

Applying the UTAUT Model to ZIS Digital Payments: Insights from Southeast Asia

Wa Ode Rayyani*
Universitas Muhammadiyah Makassar

Azizah Saban
Manipal International University

Muchriana Muchran
Universitas Muhammadiyah Makassar

Zalkha Soraya
Universitas Muhammadiyah Makassar

Aviana Sari
Universitas Muhammadiyah Makassar

Nur Insani
Universitas Muhammadiyah Makassar

— *Review of* —
**Integrative
Business &
Economics**
— *Research* —

ABSTRACT

This research aims to identify and confirm the determinants of ZIS (Zakat, Infaq, Sadaqah) digital payments using the Unified Theory of Acceptance and Use of Technology model. The objective is to enhance the comprehension of the factors influencing ZIS digital payments and provide recommendations for ZIS management institutions to enhance their performance through the utilization of digital technology. Data for the study were gathered from individuals who made ZIS payments through digital channels, employing a structured questionnaire during a four-week period in early September 2023. The SMARTPLS Structural Equation Modeling approach was employed to analyze the collected data. The research findings indicate that the UTAUT model significantly influences the intention to use ZIS digital payments. Moreover, the intention to use variable significantly affects the intention to recommend ZIS digital payments. The examination of moderating variables reveals that some variables do not significantly moderate the relationship, with nine showing insignificant results and two exhibiting significant results. In summary, this research contributes significantly to elucidating the factors shaping the adoption of ZIS digital payments. The practical recommendations offered can guide ZIS institutions in enhancing their technological utilization. Furthermore, this study advances our theoretical understanding of technology adoption within religious and social contexts.

Keywords: digital payment, ZIS, Southeast Asia, UTAUT.

Received 29 April 2023 | Revised 16 November 2023 | Accepted 10 January 2024.

1. INTRODUCTION

The use of digital payment systems has experienced significant growth worldwide, changing

the way individuals and businesses conduct financial transactions. One important sector where digital payment solutions are increasingly in demand is in the payment of '*Zakat, Infaq and Sadaqah*' (hereinafter abbreviated as ZIS). ZIS has a crucial role in supporting various charitable and community development initiatives. Therefore, it is important to consider the potential integration of digital payment technologies into this traditional framework (Oktavendi and Mu'ammal, 2022).

Indonesia is a country with a majority Muslim population, reaching 241.7 million people or around 87.02% of the total population. With this very large number of Muslims, the potential for *zakat* funds in Indonesia is also very significant (BPS, 2023). Unfortunately, collecting ZIS funds still experiences problems in the field. Various factors influence this, including low public awareness about fulfilling *zakat* obligations, a lack of understanding about *zakat*, and a lack of trust in the ZIS institution (Khairina, 2019; Salam, 2022).

In 2015, the national ZIS collection by the official Zakat Management Organization (OPZ) only reached IDR 3.7 trillion, which was less than 1.3% of its potential. Even in 2016, the ZIS fund collection only reached five trillion. In other words, the realization of the collection of ZIS funds is still far from its true potential. In 2011, the national *zakat* potential reached around 3.4% of the total Gross Domestic Product (GDP), or in absolute numbers, the *zakat* potential in Indonesia was estimated at IDR 217 trillion. In 2021, ZIS funds collected nationally in Indonesia reached an impressive figure, amounting to IDR 14.11 trillion (Khairina, 2019; Salam, 2022). These figures sound extraordinary. In reality, the *zakat* collected by Indonesian Muslims through official government institutions and private institutions is still far from its full potential. Only around 6 to 7% of *zakat* funds are actually collected (Salam, 2022).

Regarding ZIS, the Indonesian government does not force people to pay *zakat* through regulations that require them to pay it. The government is of the view that ZIS is a voluntary form of worship and is closely related to individual beliefs. This is the basic basis of the principle of religious freedom in Indonesia. The government chooses to carry out the role of fostering and encouraging. The government understands that success in collecting *zakat* is not about coercion, but about trust. Therefore, the government encourages ZIS institutions to carry out their important role well, with transparent, accountable and targeted governance.

Meanwhile, in Malaysia, *zakat* has become an obligation that must be fulfilled. In fact, not paying *zakat* is considered a violation that can result in legal action (Rakhmat and Beik, 2022). The Malaysian government is involved in managing *zakat* through the Zakat Collection Center-Majlis Agama Islam Persekutuan (PPZ-MAIWP). PPZ-MAIWP Malaysia is a *zakat* institution that has the responsibility to collect and manage ZIS and *waqf* funds in the Federal Territory of Malaysia (Rakhmat and Beik, 2022). The ZIS collecting institution is different from the institution that distributes ZIS. Baitulmal, under the Islamic Religious Department of the Federal Territory of Malaysia, is responsible for distributing *zakat* funds to people who receive ZIS known in Islamic terms as Asnaf. Rakhmat and Beik's research (2022) reveals that the management (collection to distribution) of *zakat* in Malaysia is more effective compared to Indonesia because there are mandatory regulations that make the collection of *zakat* more efficient.

ZIS collection activities are a very vital stage in the operations of the ZIS institutions because this stage aims to collect funds from the public or individuals who want to contribute. ZIS collection activities are the first and most important step because this stage determines the sources of funds that will be available to support various charitable and community development initiatives managed by the ZIS institution. Apart from that, collecting *zakat* is also closely related to educating the public about the importance of ZIS in Islam, and in helping those in need.

The managing agencies face several challenges in collecting ZIS. Some of the

problems often faced by the ZIS management institutions include public awareness and understanding of the importance of ZIS (Khairina, 2019; Usman, et al., 2022). The trust issue, regarding the management of the ZIS institutions, is also crucial. Some people may have doubts about how the funds they donate will be managed and distributed. A lack of trust in the ZIS institutions can reduce participation. Transparency, accountability and efficiency issues in managing ZIS funds can damage public trust (Zainal, et al., 2016; Ghazali and Wahab, 2016; Usman, et al., 2022). ZIS institutions face challenges in collecting funds, with traditional methods considered less efficient and prone to errors. In the technological era, innovation and adaptation are necessary to ensure effective fundraising. The use of technology for ZIS payments provides convenience and increases community participation, overcomes traditional barriers and promotes a greater level of contributions. (Kasri and Yuniar, 2021; Hudaefi and Beik, 2021; Saad, et al., 2023).

The unified theory of acceptance and use of technology (UTAUT) model, developed by Venkatesh et al., (2003), provides a comprehensive framework for studying individuals' behavioral intentions and actual use of technology. This model combines several key constructs, including performance expectations, effort expectations, social influences, and facilitating conditions, which collectively influence the acceptance and adoption of a technology (Alalwan, AA, Dwivedi, YK, & Rana, NP 2017).

This research aims to examine the factors that influence the adoption of the ZIS digital payment system in Southeast Asia. By focusing on digital-based ZIS payment innovation, this research will deepen knowledge of the UTAUT model, to allow a better understanding of the acceptance and adoption of this technology in society. The aim is to support and promote the use of the ZIS digital payment system, which allows wider and more efficient participation in ZIS practices (Oktavendi, Tri Wahyu; and Mu'ammal, Immanuel. 2022).

2. LITERATURE REVIEW

2.1 Digital Payments

Digital payments are an important milestone in the development of modern technology, and have held a dominant position in the market, both in developing and developed countries (Humbani and Wiese, 2019). In addition, this technological innovation has replaced the use of conventional cash in the payment process (Shao, et al., 2019). Kim, et al., (2010) define this service as a payment method that utilizes mobile devices and wireless technology to initiate, authorize, and confirm the exchange in financial transactions making up financial value as compensation for goods and services.

Digital payments in the context of ZIS refer to the use of digital technology, such as mobile banking applications, online payment platforms and electronic payment services, to facilitate and support the process of giving charity, including the payment of *zakat*, *infaq* and *sadaqah*. Digital payments enable individuals to easily and quickly contribute to ZIS from anywhere and at any time. They can make payments via mobile devices or personal computers without having to go to *zakat* institutions or charities.

2.2 Zakah, Infaq and Shadaqah (ZIS)

Islam has several concepts related to giving funds and aiding social development, including ZIS. Although all three relate to providing wealth or assistance to those in need, they differ in their goals, nature, and practices. *Zakat* is obligatory, which means that if Muslim people pay *zakat*, they will get a reward; conversely, if he/she does not do it, he/she will be a sinner (QS At Taubah: 103; QS Al Baqarah: 43; QS Al Bayyinah: 5).

Zakat

Zakat, in the Islamic context, is a form of blessing, holiness, goodness and welfare. In Islamic

terminology, *zakat* is an amount of property that must be given by every Muslim when the property he/she owns has reached a certain threshold (*nishab*) and the haul period (one-year period) has passed to be given to the rightful recipient. *Zakat* itself is divided into two main categories, namely *zakat fitrah* and *zakat mal*. *Zakat fitrah* is a form of personal *zakat* that Muslims must pay before Eid al-Fitr, as a form of submission and personal purity (QS Al A'la: 14-15). Meanwhile, *zakat mal* or *zakat* on assets is the obligation to give a certain amount of property in the form of assets and wealth. The amount is based on the provisions of Islamic law. *Zakat* is an obligation imposed on individuals in the amount of 2.5% of the amount of assets above the nisab, which is equivalent to 20 grams in gold Dinar or 200 grams in silver (Raimi, et al., 2014).

Zakat must be distributed to eight groups of eligible recipients, in accordance with Islamic teachings. This group includes the needy, the poor, *zakat* administrators, individuals who have recently converted to Islam who need economic support, slaves (to free them from captivity), debtors who have debts due to real needs, people who are struggling in the path of Allah (*fi sabilillah*), and travelers (Ibnu Sabil) (QS At-Taubah: 60). Integrating the concept of *zakat* in a religion-based economic system is the key to overcoming poverty in Muslim-majority countries. These *zakat* funds can be used as a unique instrument to reduce poverty, with five main points that support poverty alleviation, namely low-income communities, poor communities, freeing slaves, assistance to debtors in need, and paying the costs of traveling for those who need support. Apart from that, *zakat* can also be used to finance the administration of *zakat* and help individuals whose hearts are inclined toward Islam, and who are trying to advance the Islamic religion. In this way, *zakat* plays an important role in promoting social justice and sustainable economic development in Muslim societies (Aji, et al., 2021; Hudaefi and Beik, 2021).

Infaq

Infaq is a donation in Islam that is not required but is highly recommended, as mentioned in the Koran and Sunnah. Muslims believe that giving *infaq* will not only earn Allah's approval but will also help improve the condition of society as a whole. *Infaq* provides a very positive incentive to share wealth with the less fortunate in society. By giving *infaq*, individuals can help reduce economic inequality and advance overall social well-being. So, *infaq* is a voluntary act that is highly recommended in Islam, which not only brings blessings from Allah, but also plays a role in social and environmental improvement, and provides positive incentives to share wealth with others (Junaidi and Rizkiyah, 2013; Kamla and Rammal, 2013; Effendi, 2013; Wulandari, 2017).

Infaq in Islam is voluntary or not legally required. *Infaq* is a form of charity or *sadaqah* that is recommended in Islam, but is not required like *zakat*. Even though it is not mandatory, *infaq* is considered a very good practice and it is recommended that Muslims do it as a form of social concern for others. Therefore, *infaq* is usually done voluntarily although there is no legal obligation to do so. The Al-Quran provides instructions for Muslims to carry out *infaq* as a recommended act of virtue (QS. Al-Baqarah, 177; QS. Al-Insan, 8; QS. Al-Hadid, 18).

Shadaqah

Just like *infaq*, *shadaqah* (alms) in other terms refers to voluntary. Both *infaq* and *sadaqah* are important acts of charity in Islam, and are considered noble deeds that bring blessings and rewards from Allah SWT, but both have different concepts in Islam. Although both involve giving to people in need. *Infaq* refers specifically to giving from one's assets or possessions, while *sadaqah* can refer to giving in various forms, including property, time, or effort. *Infaq* places more emphasis on the concept of sharing wealth with people in need, while *sadaqah* place more emphasis on the concept of providing help without there being any strings attached (Wulandari, 2017; Aji, et al., 2021).

2.3 Overview of ZIS in Southeast Asia

ZIS management in Southeast Asia reflects the diverse approaches adopted by countries in the region. Likewise, at the practical level, ZIS practices have varying characteristics and features depending on the country, culture and local social context. Some countries have official institutions that regulate the collection and distribution of *zakat*, while in others, *zakat* may depend more on individual or community initiatives. (Oktavendi and Mu'ammal, 2022; Khairina, 2019; Salam, 2022).

Several countries in Southeast Asia have official institutions that manage the collection, distribution and monitoring of ZIS funds. These institutions often play an important role in carrying out social and humanitarian programs to help those in need (Rakhmat and Beik, 2022). In the Indonesian context, ZIS is regulated by Law No.38 of 1999 concerning *zakat* management. The government, through the National Zakat Amil Agency) has a role in managing *zakat*. However, it is important to note that the government cannot impose or make regulations that require people to pay *zakat*. Furthermore, the government encourages transparent and accountable governance in the management of *zakat* funds, along with allowing the public to participate in their management through the Amil Zakat Institution. The principle of religious freedom is maintained, and this approach reflects the values of pluralism and tolerance in Indonesian society. In Malaysia, *zakat* management follows a different approach. The Malaysian government allows *zakat* payments to be tax deductible, thus providing incentives for people to contribute. In this case, the Islamic Religious Council in Malaysia plays a key role in the collection and distribution of *zakat*. *Zakat* funds are used, among other things, to help overcome poverty. This reflects the country's approach to integrating Islamic principles into its taxation system and wealth redistribution. In Singapore, which has a Muslim population of around 15% of the total population, *zakat* management relies on the active role of the community. ZIS is collected through mosques and through bank accounts. The government does not intervene significantly in the collection or distribution of ZIS funds. The Muslim community in Singapore plays a very active role in providing their *zakat*, and institutions such as the Islamic Religious Council of Singapore known as MUIS in Singapore play a supporting role in facilitating this process. In Brunei Darussalam, *zakat* fitrah collection is carried out by Amil Zakat Agency appointed by the Brunei Darussalam Islamic Religious Council abbreviated as MUIB in Brunei Darussalam. MUIB has an important role in coordinating the collection and distribution of *zakat*. *Zakat* on assets can be paid in various ways, including through banks that collaborate with MUIB (Febrianti, 2011; Falata, 2016; Heru, 2016; Sholikin, 2016). Overall, the management and collection of ZIS in Southeast Asia exhibits a variety of approaches that reflect the diversity of cultures, laws and regulations in each country. Nevertheless, the principles of transparency, accountability and religious freedom are often the main focus in the regulation and implementation of *zakat*, considering the importance of this good social practice in helping those in need.

2.4 Application of the UTAUT Model

The digital payment system has the potential to revolutionize the way ZIS donations are collected and managed. The system offers convenience, security and transparency, and overcomes some of the challenges faced by traditional cash-based systems. However, the successful adoption of digital payment technology, in the ZIS context, requires a deep understanding of the factors that influence individuals' attitudes and intentions.

The UTAUT model provides a comprehensive framework for studying individuals' behavioral intentions and their actual use of technology. This model combines several key constructs, including performance expectations, effort expectations, social influences, and facilitating conditions, which collectively influence the acceptance and adoption of a technology (Alalwan, AA, Dwivedi, YK, & Rana, NP 2017). Understanding the construction

of UTAUT in the context of ZIS digital payments in Southeast Asia has significant value. It provides valuable lessons and recommendations that can encourage the wider adoption of digital payment technologies. These successes can provide guidance for policymakers to develop regulatory frameworks that support innovation and collaboration among stakeholders. Non-profit organizations and financial institutions can use these findings to design platforms that meet the needs of individuals who contribute to ZIS, and to examine the phenomenon of ZIS payments via digital methods, this research focuses on two countries with the largest Muslim populations in Southeast Asia. The application of the UTAUT model to specific contexts of ZIS digital payments aims to examine how this construct impacts individuals' attitudes and intentions to adopt digital payment systems for their ZIS contributions. Additionally, by exploring the experiences and knowledge of Southeast Asia, we can gain an insight into the unique challenges and opportunities associated with implementing digital payment solutions in this region (Fishbein, M., & Ajzen, I.1975).

We chose to take samples and study two countries with the largest Muslim populations in Southeast Asia to study the phenomenon of paying *zakat*, *infaq* and *sadaqah* (ZIS) using digital payment methods. Indonesia was chosen because it has the largest Muslim population in the world and has experienced rapid development in the adoption of digital payments. Malaysia was chosen because of its significant Muslim population and government initiatives to promote digital payments.

Performance Expectancy

- Performance expectancy refers to how much a person believes that using a system will help him or her to gain performance benefits in his/her job. There are three constructs in it, namely:
- Extrinsic motivation, namely the perception that users want to carry out an activity because it is considered to be a tool for achieving valuable results that are different from the activity itself, such as payment and promotions (Davis, et al., 1992).
- Relative advantage means how using an innovation is perceived to be better than using its predecessor (Moore and Benbasat, 1991).
- Outcome expectations means the outcome expectations related to the consequences of the behavior (Compeau and Higgins 1995b; Compeau, et al., 1999).

Effort Expectancy

This is defined as the level of convenience associated with the use of a system. If a system is easy to use, then the effort required will not be too high, and conversely, if a system is difficult to use, then a high level of effort is required to use it. We use two constructs of effort expectancy, namely:

1. Perceived ease of use, namely how much a person believes that using a system will be free from effort (Davis 1989, Davis, et al., 1989).
2. Ease of use is the extent to which using an innovation is perceived to be easy to use (Moore and Benbasat, 1991),

Social Influence

This is defined as the extent to which an individual perceives the interests that other people are believed to have will influence him or her to use a new system. Social influence is a direct determinant of intentions. The three constructs we use are:

- Subjective norm, namely a person's perception that most people who are important to him/her think that he/she should, or should not, carry out the behavior in question (Venkatesh, 2003).
- Social factors, namely a person's internalization of the subjective culture of the reference

group, and the specific interpersonal agreements that a person makes with other people in specific social situations (Venkatesh, 2003).

Facilitating Conditions

These are defined as the extent to which a person believes that the organizational and technical infrastructure is available to support the system. The two constructs we use are:

- Perceived behavioral control (Aizen, 1991, Taylor and Todd, 1995a, 1995b).
- Compatibility, namely the extent to which an innovation is perceived as consistent with the existing values, needs and experiences of potential adopters (Moore and Benbasat, 1991).

3. METHODOLOGY

3.1 Research Model

We developed Venkatesh's model by including the Intention to Recommend the ZIS Digital Payment variable. The intention to recommend ZIS digital payments refers to a person's intention or desire to recommend or invite other people to use the digital payment system for *zakat*, *infaq* and *sadaqah*. This could reflect an individual's encouragement or intention to promote or share information about digital payment platforms or services that make it easier for people to make donations or *zakat* electronically. The following is an overview of the research model that we proposed, including the development of the UTAUT model by adding the Intention to Recommend the ZIS Digital Payment variable.

3.2 Population and Sample

This research is based on data collected from 161 respondents from Indonesia and Malaysia who made digital-based ZIS payments. The results of structural equation modeling were analyzed using PLS SEM. We used the complete UTAUT model with four moderating variables. The UTAUT model was developed by adding the intention to recommend variable.

3.3 Hypothesis

Based on the research model above, we proposed 16 hypotheses to be tested, namely:

- H1. Performance expectancy (PE) has a positive effect on the intention to use ZIS digital payments (Moore and Benbasat, 1991; Davis, et al., 1992; Compeau and Higgins 1995b; Compeau, et al., 1999).
- H2. Effort expectancy (EE) has a positive effect on the intention to use ZIS digital payments (Davis 1989, Davis, et al., 1989; Moore and Benbasat, 1991).
- H3. Social influence (SI) has a positive effect on the intention to use ZIS digital payments.
- H4. Facilitating conditions (FC) have a positive effect on the intention to use ZIS digital payments (Aizen, 1991, Taylor and Todd, 1995a, 1995b; Moore and Benbasat, 1991).
- H5. Intention to use has a positive effect on the intention to recommend ZIS digital payments (Venkatesh, 2003).
- H6. Gender strengthens the influence of PE on the intention to use ZIS digital payments (Venkatesh, 2003).
- H7. Gender strengthens the influence of EE on the intention to use ZIS digital payments (Venkatesh, 2003).
- H8. Gender strengthens the influence of SI on the intention to use ZIS digital payments (Venkatesh, 2003).
- H9. Age strengthens the influence of PE on the intention to use ZIS digital payments (Venkatesh, 2003).
- H10. Age strengthens the influence of EE on the intention to use ZIS digital payments

- (Venkatesh, 2003).
- H11. Age strengthens the influence of SI on the intention to use ZIS digital payments (Venkatesh, 2003).
- H12. Age strengthens the influence of FC on the intention to use ZIS digital payments (Venkatesh, 2003).
- H13. Experience strengthens the influence of EE on the intention to use ZIS digital payments (Venkatesh, 2003).
- H14. Experience strengthens the influence of SI on the intention to use ZIS digital payments (Venkatesh, 2003).
- H15. Experience strengthens the influence of FC on the intention to use ZIS digital payments (Venkatesh, 2003).
- H16. Voluntariness of use strengthens the influence of SI on the intention to use ZIS digital payments (Venkatesh, 2003).

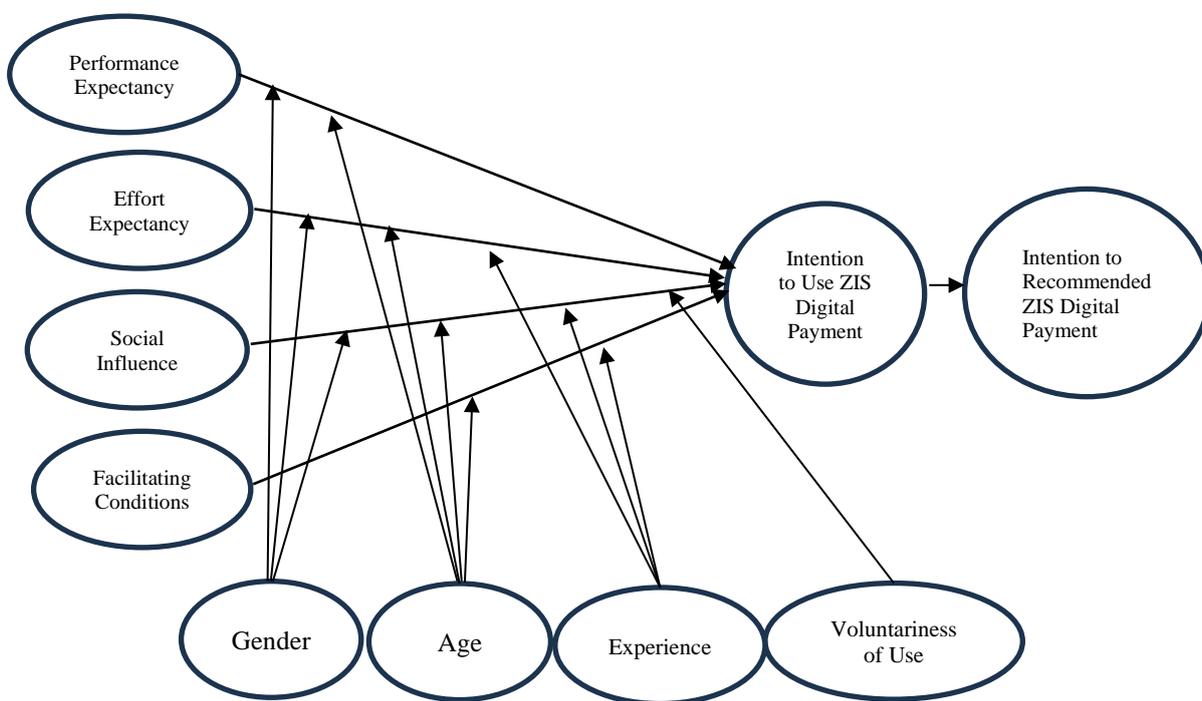


Figure 1. Research Model

Figure 1 depicts the UTAUT model from Venkatesh (2003) which we developed by adding the Intention to Recommend the ZIS Digital Payment variable.

4. RESULTS

Partial Least Square Analysis

4.1. Test Outer Model

The outer model is a model that specifies the relationship between the latent variable and its indicators, or it could be said that the outer model defines how each indicator is related to the latent variable. The outer model is interpreted by looking at several things, including convergent validity value, discriminant validity value, composite reliability, average variance extracted (AVE) and Cronbach's alpha.

1) Convergent validity

The convergent value measures the magnitude of the loading factor for each construct. Loading factors above 0.70 are highly recommended. However, loading factors between 0.5 - 0.6 can still be tolerated, as long as the model is still in the development stage.

The performance expectancy construct, as measured by three indicators, obtained a loading value for the indicator X11 of 0.944, for X12 of 0.957, and for X13 of 0.906. In the effort expectancy construct, which had three measuring indicators, the loading value for the indicator X21 was 0.957, for X22 it was 0.947 and for X23 it was 0.950. The social influence construct, which was measured using three indicators, obtained a loading value for indicator X31 of 0.918, X32 was 0.928 and X31 was 0.893. In the facilitating conditions construct, the loading value of the indicator X41 was 0.938, X42 was 0.945 and X43 was 0.929. The intention to use ZIS digital payments construct, which had three indicators, obtained a loading value for Z1 of 0.947, Z2 was 0.947 and X3 was 0.946. Thus, for the intention to recommend ZIS digital payments construct, which was measured using three indicators, the loading value for the Y1 indicator was 0.951, Y2 was 0.953 and Y3 was 0.964. For all the indicators in each construct, the indicator loading value was > 0.7 , so they were valid as a measure of the construct.

2) Discriminant validity.

The discriminant value is useful for assessing whether a variable has adequate discriminant validity, namely by comparing the correlation of the indicator with the target construct, which must be greater than the correlation with other constructs. If the correlation of the indicator has a higher value than the correlation of the indicator with the other constructs, then it is said that the variable has high discriminant validity. The full discriminant validity value is explained as follows: The loading value of the X11 indicator for the targeted construct performance expectancy was 0.944, which was much higher than for the other constructs of effort expectancy 0.840, facilitating conditions 0.824, intention to recommend ZIS digital payments 0.452, intention to use ZIS digital payments 0.863 and social influence 0.804. Thus, indicators X12 and X13 have higher loading values on the performance expectancy construct. This also applied to indicators X21, X22, X23 for effort expectancy, and X31 and X32, while digital payments had a higher loading value on the construct.

3) Composite Reliability

A high composite reliability value indicates the good consistency of each indicator in the latent variable for measuring that variable. A composite reliability value of > 0.7 indicates that the variable has good internal consistency. The complete composite reliability values are presented as follows: the composite reliability value of the effort expectancy construct was 0.966, facilitating conditions was 0.956, intention to recommend ZIS digital payments was 0.970, intention to use ZIS digital payments was 0.963, performance expectancy was 0.955 and social influence was 0.938. These six constructs obtained composite reliability values that were > 0.70 , so they are said to have good internal consistency.

4) Average Variance Extracted (AVE)

The AVE value shows that the variance value of each indicator in the construct that can be captured by that variable is greater than the variance caused by any measurement error. The AVE value was expected to be > 0.5 . The AVE value of the effort expectancy construct was 0.905, facilitating conditions was 0.879, intention to recommend ZIS digital payments was 0.914, intention to use ZIS digital payments was 0.896, performance expectancy was 0.876 and social influence was 0.834. The complete results are explained as follows:

Table 1. Average variance extracted (AVE) value

Contract	Average variance extracted (AVE)
Effort Expectancy	0.905
Facilitating Conditions	0.879
Intention Recommend ZIS Digital Payment	0.914
Intention to Use ZIS Digital Payment	0.896
Performance Expectancy	0.876
Social Influence	0.834

Apart from the AVE value, to evaluate discriminant validity, it showed the correlation values between constructs and the root of AVE. It was required that the AVE root value would be higher than the correlation values between the constructs. Complete results are presented in the table below.

Table 2. AVE root value and correlation between constructs

Contract	Effort Expectancy	Facilitating Conditions	Intention Recommended ZIS Digital Payment	Intention to Use ZIS Digital Payment	Performance Expectancy	Social Influence
Effort Expectancy	0.952					
Facilitating Conditions	0.853	0.937				
Intention Recommend ZIS Digital Payment	0.442	0.518	0.956			
Intention to Use ZIS Digital Payment	0.923	0.905	0.469	0.947		
Performance Expectancy	0.930	0.861	0.464	0.931	0.936	
Social Influence	0.869	0.854	0.474	0.903	0.863	0.913

The table above shows that the contents of the table in the diagonal boxes are the root values of AVE, and the other values are correlations between the constructs. The root value of AVE effort expectancy is 0.952, which is higher than the correlation value of effort expectancy with facilitating conditions, which is 0.853, intention to recommend ZIS digital payments is 0.442, intention to use ZIS digital payments is 0.923, performance expectancy is 0.930 and social influence is 0.869. Likewise, the root value of AVE facilitating conditions is 0.937, intention to recommend ZIS digital payments is 0.956, intention to use ZIS digital payments is 0.947, performance expectancy is 0.936 and social influence is 0.913, which is higher than the correlation between the other constructs.

5) Cronbach's Alpha

The reliability test is strengthened by Cronbach's alpha values. The test limit for the reliability of values for Cronbach's alpha is > 0.7 . The Cronbach's alpha value obtained by the effort expectancy construct was 0.945, facilitating conditions was 0.931, intention to recommend ZIS digital payments was 0.953, intention to use ZIS digital payments was 0.942, performance expectancy was 0.927 and social influence was 0.900. The complete results of Cronbach's alpha values are presented in the table below.

Table 3. Cronbach's alpha values

Contract	Cronbach's alpha
Effort Expectancy	0.948
Facilitating Conditions	0.931
Intention Recommended ZIS Digital Payment	0.953
Intention to Use ZIS Digital Payment	0.942
Performance Expectancy	0.929
Social Influence	0.900

4.2. Structural Model Test (Inner Model)

To test the structural model, we looked at the R² value, which is the goodness of the fit test. The intention to recommend ZIS digital payments construct obtained an R² value of 0.220, which can be interpreted to mean that the variation in the intention to recommend ZIS digital payments can be explained by the intention to use ZIS digital payments construct of 22.0% (0.220 x 100%), while the remaining 78.0% (100% - 22.0%) is explained by other variables outside those studied. Likewise, the intention to use ZIS digital payments obtained an R-square value of 0.928, meaning that variations in the intention to use ZIS digital payments can be explained by the performance expectancy, effort expectancy, social influence and facilitating conditions constructs of 92.8%. The complete R-square value results are presented in the table below.

Table 4.R-square value

Contract	R-square
Intention to Recommend ZIS Digital Payment	0.220
Intention to Use ZIS Digital Payment	0.928

The next test was to see the significance of the influence between the independent and the dependent constructs, and answer what has been hypothesized. Testing with a significance level of 5%, if the t-statistic value was > 1.96, then the null hypothesis (H₀) should be rejected. The t-statistic value of the influence coefficient of the latent construct was obtained from PLS bootstrapping. The results of the PLS bootstrapping model are presented in the image below.

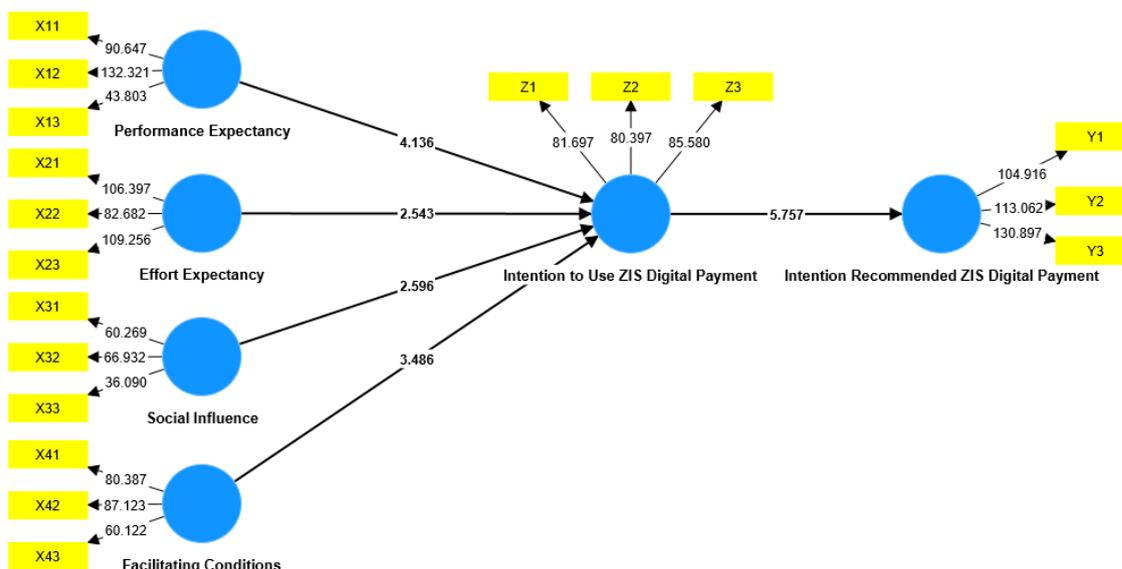


Figure 2. PLS Bootstrapping Model

Parameter coefficient values can be seen in the values (original sample), standard error (standard deviation) and t-statistic values and p-values can be seen in the table below.

Table 5. Coefficient value (original sample), standard error and t-statistics

Path of Influence	Coefficient (O)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values	Conclusion
Performance Expectancy -> Intention to Use ZIS Digital Payment	0.313	0.076	4.136	0.000	significant
Effort Expectancy -> Intention to Use ZIS Digital Payment	0.217	0.085	2.543	0.011	significant
Social Influence -> Intention to Use ZIS Digital Payment	0.219	0.084	2.596	0.009	significant
Facilitating Conditions -> Intention to Use ZIS Digital Payment	0.264	0.076	3.486	0.000	significant
Intention to Use ZIS Digital Payment -> Intention to Recommend ZIS Digital Payment	0.469	0.081	5.757	0.000	significant

Next, testing with a model with moderation, there are four modes, namely gender, age, experience and values of use. The complete results of the moderating effect's coefficient values are presented in the figure and table below.

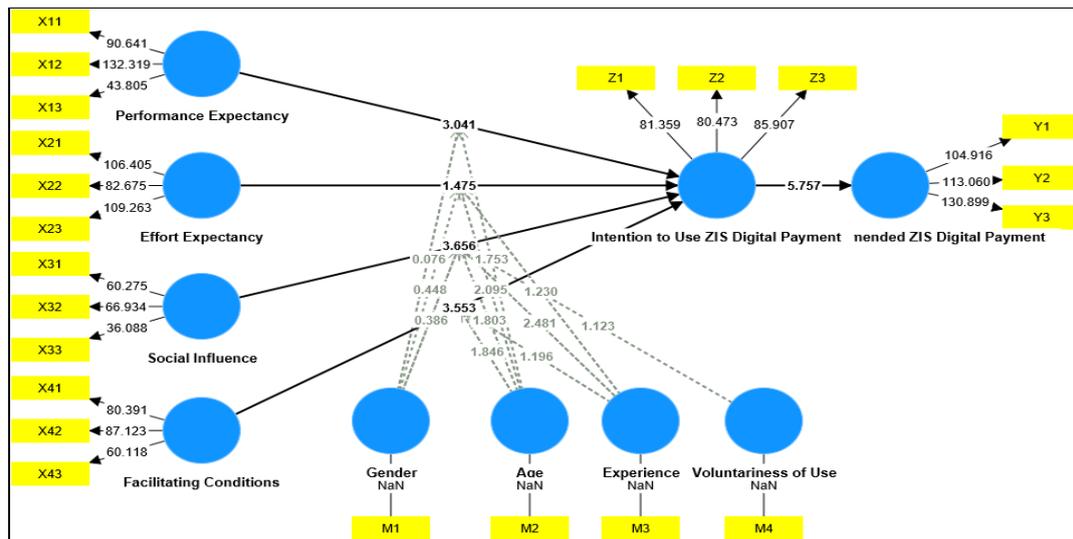


Figure 3. Bootstrapping PLS Model with Moderation

Table 6. Coefficient values, t-statistics and p-values moderating effect

Moderation Track	Coefficient (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Conclusion
Gender x Effort Expectancy -> Intention to Use ZIS Digital Payment	0.087	0.194	0.448	0.654	Not significant
Gender x Social Influence -> Intention to Use ZIS Digital Payment	-0.057	0.147	0.386	0.700	Not significant
Age x Social Influence -> Intention to Use ZIS Digital Payment	0.149	0.083	1.803	0.071	Not significant
Gender x Performance Expectancy -> Intention to Use ZIS Digital Payment	0.014	0.182	0.076	0.939	Not significant
Age x Facilitating Conditions -> Intention to Use ZIS Digital Payment	-0.150	0.081	1.846	0.065	Not significant
Age x Performance Expectancy -> Intention to Use ZIS Digital Payment	0.214	0.122	1.753	0.080	Not significant
Experience x Facilitating Conditions -> Intention to Use ZIS Digital Payment	0.100	0.083	1.196	0.232	Not significant
Voluntariness of Use x Social Influence -> Intention to Use ZIS Digital Payment	-0.054	0.048	1.123	0.261	Not significant
Age x Effort Expectancy -> Intention to Use ZIS Digital Payment	-0.237	0.113	2.095	0.036	Significant
Experience x Social Influence -> Intention to Use ZIS Digital Payment	-0.206	0.083	2.481	0.013	Significant
Experience x Effort Expectancy -> Intention to Use ZIS Digital Payment	0.093	0.075	1.230	0.219	Not significant

5. DISCUSSION

The concept of “performance expectancy” refers to an individual's expectations of the anticipated performance or positive results from the use of a technology or service. In the context of using ZIS digital payments, "performance expectancy" refers to individuals' expectations of the positive results that will be obtained when they use digital payments to contribute to ZIS practices. In this context, there are several reasons why "performance expectancy" has a significant influence on "intention to use ZIS digital payments," one of which is convenience and efficiency. Overall, "performance expectancy" has a significant effect on "intention to use ZIS digital payments" because individuals' expectations of the benefits and positive results from using this technology can provide a strong incentive to involve themselves in ZIS practices by using digital payments. The expectation of a better and more efficient experience when giving charity through digital technology may be an important factor influencing individuals' intention to adopt it.

“Effort expectancy” is a concept that refers to the extent of the level of effort or difficulty individuals expect they will experience when using a technology or service. In the context of making ZIS digital payments, "effort expectancy" refers to individuals' expectations regarding the level of effort needed from them when using the digital payment system to make charitable donations. In the context of ZIS, the expected reduction in effort when using ZIS digital payments may be an important factor influencing an individual's intention to adopt it. If individuals feel that using this technology does not require excessive effort and can be done easily, they tend to be more motivated to use ZIS digital payments in their charitable practices. Therefore, "effort expectancy" has a significant effect on "intention to use ZIS digital payments."

“Social influence” refers to the influence that other people or social groups have on an individual's actions or intentions. In the context of "intention to use ZIS digital payments," "social influence" refers to the influence that may come from people around the individual, such as family, friends, co-workers, or the community, who encourage or provide support for the use of digital payments for contributing to the practice of ZIS. In practice, social influence can have a significant role in shaping individuals' intentions to use ZIS digital payments. Encouragement, support and positive views from people around an individual can influence his or her belief in the benefits of using this technology and lead to the intention to use it. Therefore, "social influence" has a significant effect on "intention to use ZIS digital payments."

"Facilitating conditions" are factors that influence an individual's readiness or ability to use a technology or service. In the context of "intention to use ZIS digital payments," "facilitating conditions" refers to factors that make it easier for individuals to use a digital payment system for the practice of ZIS. "Facilitating conditions" creates an environment that supports and makes it easier to use ZIS digital payments. When individuals feel that the conditions support the use of this technology, they will be more likely to have positive intentions (intention) to use it for their ZIS practices. Therefore, "facilitating conditions" has a positive influence on "intention to use ZIS digital payments" by creating conditions that support and facilitate the use of this technology.

“Intention to use ZIS digital payments" refers to an individual's intention to use a digital payment system in the context of ZIS payments. Meanwhile, "intention to recommend ZIS digital payments" refers to an individual's intention to recommend or encourage the use of this digital payment system to other people. In this context, “intention to use ZIS digital payments” acts as an initial trigger, with individuals having a strong intention to use it. This intention then leads to the action of recommending the use of ZIS digital payments to others.

This creates a cycle in which individuals who have positive intentions of using this technology also contribute to spreading knowledge about its benefits to others. Therefore, "intention to use ZIS digital payments" has a significant effect on "intention to recommend ZIS digital payments."

Gender does not significantly moderate the relationship between performance expectancy and intention to use ZIS digital payments, meaning that gender differences do not have a significant influence on the relationship between the extent to which individuals expect positive performance from ZIS digital payments (performance expectancy) and their intention to actually use the system. This means that, in this context, gender differences do not strengthen or weaken the influence of performance expectancy on the intention to use ZIS digital payments.

Gender does not significantly moderate the relationship between effort expectancy and intention to use ZIS digital payments, meaning that gender differences do not have a significant influence on the relationship between the extent to which individuals expect to expend effort (effort expectancy) when using ZIS digital payments and their intention to actually use the system. This means that, in this context, gender differences do not strengthen or weaken the influence of effort expectancy on intention to use ZIS digital payments. In our analysis of the data, when gender was considered as a moderating variable, the results showed that gender was not significant as a moderator, which indicated that, in that case, gender differences do not play an important role in moderating the relationship between effort expectancy and the intention to use ZIS digital payments.

Gender does not significantly moderate the relationship between social influence and intention to use ZIS digital payments, meaning that gender differences do not have a significant influence on the relationship between social influence and an individual's intention to actually use ZIS digital payments for ZIS payments. This means that in this context, gender differences do not strengthen or weaken the influence of social influence on the intention to use ZIS digital payments.

Age is not significant in moderating the relationship between performance expectancy and intention to use ZIS digital payments, which means that the age variable does not have a significant impact on the relationship between expectations for the technology's performance (performance expectancy) and individual intentions to actually use ZIS digital payments.

Age significantly moderates the relationship between effort expectancy and intention to use ZIS digital payments, meaning that the age variable has a significant impact in influencing the relationship between the extent to which individuals expect to expend a level of effort (effort expectancy) when using ZIS digital payments, and their intention to actually use it; this impact varies depending on the individual's age group. In the model, age variable interacts with effort expectancy variable in affecting the variable of intention to use ZIS digital payment. If there is a significant interaction between age and effort expectancy, this indicates that the impact of effort expectancy on intention to use ZIS digital payments differs based on the age group. The result is that, age is not significant in moderating the relationship between social influence and intention to use ZIS digital payments, which means that the age variable does not have a significant impact on the relationship between social influence and an individual's intention to actually use ZIS digital payments for making ZIS payments.

Experience is not significant in moderating the relationship between effort expectancy and intention to use ZIS digital payments, and means that the individual's level of experience in using technology, or similar services, does not have a significant impact on the relationship between the extent to which individuals expect to expend effort (effort expectancy) when using a ZIS digital payment system and their intention to actually use it. This means that previous experience with technology does not strengthen or weaken the relationship between business expectations and the intention to use ZIS digital payments.

Experience significantly moderates the relationship between social influence and intention to use ZIS digital payments. This means that an individual's level of experience of using technology, or similar services, has a significant impact on the relationship between social influence (social influence) and an individual's intention to actually use ZIS digital payments to pay his/her ZIS, and this impact varies depending on the level of experience. Individuals who have previous experience of using technology or digital payment systems may be more likely to respond to social influences in the context of using ZIS digital payments. Their experiences can shape their perceptions of the benefits and uses of this technology. Social influence often comes from social groups, such as peers, colleagues, or family. If individuals have had positive experiences with this technology, they may be more likely to influence their group to adopt the ZIS digital payment system.

Experience is not significant in moderating the relationship between facilitating conditions and intention to use ZIS digital payments. This means that an individual's level of experience of using technology, or similar services, does not have a significant impact on the relationship between facilitating conditions and an individual's intention to actually use ZIS digital payments for ZIS payments. This means that previous experience with technology does not strengthen or weaken the relationship between the facilitating factors and the intention to use ZIS digital payments.

Voluntariness of use is not significant in moderating the relationship between social influence and intention to use ZIS digital payments. This means that the level of freedom or voluntariness in using (voluntariness of use) ZIS digital payments does not have a significant impact on the relationship between social influence (social influence) and the individual's intention to actually use ZIS digital payments for ZIS payments. This means that, in this context, the level of individual voluntariness or freedom in using ZIS digital payments does not strengthen or weaken the social influence on the intention to use the technology.

6. CONCLUSION

The digital payment system has the potential to revolutionize the way ZIS donations are collected and managed. The system offers convenience, security and transparency, and overcomes some of the challenges faced by traditional cash-based systems. However, the successful adoption of digital payment technology, in the ZIS context, requires a deep understanding of the factors that influence individual attitudes and intentions.

Understanding the relevance of the UTAUT construct in the context of ZIS digital payments in Southeast Asia can provide valuable lessons and recommendations to encourage the wider adoption and use of digital payment technology. Policymakers can leverage these insights to develop strong regulatory frameworks that encourage innovation and collaboration among the various stakeholders. Non-profit organizations and financial institutions can use these findings to design user-centered platforms that meet the unique needs and preferences of individuals contributing to ZIS.

7. IMPLICATIONS

This research has practical and theoretical implications that can provide guidance for the development of ZIS digital payment technology, as well as a deeper understanding of the factors that influence the adoption and recommendations of this technology. The results of this research provide recommendations for ZIS management institutions to increase the adoption of ZIS digital payments. They can strengthen the factors identified in the UTAUT model, such as performance expectancy, effort expectancy, and social influence, to increase individuals' intention to use this technology. Based on the significant effort expectancy findings, ZIS institutions can review and improve the user interface of their ZIS digital payment

applications. Ensuring that the application is easy to use, and minimizing the effort required, can increase its adoption. Social influence has a significant influence on this research. Therefore, ZIS institutions can more actively utilize social influences, such as recommendations from religious leaders, community figures, or peers, to motivate individuals to use this technology. The research results show that the intention to use has a significant effect on the intention to recommend. Therefore, efforts to increase individuals' intention to use ZIS digital payment technology can also have a positive impact on recommendations to others.

This research validates the UTAUT model in the context of ZIS digital payments. This confirms that the factors contained in the UTAUT model, such as performance expectancy, effort expectancy, and social influence, are relevant for analyzing the adoption of this technology in religious and social contexts. This research provides new insights into how moderating factors may play a role in the relationships between the UTAUT variables. This helps to understand that not all moderating factors will have a significant influence, and it can enrich our understanding of the complexity of the interaction of the variables in the UTAUT model. The results of this research can be a basis for further research in the domain of technology's adoption in religious and social contexts. Further research could explore other factors that might influence the adoption of ZIS digital payment technology.

8. RECOMMENDATIONS FOR FURTHER

Future research could focus on a deeper understanding of how digital technology, such as the ZIS digital payment system, influences *zakat*, *infaq* and *sadaqah* practices in society. Such research may involve surveys, interviews, or case studies to understand the motivations, barriers, and impacts of using such technology in religious and social contexts. A more in-depth study is needed on how moderating factors such as age, experience, volunteering, and facilitating conditions moderate the relationship in the context of using ZIS digital payments.

ACKNOWLEDGMENTS

This research was supported by LP3M Muhammadiyah University of Makassar through the Muhammadiyah University of Makassar International Research Collaboration Grant Scheme. The author also thanks the parties who have contributed to the completion of this project. I would like to express my sincere gratitude to the anonymous reviewers for their invaluable comments and insightful suggestions. Their constructive feedback significantly contributed to the improvement of this work. I am truly appreciative of the time and effort they dedicated to reviewing and providing thoughtful recommendations.

REFERENCES

- [1] Dewi, MH, Fandeli, C., & Baiquni, d. M. (2013). Development of a Tourism Village Based on Local Community Participation in the Jatiluwih Tourism Village. *Kawistara*, 3, 131. [10 July 2017]
- [2] Kamenidou, I. (E.), & Stavrianea, A. (2022). Profiling Monastery Tourists based on Memorable Experiences, Place Identity, Satisfaction, Intention to Revisit and Intention to Recommend. *Review of Integrative Business and Economics Research*, 11(1), 86-110.
- [3] McLeay, F., Lichy, J., & Major, B. (2019). Cocreation of the ski-chalet community experiencescape. *Tourism Management*, 74(April), 413–424. <https://doi.org/10.1016/j.tourman.2019.04.018>

- [4] Oktavendi, TW, and Immanuel Mu'ammal. 2022. Acceptance model for predicting adoption of Zakat, Infaq, and Sodaqoh (ZIS) digital payments in Generation Z. *Journal of Islamic Accounting and Business Research*, 2022, vol. 13, issue 4, 684-700. DOI. 10.1108/JIABR-09-2021-0267.
- [5] PL Pearce and S. Zare, "The orchestra model as the basis for teaching tourism experience design," *J. Hosp. Tours. Manag.*, vol. 30, p. 55–64, 2017
- [6] PL Pearce, "Tourist behavior and the contemporary world," *Tour. Behav. Contemp. World*, pp. 1–189, 2011.
- [7] Prebensen, N., Chen, JS and Uysal, M. (eds) (2014) *Creating Experience Value in Tourism*. CABI, Wallingford, UK
- [8] Rahma, ADN, & Junaedi, S. (2022). The Influence of Self-City Brand Connection, City Brand Experience, and City Brand Ambassadors on Intentions to Visit Tourism in the Special Region of Yogyakarta. *Review of Integrative Business and Economics Research*, 11(2), 226-242.
- [9] Rivera, DE, Fa, MC, & Villar, USA (2019). Delightful tourism experiences: A cognitive or affective matter? *Tourism Management Perspectives*, 32. <https://doi.org/10.1016/j.tmp.2019.100569>
- [10] Santoso, Kartika. 2018, "Motivation and Behavior of Young Generation Tourists When Traveling in Yogyakarta", *JRMB*, Volume 13, No. 1, June 2018.
- [11] Sharpley, R. (2021). Tourist experiences: Liminal, liminoid or just doing something different? In *Routledge Handbook of the Tourist Experience* (pp. 89–100). Taylor and Francis. <https://doi.org/10.4324/9781003219866-9>
- [12] Titing, Ratih, Heny, 2021, "Creating Tourism Experience- Orchestra Model Approach", *Advances in Economics, Business and Management Research*, volume 657
- [13] Kim, D., & Perdue, R.R. (2013). The effects of cognitive, affective, and sensory attributes on hotel choice. *int. J. Hosp. Manag*, 35, 246–257.
- [14] Kim, JH, Ritchie, JRB, and McCormick, B. 2012. "Development of a scale to measure memorable tourism experiences". *Journal of Travel Research*, Vol.51 No.1, pp. 12–25
- [15] J. Damanik. (2013). *Indonesian Tourism Between Opportunities and Challenges*. Yogyakarta: Library Learning
- [16] Kim, A.K. and Brown, G. (2012). Understanding the relationship between perceived travel experiences, overall satisfaction, and destination loyalty, *Anatolia: An International Journal of Tourism and Hospitality Research*, Vol. 23 No. 3, pp. 328-347
- [17] Kang, M., & Gretzel, U. (2012). Perceptions of museum podcast tours: Effects of consumer innovativeness, Internet familiarity and podcasting affinity on performance expectations. *Tourism Management Perspectives*.
- [18] www.bps.go.id will be accessed on October 25 2023
- [19] Khairina, N. 2019. Analysis of the Management of Zakat, Infaq and Alms (ZIS) to Improve the Poor Economy (Case Study at the Nurul Hayat Amil Zakat Institution, Medan Branch). *AT-TAWASSUTH: Volume IV No. 1 January - June 2019: 160 – 184*
- [20] Greetings, H. 2022. Collection of Zakat Funds is Still Not Optimal. Published on 7 December 2022 21:56 IWST. *Compass*
[Online https://www.kompas.id/baca/humaniora/2022/12/07/pengumpulan-dana-zakat-masih-belum-optimal](https://www.kompas.id/baca/humaniora/2022/12/07/pengumpulan-dana-zakat-masih-belum-optimal).
- [21] Rakhmat, AS, and Irfan Syauqi Beik. 2022. Management of Zakat and Waqf in Malaysia and Türkiye: Comparative Study. *Iltizam Journal of Sharia Economic Research*. Vol. 6, No. 1 (2022) June 2022, pp. 48-58. E-ISSN:2598-2540 P-ISSN:2598-2222.

- [22] Usman, H., Mulia, D., Chairy, C. and Widowati, N. (2022), "Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in Indonesia", *Journal of Islamic Marketing*, Vol. 13 No. 2, pp. 381-409. <https://doi.org/10.1108/JIMA-01-2020-0020>
- [23] Zainal, H., Abu Bakar, A. and Saad, RAJ (2016), "Reputation, satisfaction of zakat distribution, and service quality as determinants of stakeholder trust in zakat institutions", *International Journal of Economics and Financial Issues*, Vol. 6 No. 7 (Special issue), pp. 72-76.
- [24] Ghazali, MZ, Saad, RAJ and Wahab, MSA (2016), "A conceptual framework for examining trust towards zakat institutions", *International Journal of Economics and Financial Issues*, Vol. 6 No. 7 (Special issue), pp. 98-102.
- [25] Kasri, RA and Yuniar, AM (2021), "Determinants of digital zakat payments: lessons from Indonesian experience", *Journal of Islamic Accounting and Business Research*, Vol. 12 No. 3, pp. 362-379, doi:10.1108/JIABR-08-2020-0258.
- [26] Hudaefi, FA and Beik, IS (2021), "Digital zakāh campaign in time of Covid-19 pandemic in Indonesia: a netnographic study", *Journal of Islamic Marketing*, Vol. 12 No. 3, pp. 498-517. <https://doi.org/10.1108/JIMA-09-2020-0299>
- [27] Effendi, J. (2013), *The Role of Islamic Microfinance in Poverty Alleviation and Environmental Awareness in Pasuruan*, Universitätsverlag Göttingen, East Java, pp. 1-150.
- [28] Junaidi, E. and Rizkiyah, PD (2013), "Does contract type influence the Zakat, Infaq and Sadaqah donations of Islamic microfinance customers? Case study of Baitul Maal wat Tamwil", in 8th Conference on Islamic Economics and Finance, pp. 1-27.
- [29] Kamla, R. and Rammal, HG (2013), "Social reporting by Islamic banks: does social justice matter?", *Accounting, Auditing and Accountability Journal*, Vol. 26 No. 6, pp. 911-945.
- [30] Aji, HM, Albari, A., Muthohar, M., Sumadi, S., Sigit, M., Muslichah, I. and Hidayat, A. (2021), "Investigating the determinants of online infaq intention during the COVID-19 pandemic: an insight from Indonesia", *Journal of Islamic Accounting and Business Research*, Vol. 12 No. 1, pp. 1-20. <https://doi.org/10.1108/JIABR-05-2020-0136>
- [31] Humbani, M., & Wiese, M. (2019). An integrated framework for the adoption and continuity of intention to use mobile payment apps. *International Journal of Bank Marketing*, 37(2), 646-664.
- [32] Shao, Z., Zhang, L., Li, X. & Guo, Y. (2019). Antecedents of trust and continuance intention in mobile payment platforms: the moderating effect of gender. *Electronic Commerce Research and Applications*, 33, 100823.
- [33] Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behavior*, 26, 310-322.
- [34] BAZNAZ Zakat Outlook. 2022. Jakarta: Puskas Baznas, 2022.