) is conducted as well.

**Findings:** The result showed that the performance expectancy (PE), effort expectancy (EE), social influence (SI) and Shariah complaint (SC) significantly affect the Islamic e-wallet acceptance among the millennials. In addition, the Shariah complaint has a strong effect on Islamic e-wallet acceptance. In contrast, facilitating condition (FC) showed no effect on Islamic e-wallet acceptance.

In this study, all the requirements for model fit were achieved. The four exogenous constructs are performance expectancy (PE), effort expectancy (EE), social influence (SI) and facilitating condition (FC). The mediating construct is behavioural intention (BI) and the endogenous is user adoption (UA). All exogenous constructs show significant p-value except for effort expectancy (EE).

**Research limitation/implications:** This paper offers important implications specifically for the digital economy as it is currently making its way throughout every aspect in the human life, be it social, religion, financial transaction, entertainment and many more. The impact of digital economy can be traced through the emergence of Fintech. One of the least academically discussed areas is the adoption of Islamic Fintech. This study is considered necessary to explore the prediction of consumer behaviour in Islamic Fintech intention, as part of digital economy.

**Originality/value:** The paper fills the gap perceived within the existing literature of finance technology by showing Islamic financial technology (E-Wallet) intention via model measurement.

*Keywords: Fintech, Islamic Fintech, E-Wallet, Millennials, UTAUT*

Received: Jun. 29, 2022; Revised: Nov. 16, 2022; Accepted: Nov. 28, 2022

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## I. Introduction

Technology keeps changing and evolving. As the revolution happens, the business was also influenced by the evolution of technology. Regarding the financial sector, the technology that impacted the company is called financial technology (Fintech). Penetration of Fintech into the financial industry started in 1886 until 1976, which is called Fintech 1.0. The focus during this era was about infrastructure. During that time, they implemented the technology into the financial sector using the railroads and telegraphs that helped to shorten the period to transmit the financial information across the border. After that, Fintech evolved into Fintech 2.0, which transform the operation in the financial sector from analogue to digital. The adaptation of Fintech during that time into the financial industry followed the digitalization environment. Fintech 2.0 was evolved from 1967 until 2008. During this period, online banking was already introduced globally. The current situation of Fintech is about start-ups. The evolution started to evolve from 2008 until now. Fintech 3.0 is when the new player emerged into the financial sector and competed with the existing system. With the massive use of smartphones and the internet, hence e-wallet has been introduced during this period. Google introduced the Google Wallet in 2011, whereas Apple pays in 2014. The usage of Fintech showed positive growth, evolved, and improving along with the positive acceptance from the users.

In Malaysia, the financial sector been introduced by Fintech 3.0 in 2011, where the Malaysian expected to get MyKad and this card can be used as an e-wallet, ATM card, and other transactions with just one card only. With the influence of the Internet of Things (IoT), big data, artificial intelligence, and blockchain technology, Fintech 3.0 in Malaysia keep growing and improving. In Malaysia, Fintech companies focus on the mobile wallet, mobile payment, blockchain, crypto, crowdfunding, lending, artificial intelligence (AI), the marketplace, Islamic Fintech and remittance. In Malaysia, the most common uses of Fintech are

mobile wallets and digital payment (Fintech News Malaysia, n.d.)

The survey conducted by PwC Malaysia showed that 82% of Malaysian Financial institutions see that FinTech as a threat to their business, and 42% among them said that customers ready to get used to Fintech (PricewaterhouseCoopers, 2016). Not only developing the economy in Malaysia, but Fintech also changes the norm of users. Fintech ease people in accessing the financial product efficiently and securely. According to Jason Lee, interim VP at NEM.io Foundation Ltd, in terms of Fintech, Malaysia is leading in certain areas but lagging in others (The Malaysian Reserve, 2019). The lag still needs to improve to give better service and develop the economy in Malaysia.

Focusing on Islamic Finance, the global financial institution will take Malaysia as the first reference because Malaysia is the leader in Islamic finance. However, even though Malaysia is a leader, Islamic Fintech is still in the early phase and needs to evolve to gain the same level as the conventional platform. The purpose of introducing Islamic Fintech is to ensure the transparency of transactions, avoid riba, and follow the Shariah law. Six startup companies that apply Islamic Fintech in Malaysia are Ethis Kapital, Sedania As-Salam Capital, Finterra, GlobalSadaqah, PayHalal, and Wakaful. The first e-wallet that has been introduced in Malaysia is called Zapp Islamic, but Malaysians do not widely use it. This platform helps Muslim users to use an e-wallet, without doubt, align with their slogan "Confident without a doubt".

A digital wallet or e-wallet is a software that helps the user to make a cashless transaction for purchased goods or services, transfer the amounts to one another, online payment for e-commerce, store funds, and historical store transaction. With tight security, the user should not worry about their personal information to keep them safe. The adoption of a cashless environment helps in many sectors and individuals. There are two types of ewallet which are bank e-wallet and non-bank e-wallet. The bank e-wallet is linked with the user's credit or debit account, and users can directly load cash to their e-wallet. The nonbank e-wallet is provided by a non-bank issuer such as

Grab Pay, Touch n Go e-wallet, etc. In Malaysia, the adoption of a cashless environment showed positive growths. With the development, Bank Negara Malaysia (BNM), as the financial regulator in this country, introduced the Interoperable Credit Transfer Framework (ICTF) and Guidelines on Electronic Money (e-wallet), which encourage the improvement of cashless payment. According to BNM, the number of users of the e-wallet in Malaysia increases significantly during the pandemic era (Covid-19), where most users and businesses prefer cashless payments that help reduce the physical touch. Priyanka Madan, head of GrabPay Malaysia said that their company gains over 75% of consumers in Asia-Pacific. She noted that e-wallet issuers are in the right direction due to positive acceptance of the cashless environment.

Based on Bank Negara Malaysia (BNM) data, 53 companies have e-money licenses under BNM granted in Figure 1. Of the 53 companies, 47 are non-banks issuers, while six are from the bank issuer. While of the 47 non-banks e-money issuers, only a few of them offer e-wallet services: Boost, GrabPay, Touch n Go e-wallet, Razer pay, WeChat pay, and Big Pay. Based on the data, it is showed there are positive acceptance from the e-wallet users in Malaysia. There

is no issue from the bank issuer in terms of Shariah-compliant as bank institutions already distinguish between conventional and shariah. This situation is different from the non-bank issuers as their conduct is not confirmed to carry out shariah activities. Based on Figure 2 it is showed Islamic Fintech in Malaysia only contributed 3% as the Fintech Player in 2019, whereas 19% donated from the usage of wallets (Fong, 2019).

From the chart, we can conclude that acceptance of e-wallet usage in Malaysia much more significant compared to the Islamic e-wallet. In additions, this percentage showed that awareness of Islamic e-wallet in Malaysia facing a considerable lag. Islamic e-wallet in Malaysia such as Zapp Islamic already been introduced in this country. Unfortunately, Malaysian rarely use it, and some of them do not even know their existences. The introduction of these non-bank Islamic e-wallets is the result of Shariah's concern. The most critical element that has been concern by the users whether their deposit place into the platform used for non-Shariah or Shariah complaint purposes and free from interest, uncertainty, and gambling. Malaysian more prefer TnG e-wallet, Boost, Fave, and other conventional mobile wallets. This application becomes an important platform, especially among the

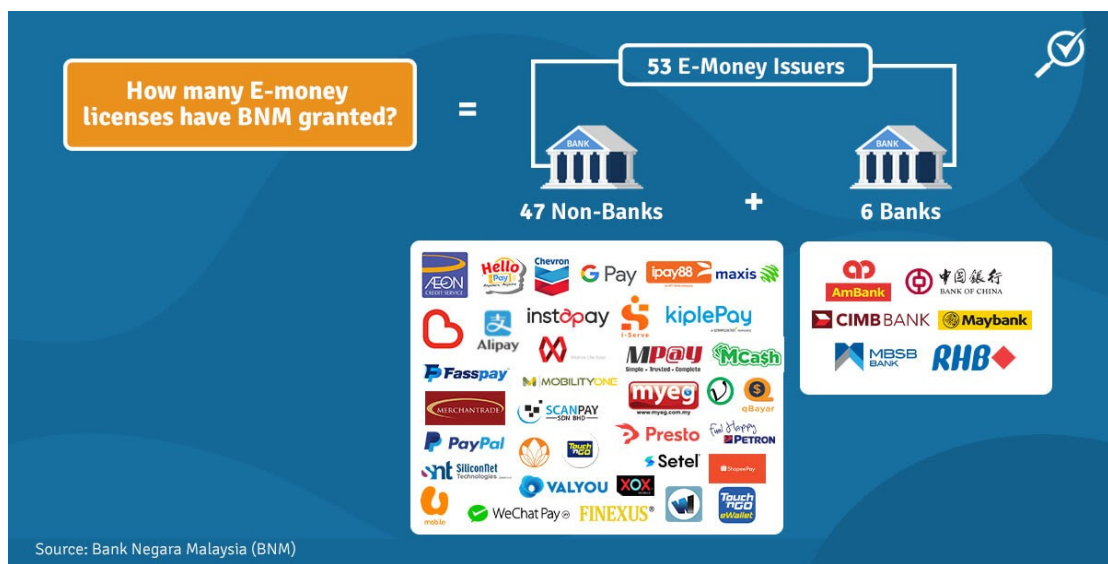


Figure 1. Data of e-money issuers licensed under BNM

millennial and tech-savvy generation. This generation already gets used to the application, and they feel easy to use it. Hence, this generation is the best age range to get the ideas for any improvement for both Islamic and conventional e-wallet. Many improvements need to plan in making sure that Islamic e-wallet compatible with other traditional e-wallets. To get the ideas and plan for improving the critical element is to identify determinants in accepting Islamic e-wallet among the millennials in Malaysia.

Academically speaking, there are some research gaps that need to be addressed in the Islamic Fintech (E-Wallet) intention to use. Currently most of the studies in Islamic Fintech are hovering on the supply-side i.e., regulation, business model, start-ups, success stories, rulings, and innovation. The adoption rate of Islamic digital product among millennials Muslim is reportedly growing but there are quite limited studies on the acceptance and adoption of Islamic Fintech, especially the factors that contribute to the adoption itself. The academic literature shows that the study in Islamic Fintech is slightly left behind in comparison with the industry itself (Oseni and Nazim Ali, 2019). There are several studies in Fintech

such as in Huei, Cheng, Seong, Khin, Raymond and Bin (2018) and Alaeddin, Altounjy, Zainudin & Kamarudin (2018) but limited number of studies in Islamic Fintech.

The thrive of Islamic Fintech in the financial and technology world and the slow-paced research in academic is unparallel and unsynchronized. How would the Islamic Fintech provider ensure that the user adoption is at its highest rate when they did not study the consumer behaviour in the apps? Thus, it is considered imperative to examine the factors that influence the behavioural intention of Islamic Fintech (E-Wallet) among millennials in Malaysia. This paper intends to examine the factors that influence the behavioural intention of Islamic Fintech (E-Wallet) among millennials in Malaysia. This study also aims to examine the instruments measuring the Islamic Fintech (E-Wallet) behavioural intention in Malaysia.

## BREAKDOWN FINTECH PLAYERS IN MALAYSIA

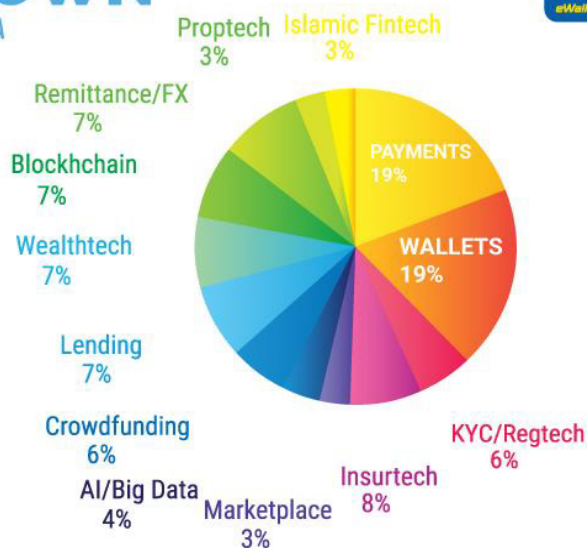


Figure 2. Breakdown Fintech players in Malaysia

## II. Literature Review

### A. Islamic Fintech

Islamic Fintech is a platform that provides services or products that get approval by Shariah Law. In another paper, it is stated that Islamic Fintech is a Fintech platform that provides the demand from Islamic financial institutions and is designed based on the Shariah principles (Rabbani, Khan and Thalassinis, 2020). Six reasons why Malaysia is ready for Islamic Fintech because of financial inclusion because we have a solid IT infrastructure, the penetration rate of mobile phone is high, strong support from the government to gain a digital economy, advanced Islamic finance regulatory architecture, speed of internet usage is high and booming of Islamic finance community. This platform will help Islamic financial institutions boost their business worldwide as it added Shariah value to their services or products. When we look into the difference between conventional Fintech and Islamic Fintech, the primary key point is conventional Fintech is permissible for any financial transaction. In contrast, Islamic Fintech only allowed the Shariah compliance transaction, which is more transparent, free from interest (riba), free from gambling (maysir), must share out with the halal sector and free from gharar (speculative uncertainty). As Islamic Fintech is more transparent than conventional, it helps the Islamic bank free from the global financial crisis (Rabbani, Khan, and Thalassinis, 2020). In adopting Islamic Fintech into society, they face few challenges, such as the lack of experts, government policy, proper ecosystem, lack of awareness among the community, and keeping on track as the conventional platforms. Based on the report from Islamic Fintech Dialogue Series 2020, it is stated that challenges faced by Islamic Fintech in Malaysia are unwillingness to make the change and accept the digital agenda by senior management (Zakat, Waqaf bodies and religious authorities), absence of proper guideline on Islamic Fintech, poor financial and digital literacy among MSMEs and B40s, only focus on Islamic banking instead to balance it with Islamic finance and low

productivity and limited human capital resources. Some of the strengths of Islamic Fintech include giving cost-effective solutions and remaining the financial institution stable by making the institution and investor free from fraud. Islamic Fintech also helps to develop the sustainability of the country's economy to reduce the cost, increase efficiency in the banking system and create various services and products. In addition, sustainable income can gain from Islamic Fintech in the form of transactions in crowdfunding, peer-to-peer lending, and mobile money (Nik Azman, Zabri, Masron and Malim, 2020).

Mobile wallet is the modern payment method, and it is cashless. (Pachpande and Kamble, 2018) stated that cards that work with electronic and used for online transactions through smartphone or computer called e-wallet. They also indicated that e-wallet could act as virtual bank cards, point of sale terminals, a terminal of online banking, and automated teller machines (ATMs) by carrying out the fast transaction and transmission just through smartphone or computer. In another paper, it is stated that an e-wallet is a platform that using an electronic system to perform an online transaction such as bill payment, purchase goods, book a flight ticket, etc. E-wallets need to reload by debiting cash through a bank account or local merchant such as 7-Eleven. The essential features to use an e-wallet are having a smartphone or computer and internet connection through mobile data or wireless fidelity (WiFi). E-wallet usage becomes the financial inclusion as it is an affordable platform, easy to use, and makes the transaction without cash in hand. Non-bank issuers and bank issuers can issue the E-wallet. In Malaysia, for example, the mobile wallet offers by the non-banking issuers are TNG e-wallet and from the banking sector is Maybank e-wallet. The mobile wallet consists of a unique QR code where user can make payment through it. The evolution of technology such as blockchain and artificial intelligence helps the development of e-wallet. With only one touch, the consumers' data can be transferred quickly, and the transaction can happen within a minute. The government supports the development and implementation of e-wallet in Malaysia. Government plays a significant

role to make sure the Malaysian get used to it. With the help from the Security of Commission, the private data and transactions of users can be guaranteed. The benefits that e-wallet provided such as provide flexibility for the user (can use everywhere and anytime), prohibit card thefts, decrease the banking transaction cost, reduce the time consuming to fulfil the customer data through order form and facilitate the cash transaction moving to the digitalization society (Pachpande and Kamble, 2018). Not only that, an e-wallet can reduce the cost of operation in terms of making the banknotes and coins, prohibit money from damage (Kustono, Nanggala and Mas'ud, 2020). Moreover, many applications can be done through e-wallet, such as e-commerce, book a ticket, transfer money, payment of a bill, buy an online movie, etc. The adaption of Islamic e-wallet in Malaysia is left behind than the conventional platform. Due to limited regulations and guidelines from the authority and expert, it becomes harder for the Islamic e-wallet to stabilise Malaysia. Besides, the revolution facing obstacles due to the limited knowledge from many parties. Zapp Islamic is one of the Islamic e-wallets introduced to society, but the awareness about this application is low. The steps to use in Zapp Islamic is the same as the other conventional e-wallet, where it can be used to make a cashless payment, shopping, transfer money and get a voucher for the discount, but they add Shariah-compliant value to the platform.

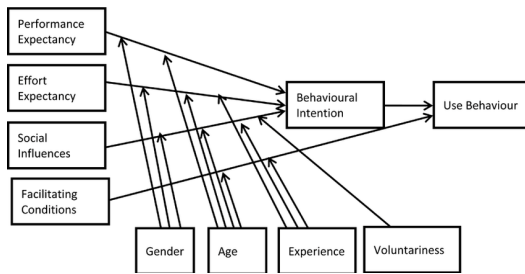
In Malaysia, the acceptance of e-wallet showed positive growth and been accepted by Malaysian based on the survey conducted in 2020. The survey reported that Malaysia is the leading digital and mobile wallet usage compared to other countries in Southeast Asia (Wong, 2020). The adoption of mobile wallet usage also increased due to the Covid-19 pandemic as the Malaysian government implement the Movement Control Order (MCO). Due to this restriction, people tend to use an e-wallet to avoid physical contact and make transactions without cash (Ismail, 2021). The report also stated that users tend to use e-wallet confidently due to the security and can easily track the transactions and benefits from the transactions. There are two concentrated activities based on Malaysian

fintech: wallets and payments (islamicmarket.com, 2021). In term of the Islamic e-wallet, the penetration still far away from the conventional e-wallet. For example, Zakat Kedah still develops a prototype of an e-wallet that can help in Zakat payment (islamicmarket.com, 2021). The focus of the Zakat Kedah e-wallet is it will help the asnaf (someone that eligible to get zakat aid) to use the zakat money in buying necessary things and prohibited cigarettes or illegitimate item. In addition, every transaction from the asnaf can be easily traced by the Zakat Kedah e-wallet. It is showed that the development of e-wallet still at an early stage. Another situation also stated that two of Finterra's products (one of the Islamic Fintech company in Malaysia) facing challenges and restriction from the central bank and capital market regulator purview, which are digital wallets and payment (islamicmarket.com, 2021). Due to limited platform, restriction of regulation, and inappropriately guideline from the authority or policymaker, Islamic e-wallet in Malaysia is still low compared to the conventional e-wallet.

## B. Unified Theory of Acceptance and Use of Technology (UTAUT)

In understanding why people accept and get used to the technology, we have to identify the baseline of acceptance. In financial technology, the baseline is people where they tend to have something that easy and user friendly rather than the traditional way. The second reason, they aware of the reasons for the e-wallet development that has been absorbed into society. With a good understanding and awareness, they tend to measure the quality and quantitative aspects of usage in e-wallet. After they use the technology, the user will figure out the challenges and problems of the usage. Challenges and issues can use as the medium in improving technology.

In this case, we can use the unified theory of acceptance and use of technology (UTAUT) to explain the determinants of usage for e-wallet. The usage of UTAUT is measuring the technology usage intention and behaviour (Garone et al., 2019). This



**Figure 3.** Unified theory of acceptance and use of technology (UTAUT)

model has four critical components which are (i) performance expectancy, (ii) effort expectancy, (iii) social influence, and (iv) facilitating conditions. Whereas gender, age, experience, and voluntariness of use are the moderating variables that support the critical components of usage intention and behaviour. Figure 3 showed the diagram of the Unified theory of acceptance and use of technology (UTAUT).

### 1. Performance expectancy

Performance expectancy can be measured by an individual who believes using technologies can help gain performance and help accomplish a task more efficiently and productive. In another paper, performance expectancy also can be defined as the degree to which an individual believes that adopting the system will assist them in improving job performance (Attuquayefio and Addo, 2015). Performance expectancy also can be stated as the degree to which a person believes that deploying a specific technology will meet the organization’s security access needs in a specific area (Ho, Stephens and Jamieson, 2003). This variable is similar to the perceived usefulness of the technologies, which is the term used by the Technology Acceptance Model (TAM). Performance expectancy is related to the behaviour intention of the e-wallet user where they believe that the use of the e-wallet platform can increase their job performance. With the usage of e-wallet, people can easily make unlimited transactions in every single place and time. Hence, this situation helps users meet and achieve their demands of using the e-wallet through their smartphone. The guarantee

of delivering a positive outcome that aligns with the consumer need will leads individuals in using the system as they believe in the performance. Application quality is associated with the system performance because it acts as the security, availability of the system, speed up the transaction process, system reliability, features that useable, and information quality (Kustono, Nanggala, and Mas’ud, 2020). Therefore, this variable plays a significant role in giving a positive outcome in accepting the technology. Two moderating variables that are related to performance expectancy are gender and age.

From the previous study, factors that influence the consumer to accept the adaption of Islamic Fintech into their daily are consumer innovativeness, subjective norm, self-efficacy, perceived usefulness, and perceived ease of use, stated by (Shaikh et al., 2020). E- wallet gives out higher usefulness than cash payment in terms of paying an actual nominal amount and increasing transaction speed (Kustono, Nanggala and Mas’ud, 2020). Another study among the M40 millennials in Malaysia showed a relationship between the performance expectancy toward behavioural intention in using e-wallet by QR code (Lim, Ahmad and Nizam, 2019). In conclusion, performance expectancy can act as the determinant of accepting the e-wallet among millennials in Malaysia. From the statement, a hypothesis can be proposed:

**H1:** There is a positive relationship between performance expectancy and acceptance of Islamic e-wallet among millennial in Malaysia.

### 2. Effort expectancy

Effort expectancy, also called the ease of use of technologies, is when users believe that the system would free from effort, either physical or mental. (Attuquayefio and Addo, 2015) stated that effort expectancy is a degree of ease with which the system can be used. In another paper, effort expectancy also defined as the amount of work required to use the system, regardless of how simple or complex it is (Catherine et al., 2017). Effort expectancy can be

characterised in term of ease, which is how an individual feels about whether or not they use technology easily and how strong that ease is (Ali and Qaisar, 2018). Effort expectancy connected with e-wallet intention's behaviour as the user feels that system is easy to use. For example, using an e-wallet leads the user to use the technology and tend to repeat it. In this case, repetition of using the e-wallet is the result of effort-free from the user. Some features that might include effort expectancy would be the easy to learn, controllable, understandable and straightforward, skilful and flexible. Three moderating variables that are related the effort expectancy are gender, age, and experience. The more knowledge that the user gain, the more repetition would be of using the e-wallet. From the previous study, the user tends to accept mobile banking usage because of usefulness, easefulness, relative advantage, perceived risk, perceived cost, and perceived interactivity (Jin, Seong and Khin, 2019). A study conducted in Mumbai showed that the user tends to use mobile payment because of satisfaction for the fast transaction, offers and discount, customer service and secure transaction as the response for ease of use (Pachpande and Kamble, 2018). There is a strong relationship between effort expectancy and behavioural intention in using e-wallet transactions by QR code among M40 Malaysian (Lim, Ahmad and Abdul Talib, 2019). Hence, it is clear that the effort expectancy is the determinant of the user accepting the usage of e-wallet. The hypothesis that can be proposed as below:

**H2:** There is a positive relationship between effort expectancy and acceptance of Islamic e- wallet among millennial in Malaysia

### 3. Social influences

The degree to which an individual believes essential others feel they should use the new method is referred to as social influences (MB.Alazzam, 2015). People are led to use the technology by behavioural intention were influenced the attitude as the general. This can be explained in terms of social factors in which the

user perceives that social relationship like family, friends, and subordinates affect their belief in using the e-wallet (Lim, Ahmad, and Abdul Talib, 2019). Social influence also can be defined as the primary motivator for the individual to adopt new technology (Kowang et al., 2020). In another paper, social influence defined as an individual's perception of importance that others believe they must use a new system (Brata and Amalia, 2018). Others can easily influence the Islamic e-wallet in adopting the Islamic e-wallet in their daily life can be defined as the social influence. Moderating variables that are related to the social influences are gender, age, experience, and voluntariness.

From the previous study, behavioural intention in using e-wallet transactions via QR code showed a positive relationship with the social influence (Lim, Ahmad and Nizam, 2019). Besides that, a survey among undergraduate students in UTAR Kampar showed a significant and positive relationship between the social influence and the adoption of an e- wallet (Yong Xian et al., 2018) The hypotheses that can be concluded:

**H3:** There is a positive relationship between social influence and acceptance of Islamic e-wallet among millennial in Malaysia

### 4. Facilitating conditions

The usage of behaviour can be explained by the facilitating conditions, where the technical and organisational infrastructure needed to support the technologies exist (Venkatesh, Brown, Maruping and Bala, 2008). The level that individual believes the existence of the structural and technical infrastructure help in support the system. Facilitating conditions also can be characterised as the degree to which an individual believes that an organisational and technological infrastructure exists to facilitate the use of the technology (Attuquayefio and Addo, 2015). On the other hand, it can also be defined as the moderator that can influence system usage (Chawla and Joshi, 2019). Moderating variables that are related to the social influences are age and experience. With



the excellent infrastructure that can support the usage of the e-wallet, facilitating condition can be the factor that affecting the behaviour intention.

From the previous study, it is reported facilitating condition has a positive relationship with using an e-wallet (Lim, Ahmad and Nizam, 2019). A survey of the adoption of digital wallets in Indonesia showed that facilitating conditions significantly influence the behavioural intention in using e-wallet in that country (Widodo, Irawan and Ambarwati Sukmono, 2019) Not only that, but a study on e-wallet acceptance among undergraduates also showed the strong relationship between facilitating conditions to use the platform (Kowang et al., 2020) .The adoption of mobile wallets in India also reported facilitating conditions showed a strong relationship with the usage of an e-wallet (Chawla and Joshi, 2019). Based on the statement above, the following hypothesis is formed:

**H4:** There is a positive relationship between facilitating conditions and acceptance of Islamic e-wallet among millennial in Malaysia

#### 5. *Shariah compliant*

The act that followed the Shariah requirement or Islamic law is called the Shariah- compliant (CIMB SG, n.d.). In terms of money transactions, the activity or the rolling of a fund by the e-wallet provider must free from interest, uncertainty, and gambling as follow the Shariah law. One of the vital element in the Shariah complaint is the transaction is must free from gharar. In Shariah's point of view, it is stated that gharar is a fraud related to uncertainty and risk (Amboala et al., 2015). To avoid gharar, both buyers and sellers must have sufficient knowledge about the values they wish to exchange, including the existence of the object (good or service), its availability, quantity, quality, and attributes, and the ability to provide it. Another component that must avoid in Shariah complaint is the riba. The excess, whether in the exchange of a tangible commodity or in the exchange of money, such as when one dinar is exchanged for two dinars, is referred to as riba. Riba is committed when more of

one commodity is exchanged for the same commodity in a barter deal, exchanging commodities for goods. (Marzuki and Nurdin, 2020). Shariah compliance is essential to protecting the five fundamentals component of human life. The five fundamental components of human life are guarded by Islamic jurisprudence (Maqasid Shariah): religion (hifz ad-din), life (hifz an-nafs), mind (hifz al-'aql), children (hifz an-nasl), and money (hifz al-mal) (al-Syatibi 2004).

To ensure that the activity fulfils the requirement, the contracting parties must identify the type of aqad apply to the contract. Dr Azrul Azhan Iskandar Mirza from Universiti Sains Islam Malaysia stated that the e-wallet from the local provider still in the bounds of the shariah principle as BNM know the companies and banks which are permissible in handling the e-money. The use of an e-wallet is following fiqh legal principles. "The norm of something is permissibility," or "al-al fi alashya al-ibah" which means that the genesis of any matter is permissible (Razali, 'Ain, Hadigunawan and Saidon, 2021). But there is a minor concern based on the promotion offered by the issuer in terms of uncertainty.

Based on the previous study, a preliminary analysis from the shariah perspective in the application in e-wallet is suggest to focus on the fiqh adaptation. The result from this discussion showed that it is crucial to find out whether e-wallet issuers follow the Shariah principles or not following Shariah requirement. Another study on the development method for shariah-compliant in e-commerce payment stated that it needs to have the third party called Intermediate Shariah Transaction Party (ISTP) to prove Shariah transaction between user and e-wallet issuer (Amboala et al., 2015). Besides, a study on using the Shariah Fintech stated that the user willing to spend more money and effort to avoid the non-Shariah transaction. (Marzuki and Nurdin, 2020). Therefore, based on the previous study, we can make the hypothesis as shown:

**H5:** There is a positive relationship between Shariah compliance and acceptance of Islamic e-wallet among millennial in Malaysia

### III. Methodology

This study has adapted instruments developed by previous researchers and some of the items were modified to suit current study setting. In this case, the behavioural intention of UTAUT into the Islamic Fintech adoption among millennials in Malaysia is considered new as UTAUT has been tested in other countries and in other financial technologies such as internet banking or mobile banking.

In the pre-testing stage, the researcher needs to assess the modified items for content validity, face validity and criterion validity. The content validity should be assessed by the content experts such as academicians and the practitioners in the field, the face validity assessment should be carried out by the language expert especially if the items were translated into other language. The criterion validity or sometimes called measurement validity should be carried out by the statisticians who would verify if the scales used to measure data meet the requirement for the statistical analysis to be employed for hypothesis testing.

Once the pre-testing stage is completed, the researcher shall amend the items accordingly based on the comments by the experts and response by the respondents.

#### A. Data Collection Procedure

Exploratory factor analysis (EFA) will be used in this paper by performing extraction and rotation to get the factor loading that related to the questionnaire. EFA will helps in explaining the exploratory research. The result from the multi regression analysis will help explain which variable gives the most significant value in determining the acceptable usage of Islamic e-wallet among the millennial group in Malaysia.

The quantitative method will be performed, where primary data will get from feedback from the millennials group in Malaysia. From the data, an analysis process will be conducted to study the relationship between variables. This process is performed to validate the

model and finding the reliability of the measurement. At this stage, we distributed 384 questionnaires to the respondents. Finally, the result will be illustrated by using a table, chart or graphs.

The sampling procedure in this study is the multistage clustered sampling. This is because cluster sampling is effective when the population is dispersed widely and almost impractical to select a representative for the final sampling. The other advantage of multistage clustered sampling is it assures the representation of all groups in the target population. The characteristics of each stratum can be estimated. The variability of the data can be reduced compared to systematic sampling. However, the cost involved in doing stratified sampling is very expensive. Hence, this study uses multistage clustered sampling to ensure representativeness.

The authors use data from the Department of Standard Malaysia (DSM) and Malaysian Communications and Multimedia Commission (MCMC) to determine the target population and sampling. The report from MCMC (2018) stated that the percentage of internet users in Malaysia in the year 2018 is 87.4 percent. From this figure, 9 out of 10 person uses a smart phone to access the Internet. More than half of the users use mobile phones to conduct financial transaction (54.2 percent).

An MCMC report has confirm the discussion by academicians and practitioners in Fintech industry, that millennials are the majority users of the internet. The 20's make up 30 percent of the Internet users, while 30's make up around 25.9 percent. Thus, they became the target population of the study. However, the number of millennials in the urban central region in Malaysia is publicly unavailable. Thus, the sampling representativeness is needed. Based on the report by MCMC (2017), the central region comprising of Negeri Sembilan, Selangor, Federal Territory of Kuala Lumpur and Federal Territory of Putrajaya has the highest internet users (37.3 percent), followed by Sabah, Sarawak and Federal Territory of Labuan (18.1 percent), northern region (17.8 percent) comprising Kedah, Perak, Perlis and Pulau Pinang, while the southern parts comprising states of Johor and Melaka (14.5 percent) and the east coast (Kelantan, Pahang

and Terengganu) which make up around 12.3 percent of internet users. For the first stage of clustered sampling, the millennials from the central region will be chosen. For the second stage of clustered sampling, millennials in the urban areas of the central region will be used as the final sample. This is based on the report by MCMC (2018) and DSM (2019) that stated that urban population make up around 70 percent of internet users. The urban areas as stated are based on the density of the population of the metropolitan area of Greater Kuala Lumpur (Klang Valley). The

sampling and the population are homogenous. The data is collected from respondents at these major urban areas in the central region of Malaysia.

## B. Scale Development

The questionnaire is adapted from Venkatesh, et al. (2003) in Table 1. The items make up the dimensions in UTAUT and few items were added according to the suggestions from the expert.

**Table 1.** Operation Instrument

	<b>Performance Expectancy</b>	<b>Source(s):</b>
PE01	I believe using Islamic e- wallet would improve my efficiency of online transactions	(Chawla and Joshi,2019)
PE02	I find Islamic e-wallet useful in my daily life	(Widodo, Irawan and Ambarwati Sukmono, 2019)
PE03	Using an Islamic e-wallet makes a payment transaction faster	
PE04	Using an Islamic e-wallet increase my productivity	
<b>Effort Expectancy</b>		
EE01	I like the fact that payments done through Islamic e-wallet require minimum effort	(Chawla and Joshi, 2019)
EE02	I find it easy to learn how to use an Islamic e-wallet	(Widodo, Irawan and Ambarwati Sukmono, 2019)
EE03	I feel the Islamic e-wallet is user-friendly	
EE04	I feel the Islamic e-wallet user interface is easy to understand	
<b>Social Influence (SI)</b>		
SI01	People who influence my behaviour think that I should use Islamic e-wallet	(Yong Xian et al., 2018)
SI02	My friends think that I should use Islamic e-wallet	
SI03	Using mobile payment is considered a status symbol among my friends	
SI04	People who are important to me suggest that I have to use an Islamic e-wallet	(Widodo, Irawan and Ambarwati Sukmono, 2019)
<b>Facilitating Condition</b>		
FC01	I have the facilities needed to use an Islamic e-wallet	(Widodo, Irawan and Ambarwati Sukmono, 2019)
FC02	I have the knowledge needed to adopt an Islamic e-wallet	
FC03	The technology I use is compatible with the Islamic e-wallet	
FC04	I can obtain other’s assistance when I encounter issued in using an Islamic e-wallet	
<b>Shariah complaint</b>		
SC1	I believe Islamic e-wallet free of gambling	Adapted from (Marzuki and Nurdin,2020)
SC2	The Islamic e-wallet issuers are not involved in non-halal funding	
SC3	Islamic e-wallet is provided according to Islamic Shariah	
SC4	Always ensure that Islamic e-wallet that I use through halal process	
<b>Behavioural Intention</b>		
BI01	I prefer to use Islamic ewallet even though the brand is not popular	Adapted from (Marzuki and Nurdin,2020)
BI02	I will recommend my friends to use Islamic ewallet	
BI03	I will consistently make transaction with Islamic ewallet	
BI04	I believe using Islamic e-wallet is interesting	(Yong Xian et al., 2018)

### C. Exploratory Factor Analysis (EFA)

Exploratory factor analysis (EFA) is a multivariate statistical method that develops and validates psychological theories and measurement (Watkins, 2018). In addition, EFA is a technique for determining the number of latent constructs and the underlying factor structure of a set of variables (D.Suhr, 2006). It also will explain the relationship between the variable and the respondent. This factor analysis uses statistical techniques that reduce the extensive data into a smaller set of summary variables. The summary variable next will be used to explain the fundamental theoretical structure of the situation. This procedure will compute factor loading for every item and Total Variance Explained.

The steps in this procedure are (i) initial extraction, (ii) determine the number of factors to retain, (iii) rotation, interpret solution, (iv) calculate factor scores, (v) result in table form and (vi) prepare the final result. In the initial extraction, factors are uncorrelated, and eigenvalues denote the amount of variation accounted for by each component that has not previously been accounted for by the other factors. The second step will be a scree test to look for the elbow, percentage of variance and communality. Interpretability result will also be in the second steps were a minimum of three observed variables per significant element, ordinary conceptual meaning, various constructs are measured, and the structure of the rotational factor pattern is straightforward (no cross-loadings). The third step will be a rotation where the factor loadings will be transformed. The fourth step will be an explanation of the solution and followed by the factor scores calculation. The summary of the final result will be tabulated (D.Suhr, 2006).

Few data will be the focus on the EFA, which are (i) correlation matrix should be greater than Hair et al., 2010), (ii) Bartlett's (Bartlett, 1954) must be statistically significant chi-square value, and (iii) The Kaiser-Meyer-Olkin (KMO; Kaiser, 1958) must exceed 0.70 to be accepted. The biggest loadings can be used to identify factors, but it is also vital to look at the zero and low loadings to check that the factors have been found (Gorsuch, 1983).

### D. Multiple Regression Analysis

The factors that used in this study are performance expectancy, effort expectancy, social influence, facilitating condition and Shariah compliance. Multiple regression analysis will be used in this study to determine the impact of those factors (Yong Xian et al., 2018). In addition, multiple regression will help to measure how strong the significant rate between the independent and dependent variables (Tan, Purba and Widjaya, 2019). There are eight assumptions in the multiple regression analysis which are (i) continuous scale will be measure for the dependent variable, (ii) independent variables must two or more that can be categories either categorical or continuous (iii) independence of observation must Durbin- Watson friendly, (iv) it is a must to have the linear relationship between the independent and dependent variable, (v) homoscedasticity data, (vi) multicollinearity must not occur, (vii) significant outlier must no exist and (viii) normally distributed for the residual Laerdstatistics, 2018).

## IV. Findings

### A. Factor analysis using the Exploratory Factor Analysis (EFA)

Based on Table 2, it is showed that the value of the KMO for the determinant of Islamic e-wallet acceptance was 0.953 (marvellous), which greater compared to the threshold value of 0.5 (Kline, 2014; Tabachnick, Fidell and Ullman, 2007; Hair et al., 2010; George & Mallery, 2001). While Bartlett's

**Table 2.** Summary of KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.953
Bartlett's Test of Sphericity	Approx. Chi-Square	5335.954
	df	190
	Sig.	.000

Test of Sphericity indicates significance as the value of the Chi-square + 5335.954 and its p-valued equal to 0.000 as followed the indicator that it must less than 0.05. The result of KMO valued near 1.0, and Barlett’s Test of Sphericity less than 0.05. Hence with the result, it can be said that the determinant of Islamic e-wallet acceptance construct with 24 items is adequate and factorable in proceeding with factor analysis. The correlation matrix is performed among the items to assess the construct exhibited any coefficients of 0.40 and above.

The result of EFA using the Principal component analysis (PCA) method with Varimax rotation for 24 items is presented in Table 3. The result indicates that three components with eigenvalue exceeding the score of 1.0 were extracted by the PCA procedure. The total variance explained for both components to be 64.53%. where Component 1 given 51.20%, Component 2 given 56.62%, Component 3 resulted 60.10%, Component 4 given 62.52% and Component 5 given 64.53%.

Figure 4 below presented the scree plot for the determinant of Islamic e-wallet acceptance had sorted the 24 items into five components. The examination of the scree plot shows an obvious point of inflation after the third factor. The cut-off will be after the eigenvalue of 1.

Table 4 presented the five components with the corresponding elements result from the corresponding elements endure. The rotated component matrix is used to understand the result of the analysis. The

cut-off of the factor loading must exceed 0.60 (Bahkia et al., 2019; Yahaya, Idris, Suandi and Ismail, 2018). Another paper also stated that the factor loading that is more significant than 0.50 should be retained (Afthanorhan, 2013). To be considered significant, your variable should have a rotated factor loading of at least |0.4| (meaning +.4 or -.4) onto one of the factors (Rahn, n.d.). From the result, EE1 should be eliminated from the model as the loading factor only score 0.230, which is less than 0.40. It is indicated that the variables of EE1 is less important and contribute to the model.

Table 4 below shows that SI2 (My friends think that I should use an Islamic e- wallet) has the highest loading factor with 0.809. The lowest loading factor goes to the (Using mobile payment is considered a status symbol among my friends) with the loading factor of 0.433. It also stated that SC1 (0.660), SC2 (0.733), SC3 (0.759) and SC4(0.722) have large

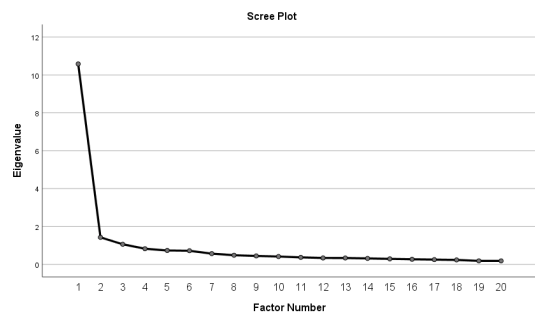


Figure 4. Scree plot with the rotation of three components

Table 3. The Total variance explained summary

Factor	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.581	52.903	52.903	10.241	51.204	51.204	3.068	15.342	15.342
2	1.426	7.129	60.032	1.084	5.419	56.623	2.880	14.402	29.744
3	1.059	5.297	65.328	0.696	3.481	60.104	2.836	14.178	43.922
4	0.825	4.123	69.451	0.485	2.423	62.527	2.277	11.383	55.305
5	0.733	3.665	73.116	0.401	2.004	64.531	1.845	9.226	64.531

Extraction Method: Principal Axis Factoring.

positive loadings on factor 1. Whereas for factor 2, the variables that have the large positive loadings are SI1(0.609), SI2 (0.792), SI3(0.433) and SI4(0.688). In addition, the result of PE1(0.550), PE2(0.704), PE3 (0.582) and PE4(0.545) have large positive loadings towards factor 3. While for the factor 4, the variables that have large positive loadings are FC1(0.490), FC2(0.538), FC3(0.616) and FC4(0.505). Finally for the factor 5, the variable are EE2 (0.572), EE3(0.728) and EE4(0.524). The summary of the result is shown below.

To check the internal reliability of the five new variables, Cronbach’s alpha is once again performed. The value of Cronbach’s alpha must be more significant than 0.7 to achieve high internal reliability. Based on Table 5, it is shown that all the new components achieved the range of reliability based on Cronbach’s alpha. The result showed that the capacity of Cronbach’s alpha is between 0.897 and 0.837.

## B. Multiple Regression Analysis

In measuring the significant rate between the independent and dependent variables, the writer will analyse based on the  $R^2$ . From the Table 6 of the modal summary, the result of the  $R^2$  is 0.702 that suggested that 70.2% of the independent variables (performance expectancy, effort expectant, social influence, facilitating condition and shariah complaint) able to

**Table 5.** The internal reliability check for five new components

Variables	Cronbach's Alpha	Number of items
Component 1	0.882	4
Component 2	0.837	4
Component 3	0.839	4
Component 4	0.868	4
Component 5	0.897	3

**Table 4.** The five components with their items Rotated Component Matrix<sup>a</sup>

		1	2	3	4	5
I believe using Islamic e-wallet would improve my efficiency of online transactions	PE1			0.550		
I find Islamic e-wallet useful in my daily life	PE2			0.704		
Using an Islamic e-wallet makes a payment transaction faster	PE3			0.582		
Using an Islamic e-wallet increase my productivity	PE4			0.545		
I like the fact that payments done through Islamic e-wallet require minimum effort	EE1					0.230
I find it easy to learn how to use an Islamic e-wallet	EE2					0.572
I feel the Islamic e-wallet is user-friendly	EE3					0.728
I feel the Islamic e-wallet user interface is easy to understand	EE4					0.524
People who influence my behaviour think that I should use Islamic e-wallet	SI1		0.609			
My friends think that I should use Islamic e-wallet	SI2		0.792			
Using mobile payment is considered a status symbol among my friends	SI3		0.433			
People who are important to me suggest that I have to use an Islamic e-wallet	SI4		0.688			
I have the facilities needed to use an Islamic e-wallet	FC1				0.490	
I have the knowledge needed to adopt an Islamic e-wallet	FC2				0.538	
The technology I use is compatible with the Islamic e-wallet	FC3				0.616	
I can obtain other’s assistance when I encounter issued in using an Islamic e-wallet	FC4				0.505	
I believe Islamic e-wallet free of gambling	SC1	0.660				
The Islamic e-wallet issuers are not involved in non-halal funding	SC2	0.733				
Islamic e-wallet is provided according to Islamic Shariah	SC3	0.759				
Always ensure that Islamic e-wallet that I use through halal process	SC4	0.722				

Extraction Method: Principal Axis Factoring.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 7 iterations.

give reflection to the dependent variable (acceptance of Islamic e-wallet usage).

From Table 7 Anova below, it is indicated, and proof that the modal is fit as the p-value showed the value of 0.000. In addition, it also meant that only one independent variable could give a result to the dependent variable.

Based on the Table 8 result below, the VIF is shown that four independent variables showed positive significance toward the determinant of Islamic e-wallet acceptance usage as the result of a p-value less than 0.05. Whereas, only one independent variable is not significant as the p valued more than 0.05. Facilitating condition get the lowest  $\beta = 0.090$ , whereas the highest beta belongs to Shariah compliance with the  $\beta =$

0.333. While for the social influence gain = 0.285, followed by performance expectancy with  $\beta = 0.162$  and finally effort expectancy with  $\beta = 0.117$ . In checking the multicollinearity, collinearity statistics must perform. If the Variance Inflation Factor (VIF) value is greater than 10, it is showed the model has multicollinearity. Based on the result below, the VIF is in the range between 1.858 and 3.549 that less than ten and it is acceptable.

### C. Hypothesis Testing Summary

The hypothesis will be accepted if the value of  $p < 0.05$  and rejected if  $p > 0.05$ . Based on the result given, the hypothesis of personal expectancy, effort expectancy, social influence, and shariah compliance will be accepted. Whereas the writer will reject the idea and facilitating conditions. The summary of the hypothesis is presented below in Table 9.

**Table 6.** Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838a	.702	.698	.42063

a. Predictors: (Constant), Shariah, Social, Performance, Facilitating, Effort

**Table 7.** ANOVA Table

ANOVA <sup>a</sup>						
Mode		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	157.244	5	31.449	177.750	.000b
	Residual	66.878	378	.177		
	Total	224.122	383			

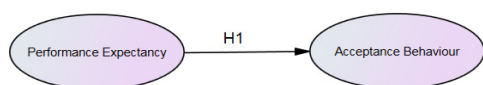
**Table 8.** Coefficient table

Coefficients <sup>a</sup>							
B	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.037	.131		.283	.777	
	PE	.171	.050	.162	3.382	.001	.345
	EE	.121	.054	.117	2.215	.027	.282
	SI	.280	.043	.285	6.545	.000	.415
	FC	.090	.050	.090	1.803	.072	.319
	SC	.340	.039	.333	8.694	.000	.538

Dependent Variable: Acceptance  
Predictors: (Constant), Shariah, Social, Performance, Facilitating, Effort

**Table 9.** Summary of hypothesis test

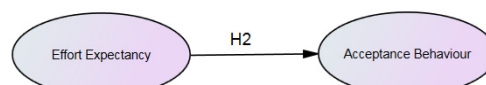
Hypothesis	Coefficient of correlation (r)	p-valued	Result
There is a positive relationship between performance expectancy and acceptance of Islamic e-wallet among millennial in Malaysia	0.699	0.001	Accepted
There is a positive relationship between effort expectancy and acceptance of Islamic e-wallet among millennial in Malaysia	0.721	0.027	Accepted
There is a positive relationship between social influence and acceptance of Islamic e-wallet among millennial in Malaysia	0.711	0.000	Accepted
There is a positive relationship between facilitating condition and acceptance of Islamic e-wallet among millennial in Malaysia	0.706	0.072	Rejected
There is a positive relationship between Shariah complaint and acceptance of Islamic e-wallet among millennial in Malaysia	0.713	0.000	Accepted



**Figure 5.** Performance expectancy

**H<sub>1</sub>:** There is a positive relationship between performance expectancy and acceptance of Islamic e-wallet among millennial in Malaysia

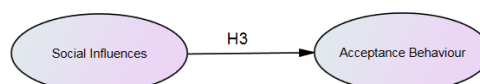
The result in Figure 5 proved a positive relationship between performance expectancy and the acceptance of Islamic e-wallet among millennials in Malaysia. This result is similar to the previous study by (Shaikh et al., 2020; Kustono, Nanggala, and Mas'ud, 2020; Lim, Ahmad and Nizam, 2019). Furthermore, it is showed that performance expectancy would make the user of Islamic e-wallet feel easy to use the platform, accomplish the transaction more efficiently, and gain the confidence to use the platform with security and reliability. Furthermore, the performance of the Islamic e-wallet can be increase by using advanced technology such as big data, IoT, and artificial intelligence.



**Figure 6.** Effort expectancy

**H<sub>2</sub>:** There is a positive relationship between effort expectancy and acceptance of Islamic e-wallet among millennial in Malaysia

The result in Figure 6 demonstrated that effort expectancy influenced the acceptance of Islamic e-wallet among millennials in Malaysia. The result is aligned with the previous study conducted to study the relationship between effort expectancy and e-wallet acceptance (Jin, Seong, and Khin, 2019; Pachpande and Kamble, 2018; (Lim, Ahmad, and Abdul Talib, 2019). Effort expectancy will help the users repeat the platform's usage as it is easy to learn, use, understand, straightforward, and flexible. Another factor that influenced the effort expectancy in Figure 7 might be the promotion, the fast system, security, and good customer service of the platform.

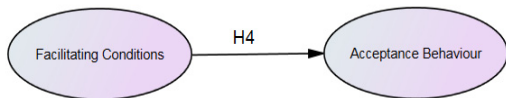


**Figure 7.** Social influence



**H<sub>3</sub>:** There is a positive relationship between social influence and acceptance of Islamic e-wallet among millennial in Malaysia

The result manifested that social influence can affect the acceptance of Islamic e-wallet. It is oriented with the earlier study by (Lim, Ahmad and Nizam, 2019; Yong Xian et al., 2018). In terms of social influence, the user believed that close friends, subordinates, and family would tend to make them use the Islamic e-wallet platform. Most of the users will tend and attract to used some platform if they foresee they influencers use it quickly and flexibly.

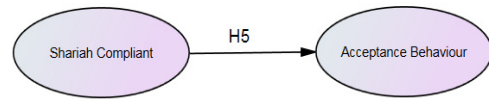


**Figure 8.** Facilitating conditions

**H<sub>4</sub>:** There is a positive relationship between facilitating conditions and acceptance of Islamic e-wallet among millennial in Malaysia.

The result indicated that Figure 8 facilitating conditions would not affect the acceptance of Islamic e-wallet. This condition is not aligned with the earlier study by (Lim, Ahmad and Nizam, 2019; Widodo, Irawan and Ambarwati Sukmono, 2019; Tan et al., 2020; Chawla and Joshi, 2019). This situation is contradicted because the Islamic e-wallet in Malaysia is still limited;

hence there is no enough infrastructure, support, and knowledge to use the platform.



**Figure 9.** Shariah-compliant

**H<sub>5</sub>:** There is a positive relationship between Shariah compliance and acceptance of Islamic e-wallet among millennial in Malaysia

The result in Figure 9 has proven that Shariah-compliant will highly affect the acceptance of Islamic e-wallet, and this is parallel to the previous study by (Studies 2020; Amboala et al., 2015; Marzuki and Nurdin, 2020). As Islamic e-wallet is a shariah platform that contradicts the conventional platform, Shariah's complaint requirement is essential and a must for building up the platform. In addition, with a tight protocol from the Shariah side, it will gain the confidence from the users as it is free from interest, uncertainty, and gambling as follow the Shariah law.

**Table 10.** Model.

Regression Weights: (Group number 1 - Default model)	Estimate	S.E.	C.R.	P	Result
Acceptance Behaviour ← Performance Expectancy	1				
Acceptance Behaviour ← Eeffort Expectancy	-0.439	0.105	-4.178	***	Significant
Acceptance Behaviour ← Social Influence	0.463	0.084	5.482	***	Significant
Acceptance Behaviour ← Facilitating Conditions	-0.316	0.131	-2.412	0.016	
Acceptance Behaviour ← Sharia Compliant	0.348	0.066	5.292	***	Significant

Note: \*\*\* indicates a p-value of 0.001

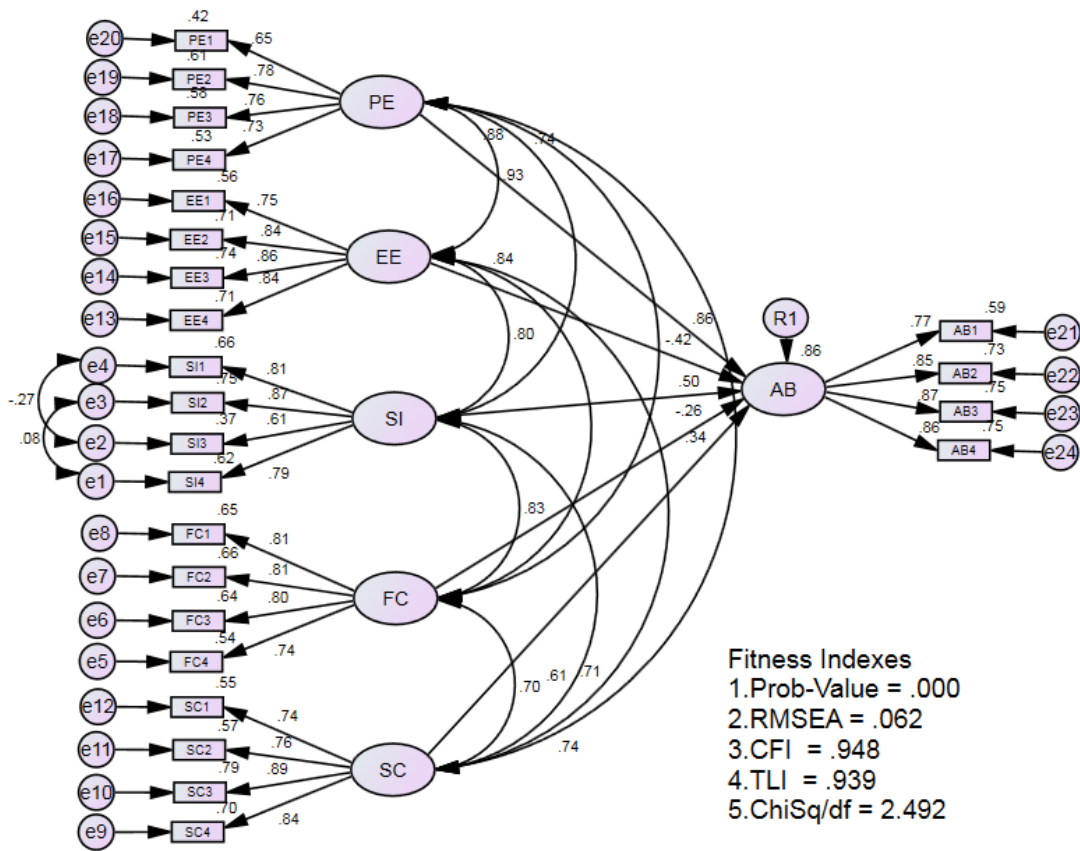


Figure 10. Structural Models

## V. Discussion and Conclusion

This paper attempts to validate the measurement of the behavioural intention of Islamic Fintech among millennials in Malaysia. The use of UTAUT as the theoretical framework to measure the behavioural intention and user adoption is considered appropriate due to its quality. UTAUT have six constructs namely, performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating conditions (FC), Shariah Compliant (SC) and behavioural intention (BI).

Exploratory factor analysis (EFA) is performed to find the underlying relationship between the independent and dependent variables of the Islamic

e-wallet acceptance. Few steps have been undergone to see the final result of EFA, such as rotation and internal reliability. Instead, the loading factor will be the focus to determine which factor most influences each variables. Based on the summary, it is shown that component 1 is focusing on the Shariah complaint. Whereas component 2 indicate the social influence. In addition, component 3 more focused on the performance expectancy. Finally, facilitating conditions is the focus of component 4 and component 5 is the effort expectancy.

In terms of the Shariah complaint, component SC3 (Islamic e-wallet is provided according to Islamic Shariah) strongly influences the variable as it is close to 1. Whereas, for the social influence, the user tends to use the Islamic e-wallet as their friend belief that

they should use the Islamic e-wallet platform (SI2). For the performance expectancy, the component of PE2 (I find Islamic e-wallet useful in my daily life) has a substantial impact on the acceptance of Islamic e-wallet as it has the highest loading score compared to other variables in PE. For the facilitating condition, the user slightly believe they have the technology I use is compatible with the Islamic e-wallet (FC3) as the loading factor score in the middle range. Finally, for the effort expectancy, users strongly believe that Islamic e-wallet is user-friendly (EE3) affect their behaviour intention.

Shariah's complaint is the most significant determinant for Islamic e-wallet acceptance. Without the Shariah complaint variable in an Islamic e-wallet platform, it will be the same platform as the conventional platform such as TnG, Boost, etc. In term of social influence, most of the user tends to quickly get impact by others to using some platform such as mobile application. E-wallet is an important and a must for daily usage, especially during the pandemic era where people tend to avoid physical touch, and an e-wallet platform is the best method for this problem. Whereas, for the performance expectancy, users need a platform that helps them make the transaction easier and faster. A good performance of a platform will create loyalty from the user and gain the new potential user, which relates to the previous variable, social influence. In terms of effort expectancy, users tend to keep repeating to use the platform as they feel secure, easy to understand the overall usage and techniques of the platform, and they can make use of the platform every time and every place. Finally, the facilitating conditions get the minor beta as the Islamic e-wallet in Malaysia is far behind the conventional one.

## VI. Conclusion

The study explores the factors that influence the behavioural intention of Islamic Fintech (E-Wallet) adoption, and for this study, the UTAUT model is

chosen as the theoretical framework to predict the behavioural intention. The measurement is adopted into this study; hence the measurement and regression modelling is a necessity.

This study is considered significant because of the urgency in the field itself. The Islamic Fintech is somehow hovering in the supply-side and starts ups but very limited in the demand-side, i.e., consumer. The importance to study from the perspective of the consumer is vital as the Fintech starts-up need recognition not only from the government but also penetration to the mass market. It is imperative too due to importance of Islamic digital economy initiative by the government of Malaysia, thus this study is hoped to be a steppingstone to predict the consumer behaviour in the Islamic Fintech. The implication of Islamic Fintech in digital economy is touching the micro and macro level. This is because financial transaction affects all sectors in the digital economy be it fashion, entertainment, travel, food and beverage, cosmetics, pharmaceuticals and many more. The digitalization in Islamic finance via Islamic Fintech comes at the right time where it is not only celebrated as part of technology revolution in Industrial Revolution 4.0 (IR 4.0), but also a part of financial inclusion. In Malaysia, digitalization of Islamic finance is part of the strategic plan to achieve financial inclusion by Bank Negara Malaysia's Financial Sector Blueprint where the innovative products and services via technology-based channel is being leveraged (BNM, 2020). This proves that Islamic Fintech (E-Wallet) touches most of the sectors in economy as a whole.

The consumer behaviour in technology use is important to know the preferences and usage of a certain technology to make sure the study is significant. This also ensures that Islamic Fintech is not left behind in the market share compared with other Fintech products and services. Although Fintech products and services is widely welcomed, the adoption behaviour study is necessary to understand users and consumers intention and usage of using the Islamic Fintech products and services. This is because of the liberalisation of Fintech product and services due to leniency in regulatory framework, making it vulnerable to free

entry and exit in the market, thus, to study the adoption of Islamic Fintech is considered vital.

The future direction of this study will include demographical factors such as gender, age, income and education background as moderators. Some studies include demographic variables in Fintech studies such as in Mendez, Parasuraman, and Papadopoulos (2015) in technology readiness and assessing the moderating effect of gender in technology and also in recent studies in Fintech focusing on millennials as their respondents such as studies by Niswah et al., (2019) and Velasco (2020). Thus, demographical factors are considered weighty for further research in Islamic Fintech.

## Acknowledgement

To complete this paper, the authors would like to thank Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia.

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