Journal of Nusantara Studies 2025, Vol 10(2) 590-610
Universiti Sultan Zainal Abidin
ISSN 0127-9386 (Online)
http://dx.doi.org/10.24200/jonus.vol10iss2pp590-610

THE INFLUENCE OF TECHNOLOGY READINESS, TECHNOLOGY ACCEPTANCE MODEL AND PRIOR ZAKAT DIGITALIZATION EXPOSURE ON ONLINE ZAKAT PAYMENT SERVICES ADOPTION INTENTIONS

[1]Siti Hirdayu Mohd Radzi, [*2]Rahayu Abdul Rahman, [3]Mohd Hadli Shah Mohamad Yunus, [2]Norzarina Noordin & [4]Nur Aima Shafie

[1] Faculty of Business, Accountancy, and Social Sciences, Universiti Poly-Tech Malaysia, 56100 Kuala Lumpur, Malaysia.
[2] Faculty of Accountancy, Universiti Teknologi MARA, Tapah Campus, 35400 Tapah Road, Perak, Malaysia.
[3] Institute of Graduate Studies, Universiti Poly-Tech Malaysia, 56100 Kuala Lumpur, Malaysia.
[4] Accounting Research Institute (ARI), Level 12, Menara SAAS Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia.
[*]Corresponding author: rahay916@uitm.edu.my

Received: 28.02.2025 Accepted: 11.06.2025

ABSTRACT

Background and Purpose: The swift advancement of internet technology, particularly accelerated by Covid-19 pandemic, has transformed the lifestyle of Muslims and introduced various digital zakat options. The purpose of this study is to explore the determinants influencing willingness of *muzakkis* (zakat payers) to fulfil their zakat obligations using digital platform.

Methodology: Grounded in the theoretical frameworks of Technology Readiness (TR) and the Technology Acceptance Model (TAM), this study incorporates prior exposure with zakat digitalization alongside core constructs; innovativeness, optimism, perceived usefulness, and perceived ease of use. Data have been obtained using structured questionnaires distributed to 230 Malaysian *muzakkis* (Muslim zakat contributors). Structural equation modeling (SEM) was used to analyze the gathered data in order to test the hypothesized relationships.

Findings: The results show that innovativeness, perceived usefulness, and previous exposure to digital zakat services significantly and positively affect zakat payers' desire to use online payment methods. In contrast, optimism and perceived ease of use were not significant factors of such intentions.

Contributions: This study enhance our knowledge of factors shaping online zakat payment adoption among Muslim payers. Notably, it is among the first to combine the Technology Readiness and Acceptance frameworks with prior digital exposure to predict zakat payers' adoption behavior regarding online payment technologies.

Keywords: Online zakat payment service, theory of technology readiness, theory of acceptance model, prior exposure, zakat payer's adoption intention**.**

Cite as: Mohd Radzi, S. H., Abdul Rahman, R., Mohamad Yunus, M. H. S., Noordin, N., & Shafie, N. A. (2025). The influence of technology readiness, technology acceptance model and prior zakat digitalization exposure on online zakat payment services adoption intentions. *Journal of Nusantara Studies, 10*(2), 590-610. http://dx.doi.org/10.24200/jonus.vol10iss2pp590-610

1.0 INTRODUCTION

Zakat holds a crucial position within the economic framework of the Muslim community. As one of Islam's five fundamental pillars, it represents a mandatory duty for Muslims who possess the financial means. Zakat is a type of mandatory philanthropy that seeks to cleanse riches and redistribute it to those in need (Bilo & Machado, 2020), ultimately fostering social welfare and economic stability in the Muslim community (Zauro et al., 2020). Given the importance of zakat, various initiatives have been made by the zakat institutions and the State Islamic Religious Council to increase zakat collection. One of them is by introducing an online zakat payment service.

Rapid technological advancement transforms the management of zakat institutions, from traditional management to digitalization. Nowaday, most of the zakat institutions is encouraging corporate and individual zakat payers to use digital platform in paying their zakat obligations (Al Anshory et al., 2020). In contrast to the conventional method of paying zakat, typically conducted in person at zakat office counters or through mosque-appointed representatives, online zakat services present numerous advantages for both zakat organizations and payers by leveraging the latest technological advancements and innovations. Overall, these digital platforms deliver greater convenience, user-friendliness, efficiency, transparency, and speed, enhancing the overall experience for users. According to

prior studies (Kasri & Yuniar, 2021; Saro et al., 2023), zakat intuitions across the globe have adopted technology for zakat collection, allowing zakat payers to calculate their zakat amount, making payment and tracking payment on fingertips via digital platform.

In Malaysia, online zakat services offer a more efficient, flexible and friendly system to its users, ultimately improving zakat funds collection and distribution. Despite the increasing popularity of online zakat payment services and their potential to revolutionize the way zakat is fulfilled, many claim that the potential of the collection is higher than the actual collection. Saad et al. (2024) highlight that there is a wide gap between the current achievement and the potential for zakat to be collected. They add that although there is an increasing positive result of zakat collection every year, the amount of the collection does not reach an optimal level. This also means that there is still a lot of potential available for Malaysia's zakat institutions to optimize their zakat collection management via online platforms.

Hence, understanding Muslim behaviour and intention towards adoption of alternatives zakat payment; online zakat payment service is an urgent demand for zakat institutions, policymakers, and related government agencies to strengthen the digital zakat management of the country. To date, scholars around the world have employed various theoretical models such as the technology acceptance model (TAM) (Muflih, 2023), unified theory of acceptance and use of technology (UTAUT) (Ahmad et al., 2014; Bin-Nashwan, 2022; Kasri & Yuniar, 2021; Ferdana et al., 2022; Farhatunnada & Wibowo, 2022; Nuryahya et al., 2022), and integrative model of UTAUT with social cognitive theory (SCT) (Bin-Nashwan et al., 2023a, 2023b) or with TAM and innovative diffusion theory (Oktavendi & Mu'ammal, 2022) as well as socio-economic factors (Rahman et al., 2025) to explore Muslim behaviour and intention towards online zakat services.

Although TAM is widely employed to explain the adoption of technology, including online zakat services, some contend that it may not adequately account for individuals' technology adoption behavior. This is because TAM primarily assesses utilitarian aspects of technology use, namely, ease of use and usefulness (Kim & Chiu, 2018; Lin et al., 2007). Scholars have proposed that augmenting TAM with additional constructs could offer a more thorough understanding of the psychological processes underlying adoption behavior of technology (Lin et al., 2007; Oh & Yoon, 2014).

TR suggests that a person's inclination to engage with new technologies is determined by two positive technology-related beliefs: optimism and innovativeness. Considering the benefit of both theories in discussing the utilization of technology, this study integrates the

TAM and TR to examine the *muzakkis*' intention to use online zakat payment services. Moreover, the study integrates prior exposure on digitalization zakat services into the theoretical framework, recognizing its crucial role in affecting the intentions of zakat payers. Prior exposure significantly impacts individuals' intentions to adopt technology (Irani, 2000). More exposure enhances familiarity, perceived usefulness, ease of use, trust, and social influence, leading to increased adoption intentions. Conversely, limited exposure as well as negative experience may create skepticism and impede adoption.

This study offers several contributes to the existing knowledge. Notably, it is the first known research to examine the determinants of online zakat payment adoption intention by integrating the TR and TAM frameworks. This fills a void in the understanding of Muslim behaviour and intention towards online zakat services within the context of both TR and TAM, which has been relatively underexplored. Secondly, this study introduces a novel aspect by integrating prior exposure with the zakat digitalization system into the theoretical model. Recognizing the significant impact of past exposures on individuals' intentions towards adoption of technology, particularly in the context of zakat digitalization, enhances the comprehensiveness of the study.

This paper's organization is as follows: Section 2 reviews the relevant literature that forms the basis for the hypothesis development. Section 3 describes the research methods of this study. Meanwhile, Section 4 provides elaboration on the data analysis and results. Finally, Section 5 and Section 6 presents findings' discussion and conclusion of the research, respectively.

2.0 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Framework

In this study, the *muzakkis'* intention to adopt digital platform in paying zakat was explored through the lens of individual prior exposure on online zakat platforms and by using both TR and TAM as the underpinning theory. According to Parasuraman (2000), TR is a theoretical model developed to measure person's inclination to embrace and utilize new technologies in order to achieve their professional and personal objectives. He adds that this theory is related to the self-perception of technological proficiency. In general, this theory proposes four attributes; favourable attributes; optimism, innovativeness, as well as adverse attributes; discomfort, and insecurity, affecting acceptance and adoption of new technologies. The favourable attributes encourage people to embrace the new technology. Conversely, the adverse attributes are considered unfavourable factors that restrain people from using the new

technology. Nevertheless, Parasuraman and Colby (2015) stress that these personality traits are fairly independent, each making unique contributions to an individual's TR. Thus, this study aims to examine the impact of favourable attributes; optimism and innovativeness as both of them are drivers of TR. High scores for optimism and innovativeness increase an individual's overall TR (Parasuraman, 2000). Indeed, Parasuraman and Colby (2015) argue that if an individual has a higher level of positive TR attributes, then his or her adoption rate of new technologies is higher.

Meanwhile, the TAM, proposed by Davis (1989), is a system-specific model that adopts two fundamental cognitive factors; perceived usefulness and perceived ease of use for studying an individual's attitude/ intention in accepting or adopting a new technology. Perceived usefulness is defined as the extent to which an individual believes that using a specific system will increase his or her job performance (Davis et al., 1989). Perceived ease of use, on the other hand, is an individual's belief that using a particular system will be free of effort (Davis et al., 1989). Several studies have found that the TAM can be applied in predicting online zakat services such as e-zakat Al-fitrah and mobile zakat service (Muflih, 2023). However, some have argued that it may not sufficiently explain individuals' technology adoption behaviour as the primary constructs of the TAM measure utilitarian aspects of using technologies; ease of use and usefulness (Kim & Chiu, 2018; Lin et al., 2007), thus in this study, the TAM was extended by incorporating prior online zakat exposure and positive attributes of TR in order to determine the zakat payer's intentions.

2.2 Optimism and Online Zakat Payment Service Adoption Intention

Previous studies have emphasized the role of optimism in driving the adoption of new technology (Chen & Lin, 2018; Ali et al., 2020; Wiese & Humbani, 2020). According to Parasuraman and Colby (2015), optimism can be defined as a positive belief that technology can enhance control, flexibility, and efficiency in individuals' lives. Chen and Lin (2018) stress that individuals who feel optimistic about technology are more likely to possess a strong conviction that new technology brings various benefits to facilitate their work and domestic responsibilities efficiently, ultimately leading them to embrace new technology more readily. Empirical evidence seems to support this argument. For example, Ali et al. (2020) found a positive association between optimism and the intention to use new technology, specifically, an online food delivery ordering service. In the same vein, Wiese and Humbani (2020) revealed that optimism has a positive impact on consumer intentions to use mobile payment apps. However, scholars, both in developed and emerging countries, including Malaysia, have

overlooked the connection between optimism and the *muzakkis'* intention to pay zakat via digital platforms. Given that, following hypothesis has been proposed:

H1. Optimism has a significant positive effect on online zakat payment adoption intention

2.3 Innovativeness and Online Zakat Payment Service Adoption Intention

Parasuraman and Colby (2015) defined innovativeness as a tendency to be a technology pioneer and thought leader. Thus, Karahanna et al. (1999) stress that individuals characterized by a high degree of innovativeness exhibit a strong inclination to explore new technologies and are enthusiastic about embracing the challenge of acquiring technological skills. This inclination arises from their relatively uncomplicated belief systems concerning novel technology (Karahanna et al., 1999) and their favourable perceptions of the usefulness of new technology, even when its potential value is uncertain and its benefits are not immediately apparent (Walczuch et al., 2007). Previous research has consistently reported a noteworthy association between innovativeness and the inclination to adopt new technologies, encompassing various domains such as online food delivery ordering services (Ali et al., 2020), mobile tourism apps (Jarrar et al., 2021), dietary and fitness applications (Chen & Lin, 2018), health and fitness apps (Chiu & Choo, 2021), and cashless payment applications (Balakrishnan & Mohd Shuib, 2021). Thus, this study makes the following hypothesis in light of the debate above:

H2. Innovativeness has a significant positive effect on online zakat payment adoption intention.

2.4 Perceived Usefulness and Online Zakat Payment Service Adoption Intention

Perceived usefulness is significantly influenced an individual's intention to accept new technology. The concept of perceived usefulness relates to individuals' belief that using a particular technology will improve their work performance (Davis, 1989). He adds that when individuals perceive that a particular technology will enhance their efficiency, productivity, or overall performance in a specific context, they are more inclined to adopt it. This perception of usefulness creates a tangible value proposition, wherein users anticipate that the new technology will fulfil their needs and deliver clear benefits. As a result, when individuals perceive a higher degree of usefulness, it enhances the probability that they will emonstrate an inclination to adopt and seamlessly incorporate novel technology into their everyday

activities. In the realm of online zakat, *muzakkis* stand to gain in terms of time and cost savings since they are not required to physically visit zakat institutions (Rachman & Salam, 2018; Ninglasari, 2021). These advantages ultimately play a substantial role in bolstering their readiness to embrace the online zakat payment service. This is supported by the results of previous research studies in various contexts including mobile apps (Roy, 2017), digital health wearables (Ahmad et al., 2020), and online zakat services (Ahmad et al., 2021; Hasyim et al., 2020). However, Muflih (2023) and Ninglasari (2021) fail to find direct association between perceived usefulness and online zakat payment. This inconsistency in findings underscores the necessity for further investigation into this association. In order to fill this gap, this study puts forth the following hypothesis:

H3. Perceived usefulness has a significant positive effect on online zakat payment adoption intention

2.5 Perceived Ease of Use and Online Zakat Payment Service Adoption Intention

Theoretically, perceived ease of use is defined by Davis (1989) as the extent to which a person believes that using a technology will be free of effort. Previous research suggests that people generally prefer to minimize effort in their actions, which supports the idea that perceived ease of use effects usage behaviour indirectly through behavioural intention, as proposed by TAM. In the context of zakat, it is reasonable to assume that when *muzakkis* that muzakkis are more likely to use the e-zakat payment service if they believe the digital platform to be simple and easy to use.

Prior studies such as Al-Emran and Teo (2020) conducted a study with 403 students at Al Buraimi University College in Oman documented positive and significant relationship between e-learning systems adoption intention and perceived ease of use. Similarly, Yang et al. (2021) reported that perceived ease of use positively impacted both the intention to use and actual adoption of e-wallets. In studies pertaining to zakat, Ninglasari (2021) reported an insignificant effect of perceived ease of use on the intention to use Fintech for zakat payments. Likewise, Sun and Gao (2020) found that perceived ease of use did not significantly influence students' intentions to use mobile-assisted language learning applications. Due to these conflicting results, this study proposes the following hypothesis in an effort to re-examine the connection between perceived ease of use and intention to use online zakat payment systems.:

H4. Perceived ease of use has a significant positive effect on online zakat payment adoption intention

2.6 Prior Zakat Digitalization Exposure and Online Zakat Payment Service Adoption Intention

Ouellette and Wood (1998) emphasize the importance of prior exposure in predicting future intentions and behaviors. Knowledge acquired from past experiences helps shape intentions (Eagly & Chaiken, 2007), as such experiences make information more readily accessible in memory (Fazio & Zanna, 1978). In the context of technology adoption, Chua et al. (1999) argue that consumers' anxiety about a new technology is generally inversely related to their exposure to it, which ultimately promotes greater technology usage. This perspective is supported by empirical research; for instance, Abramson et al. (2015) found a significant positive relationship between prior use of e-learning and the intention to engage in m-learning. Similarly, Wang et al. (2020) demonstrated that prior learning experiences positively influence students' evaluations and satisfaction with online education. Drawing from this literature, the following hypotheses regarding direct effects have been formulated.

H5. Prior zakat digitalization exposure has a significant positive effect on online zakat payment adoption intention.

Further, this study hypothesised that prior exposure to zakat digitalization serves as a significant moderator in the relationships between key psychological constructs (optimism, innovativeness, perceived usefulness, and perceived ease of use) and the intention to adopt online zakat payment systems. Specifically, individuals who have had positive experiences with digital zakat platforms may exhibit heightened optimism, viewing online payment systems as beneficial and aligning with their values. This exposure can also enhance their innovativeness, making them more open to adopting new technologies. Additionally, familiarity with previous digital zakat tools can lead to a stronger perception of usefulness, as users recognize the practical advantages of online payments based on their past interactions. Lastly, prior exposure may simplify the perceived ease of use, as users are likely to find similar interfaces and functionalities familiar, further lowering barriers to adoption. Based on this argument, the following hypotheses for moderating effect were developed:

H6. Prior zakat digitalization exposure moderates the relationship between optimism and

online zakat payment adoption intention

H7. Prior zakat digitalization exposure moderates the relationship between innovativeness and online zakat payment adoption intention

H8. Prior zakat digitalization exposure moderates the relationship between perceived usefulness and online zakat payment adoption intention

H9. Prior zakat digitalization exposure moderates the relationship between perceived ease of use and online zakat payment adoption intention

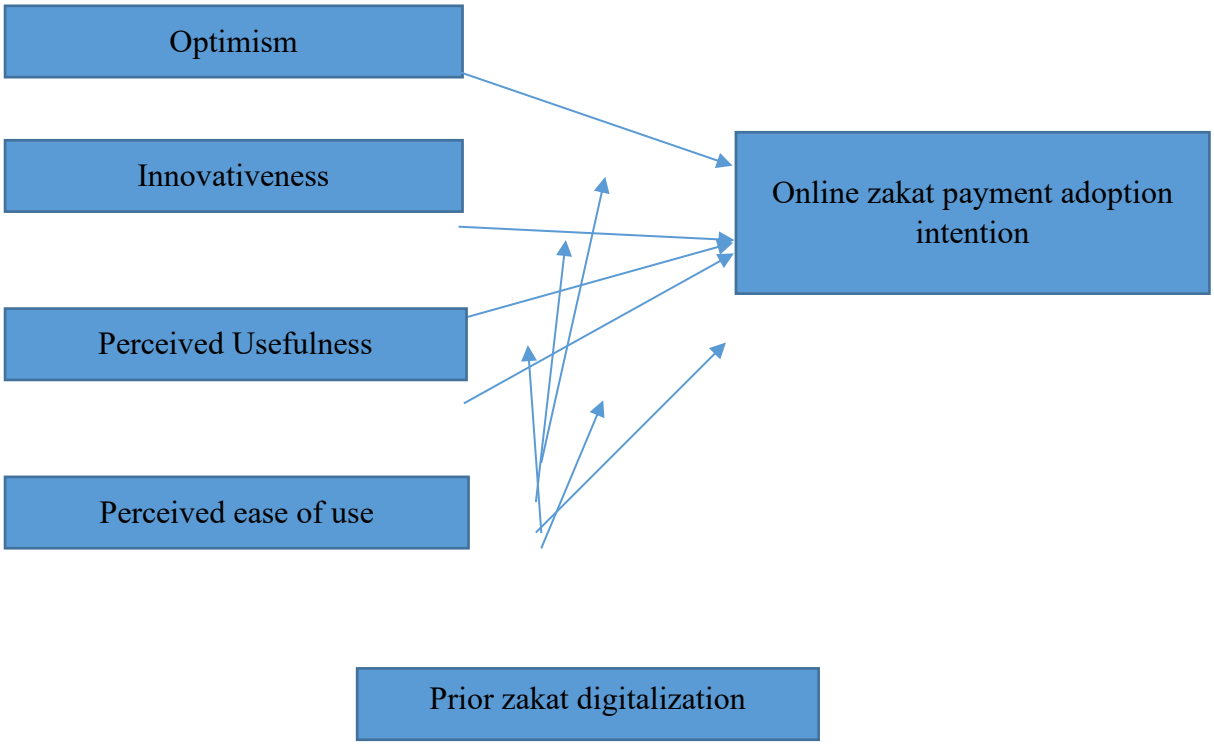

Figure 1: Research framework

3.0 METHODOLOGY

This study employed a quantitative approach through the distribution of structured questionnaires to collect relevant data. The survey instrument was organized into three main parts. Part A gathered demographic details, including participants' age, gender, educational background, and occupation. Part B focused on exploring the various factors affecting *muzakkis*' intention to pay zakat using digital platforms. Part C addressed the respondents' behavioural intentions toward utilizing such services. Constructs related to optimism and innovativeness each consisted of four items adapted from Chiu and Cho (2021). Perceived usefulness was measured using three items, while perceived ease of use included four, both

sourced from Bitrián et al. (2021). The dependent variable, *muzakkis*' intention to pay zakat using digital platforms was evaluated using three indicators by Muflih (2023).

The research aimed to examine the factors that shape *muzakkis*' intentions to adopt digital zakat platforms in Malaysia. Participants were asked to indicate their likelihood of using these online systems to fulfil their zakat duties. The surveys were distributed in person, with assurances of confidentiality and clarification that the information collected was strictly for academic analysis. Of the 350 questionnaires handed out, 230 were completed and deemed valid, resulting in a response rate of 66%.

4.0 DATA ANALYSIS AND FINDINGS

4.1 Respondent Demographics

Table 1 outlines the demographic characteristics of the 230 individuals who participated in the survey. The participant pool was relatively balanced in terms of gender, comprising 118 males (51%) and 112 females (49%). The largest proportion of respondents fell within the 41–50 age group, representing 42% of the total. In terms of educational qualifications, most respondents held a bachelor's degree (36%). Regarding employment, a majority of participants (56%) were employed in the public sector.

Table 1: Demographic profile of respondents

Characteristics	Category	Frequency	Percentage
Gender	Male	118	51%
	Female	112	49%
Age	21 - 30 years	10	4%
	31 - 40 years	42	18%
	41 - 50 years	96	42%
	Above 50 years	82	36%
Educational Level	PhD	54	23%
	Master's degree	64	28%
	Bachelor's degree	84	36%
	Diploma or lower	28	13%
Employment Sector	Public (Government)	130	56%
	Private	100	44%

4.2 Evaluation of the Measurement Model

Data collected through the questionnaire were analysed using the two-stage procedure recommended in SmartPLS, comprising an evaluation of both the measurement assessment model and the structural assessment model. Following the guidelines suggested by Hair et al. (2017), three criteria were considered: item loadings should be no less than 0.6, Average Variance Extracted (AVE) should exceed 0.5, and Composite Reliability (CR) should be at least 0.7. As shown in Table 2, all constructs satisfied these thresholds. The item loadings ranged from 0.849 to 0.994, AVE values ranged between 0.823 and 0.955, and CR values fell within 0.942 to 0.988. These results demonstrate that the items consistently and reliably reflect their corresponding constructs, thereby confirming convergent validity.

Once convergent validity was established, the study proceeded to evaluate discriminant validity, which determines whether each construct in the model is actually different from the others. As detailed in Table 3, this condition was met for all constructs, confirming the presence of discriminant validity and ensuring that the constructs are not overly similar or measuring overlapping concepts.

Table 2: The measurement model evaluation

Constructs	Measurement items	Loadings	Cronbach's α	CR	AVE
Innovativeness	INN1	0.849	0.928	0.949	0.823
	INN2	0.928			
	INN3	0.944			
	INN4	0.905			
Optimism	OPT1	0.949	0.960	0.971	0.894
	OPT2	0.939			
	OPT3	0.945			
	OPT4	0.949			
Perceived Ease of Use	PE1	0.961	0.975	0.984	0.953
	PE2	0.986			
	PE3	0.981			
Perceived Usefulness	PU1	0.966	0.984	0.988	0.955
	PU2	0.994			
	PU3	0.978			
	PU4	0.971			
Prior Zakat Digitalization Exposure	PEXP	1	NA	NA	NA
Online Zakat Payment Adoption Intention	OZI1	0.915	0.905	0.942	0.841
	OZI2	0.959			
	OZI3	0.876			

Table 3: Discriminant validity assessment - Fornell and Larcker

Constructs	1	2	3	4	5	6
Innovativeness (1)	0.907					
Online Zakat Payment Adoption Intention	0.473	0.917				
Optimism (3)	0.519	0.646	0.945			
Perceived Ease of Use (4)	0.479	0.798	0.652	0.976		
Perceived Usefulness (5)	0.347	0.783	0.667	0.844	0.977	
Prior Zakat Digitalization Exposure (6)	0.160	0.569	0.282	0.471	0.499	1

4.3 Structural Model Evaluation

This phase of analysis focused on examining the strength and direction of the path coefficients (β), as well as their statistical significance, using t-values and p-values in line with the recommendations of Hair et al. (2017). The results, visualized in Figure 2, illustrate the structural path model, while Table 4 summarizes the outcomes of the hypothesis testing.

For Hypothesis 1 (H1), which posited that optimism would positively impact the *muzakkis'* intention to pay zakat using digital platforms, the analysis revealed a non-significant result ($\beta = 0.097$, $t = 0.625$, $p > 0.05$). Thus, H1 was not supported. In the case of Hypothesis 2 (H2), suggesting that innovativeness influences adoption intention positively, the results indicated a statistically significant relationship ($\beta = 0.451$, $t = 2.295$, $p < 0.05$), providing support for H2. Hypothesis 3 (H3) proposed that perceived usefulness would have a positive effect on the adoption intention. This hypothesis was supported, as a significant positive association was found ($\beta = 0.488$, $t = 2.231$, $p < 0.05$). For Hypothesis 4 (H4), which anticipated a positive relationship between perceived ease of use and the *muzakkis*' intention to use zakat digitalization platforms, the findings contradicted expectations. The path coefficient was negative and non-significant ($\beta = -0.058$, $t = 0.224$, $p > 0.05$), leading to the rejection of H4. Lastly, Hypothesis 5 (H5) examined whether prior exposure to digital zakat systems would enhance adoption intentions. The data supported this hypothesis, with a strong and significant relationship observed ($\beta = 0.574$, $t = 3.421$, $p < 0.01$).

As for the interaction relationship, as shown in Table 5 and Figure 2, all interaction effects of optimism x prior zakat digitalization exposure (β= -0.019, t = 0.108, p> *0.05*), perceived usefulness x prior zakat digitalization exposure (β= -0.436, t = 1.175, p> 0.05), perceived ease of use x prior zakat digitalization exposure (β= 0.709, t = 1.845, p> 0.05) on online zakat payment adoption intention are insignificant, except for innovativeness x prior

zakat digitalization exposure (β= -0.447, t = 2.182, $p < 0.05$). Therefore, only H7 is supported, while H6, H8 and H9 are not.

Table 5 summarizes the coefficient of determination (R^2) and the effect size (f^2) of the study. The analysis yielded an R^2 of 0.781, indicating that approximately 78.1% of the variation in online zakat payment intention can be explained by innovativeness, perceived usefulness, prior exposure to zakat digitalization, and the interaction term (innovativeness × prior exposure). This demonstrates a high level of explanatory power within the structural model.

In addition, the effect size (f^2) was calculated to determine the unique contribution of each individual predictor. The f^2 value assesses the change in R^2 when a particular exogenous variable is excluded from the model. According to Cohen (1988), an f^2 of 0.02 is considered small, 0.15 is moderate, and 0.35 is large. The findings presented in Table 5 show that the significant predictors; innovativeness (f^2 = 0.155), perceived usefulness (f^2 = 0.168), and prior zakat digitalization exposure (f^2 = 0.187), each demonstrated a moderate effect on the dependent variable. Meanwhile, the interaction term (innovativeness × prior digitalization exposure) exhibited a small to moderate effect, indicating its meaningful but comparatively lesser contribution to explaining online zakat payment intention.

Table 4: Structural model results - Direct and moderating effects

Hypothesis	Relationship	Beta	Std Deviation	t value	p value
H1	Optimism -> Online Zakat Payment Adoption Intention	0.097	0.155	0.625	0.532
H2	Innovativeness -> Online Zakat Payment Adoption Intention	0.451	0.196	2.295	0.022
H3	Perceived Usefulness -> Online Zakat Payment Adoption Intention	0.488	0.219	2.231	0.026
H4	Perceived Ease of Use ->Online Zakat Payment Adoption Intention	-0.058	0.258	0.224	0.823
H5	Prior zakat digitalization exposure -> Online Zakat Payment Adoption Intention	0.574	0.168	3.421	0.001
H6	Optimism x Prior zakat digitalization exposure -> Online Zakat Payment Adoption Intention	-0.019	0.174	0.108	0.914
H7	Innovativeness x Prior zakat digitalization exposure -> Online Zakat Payment Adoption Intention	-0.447	0.205	2.182	0.029
H8	Perceived Usefulness x Prior zakat digitalization exposure -> Online Zakat Payment Adoption Intention	-0.436	0.371	1.175	0.24
H9	Perceived Ease of Use x Prior zakat digitalization exposure -> Online Zakat Payment Adoption Intention	0.709	0.384	1.845	0.065

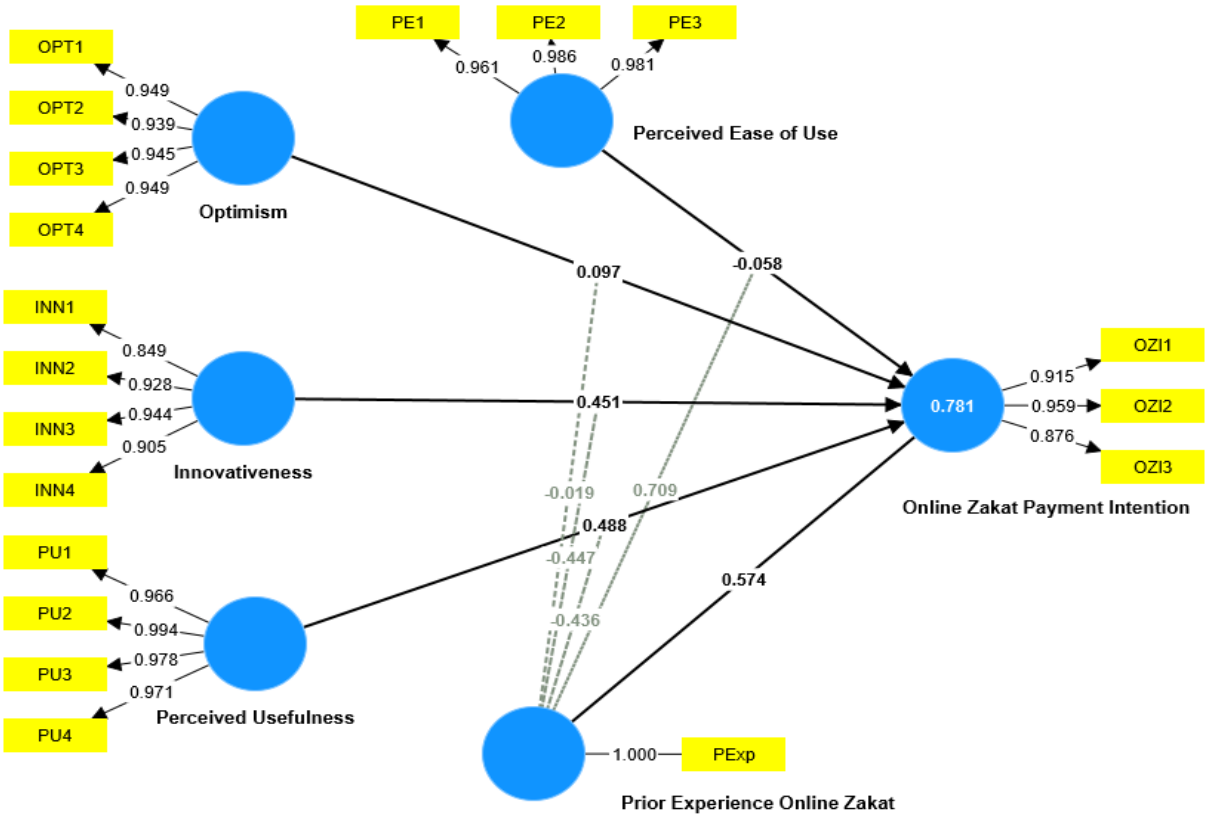

Figure 2: Structural model

Table 5: Summary of R^2 and f^2 values

Construct	R^2	f^2	Decision
Online Zakat Payment Adoption Intention	0.781		
Innovativeness		0.155	Medium
Perceived Usefulness		0.168	Medium
Prior zakat digitalization exposure		0.187	Medium
Innovativeness x Prior zakat digitalization exposure		0.113	Small

5.0 DISCUSSION

This study aimed to provide empirical evidence for the efficiency of the TAM and TR positive factors in explaining online zakat payment intention of *muzakki* in Malaysia. It also incorporated prior exposure on online zakat service, into the TAM and TR model. A few studies on online zakat have used the TAM to describe on intention of using such system, however some have argued that it may not sufficiently explain individuals' technology adoption intention and behaviour as the primary constructs of the TAM measure utilitarian aspects of using technologies; ease of use and usefulness (Kim & Chiu, 2018; Lin et al., 2007). Thus, this study integrates the TAM, TR and individuals' prior exposure with zakat

digitalization to better understand the psychological factors influencing the intention to adopt online zakat payment systems. The findings contribute new insights to the body of research on online zakat by demonstrating that innovativeness, perceived usefulness, and prior exposure significantly affect *muzakki*'s willingness to use digital platforms for zakat payments.

The investigation into both direct and interaction effects revealed several noteworthy outcomes. Regarding innovativeness, the data showed that *muzakki* who exhibit a higher level of innovativeness are more inclined to adopt online zakat payment methods. This supports previous research conducted in other contexts (Jarrar et al., 2021; Ali et al., 2020), suggesting that individuals who are more open to innovation are naturally more receptive to embracing novel digital solutions. Their familiarity and comfort with technology enhance their likelihood of engaging with online zakat services. Conversely, optimism, a positive aspect of the TR model did not demonstrate a significant influence on adoption intention. This suggests that a *muzakki*'s optimistic outlook alone is not a determining factor in deciding whether to use the online zakat system.

In addition, perceived usefulness showed a positive and significant association with the intention to adopt online zakat payment. This aligns with findings from earlier studies (Ali et al., 2020; Roy, 2017; Ahmad et al., 2021; Hasyim et al., 2020) and may reflect *muzakki*'s recognition of the practical benefits offered by online platforms, such as convenience and reduced time and financial costs compared to traditional zakat payment methods. Moreover, prior exposure with zakat digitalization emerged as the strongest predictor of intention to adopt online payment systems. This result is consistent with previous research in diverse settings (Abramson et al., 2015; Wang et al., 2020) where familiarity and prior exposure significantly influenced technology acceptance. However, similar to some past studies in the context of online zakat (Ninglasari, 2021) and other domains (Sun & Gao, 2020), perceived ease of use was not found to have a statistically significant impact on adoption intentions. This suggests that ease of use may not be a critical factor for *muzakki* when deciding to engage with online zakat payment platforms.

Interestingly, with the presence of moderating effects, the empirical evidence indicated that prior zakat digitalization exposure weakened the positive association between innovativeness and the online zakat payment system adoption intention. As such, *muzakki* with prior exposure may have encountered technology-related challenges or drawbacks in the past, leading to a more cautious and discerning attitude towards adopting new innovations offered by zakat institutions. While innovativeness typically reflects a propensity for embracing new technologies, *muzakki* with previous negative encounters may exhibit heightened scepticism

and risk aversion, making them less inclined to adopt online zakat systems despite their general openness to innovation. This scepticism may arise from concerns about security, reliability, or usability based on their past exposures, which can counterbalance their inherent innovativeness and deter them from readily adopting novel online zakat payment methods.

6.0 CONCLUSION

The importance of online zakat payment service cannot be underestimated as a means in increasing zakat collection and, in turn, have a significant impact on poverty mitigation and economic growth. Despite the growing interest in digital financial services, studies focusing specifically on online zakat particularly within the Malaysian context remain scarce. Furthermore, the influence of individuals' technological perceptions on their behavioural intentions toward using online zakat systems has yet to be fully understood. This research contributes fresh empirical insights by identifying key factors that encourage zakat payers in Malaysia to adopt online payment platforms. The results offer valuable theoretical contributions and practical applications, which are elaborated upon in the following sections.

The empirical findings of this study yield two significant implications that can assist zakat institutions in enhancing the utilization of online zakat services among zakat payers. Firstly, this research offers valuable guidance to zakat institution managers aiming to increase the adoption of online zakat services by emphasizing the pivotal role of perceived usefulness. The results underscore that *muzakkis* (zakat payers) place high importance on the utility of new technology in meeting their needs and delivering tangible benefits. Therefore, to substantially boost the intention to adopt online zakat services, zakat institution managers should ensure that these platforms efficiently streamline zakat payers' tasks, enhance their user experiences, or address existing issues. Second, this study finds that prior exposure on online zakat services is an excellent determinant of the adoption intention of online payment systems. It implies that when individuals have previously engaged with digital zakat platforms, they become more comfortable navigating online transactions, which reduces perceived risks associated with new technologies. This familiarity fosters a positive attitude toward using similar systems for other financial transactions, as users are more likely to feel confident in the security and reliability of online payments. Furthermore, past positive experiences can enhance user satisfaction and encourage recommendations, creating a cycle of increased adoption as more individuals are influenced by the shared experiences of those already accustomed to digital zakat services.

While this study contributes significantly by filling research gaps, offering practical insights, and conducting a comparative analysis of theoretical models, it is important to

acknowledge limitations that require attention. The survey was exclusively administered to the *muzakki* population in Perak, Selangor, and Kelantan, Malaysia. Additionally, given the cross-sectional research design employed in this study, it is essential to recognize that results may vary when similar investigations are conducted in different contexts and at different points in time. Consequently, generalizing the findings should be done carefully. Consequently, future studies should encompass a more diverse geographical range, including other countries, to ensure generalization of the results obtained in this study.

ACKNOWLEDGEMENT

This research is funded by the Accounting Research Institute (HICoE), Universiti Teknologi MARA and Universiti Poly-Tech Malaysia.

REFERENCES

Abramson, J., Dawson, M., & Stevens, J. (2015). An examination of the prior use of e-learning within an extended technology acceptance model and the factors that influence the behavioral intention of users to use m-learning. *Sage Open, 5*(4), 1-9.

Ahmad, A., Rasul, T., Yousaf, A., & Zaman, U. (2020). Understanding factors influencing elderly diabetic patients' continuance intention to use digital health wearables: Extending the technology acceptance model (TAM). *Journal of Open Innovation: Technology, Market, and Complexity, 6*(3), 1-15.

Ahmad, N. N., Tarmidi, M., Ridzwan, I. U., Hamid, M. A., & Roni, R. A. (2014). The application of unified theory of acceptance and use of technology (UTAUT) for predicting the usage of e-zakat online system. *International Journal of Science and Research, 3*(4), 63-70.

Ahmad, N., Roslin, R. I., & Nazrin, N. F. S. (2021). Analysing the drivers affecting the intention to use online zakat payment among Muslim in Shah Alam, Selangor. *International Journal of Islamic Business, 6*(1), 32-48.

Al Anshory, A. C., Hudaefi, F. A., Junari, U. L., Zaenal, M. H., & Ramdhoni, R. (2020). Policy brief - The role of zakat institution in preventing Covid-19. *Badan Amil Zakat Nasional.* https://www.researchgate.net/profile/Fahmi-Hudaefi/publication/340095477_The_Role_of_Zakat_Institution_in_Preventing_Covid-19/links/5e7860f8299bf1892c021e50/The-Role-of-Zakat-Institution-in-Preventing-Covid-19.pdf

Al-Emran, M., & Teo, T. (2020). Do knowledge acquisition and knowledge sharing really affect e-learning adoption? An empirical study. *Education and Information Technologies, 25*(3), 1983-1998.

Ali, S., Khalid, N., Javed, H. M. U., & Islam, D. M. Z. (2020). Consumer adoption of online food delivery ordering (OFDO) services in Pakistan: The impact of the COVID-19 pandemic situation. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(1), 1-23.

Balakrishnan, V., & Shuib, N. L. M. (2021). Drivers and inhibitors for digital payment adoption using the cashless society readiness - Adoption model in Malaysia. *Technology in Society, 65*(1), 101554.

Bilo, C., & Machado, A. C. (2020). The role of Zakat in the provision of social protection: A comparison between Jordan and Sudan. *International Journal of Sociology and Social Policy, 40*(3/4), 236-248.

Bin-Nashwan, S. A. (2022). Toward diffusion of e-Zakat initiatives amid the COVID-19 crisis and beyond. Foresight, 24(2), 141-158.

Bin-Nashwan, S. A., Ismaiel, A. E. A., Muneeza, A., & Isa, M. Y. (2023b). Adoption of ZakaTech in the time of COVID-19: Cross-country and gender differences. *Journal of Islamic Marketing, 14*(11), 2949-2979.

Bin-Nashwan, S. A., Shah, M. H., Abdul-Jabbar, H., & Al-Ttaffi, L. H. A. (2023a). Social-related factors in integrated UTAUT model for ZakaTech acceptance during the COVID-19 crisis. *Journal of Islamic Accounting and Business Research, 14*(8), 1383-1403.

Bitrián, P., Buil, I., & Catalán, S. (2021). Making finance fun: The gamification of personal financial management apps. *International Journal of Bank Marketing, 39*(7), 1310-1332.

Chen, M. F., & Lin, N. P. (2018). Incorporation of health consciousness into the technology readiness and acceptance model to predict app download and usage intentions. *Internet Research, 28*(2), 351-373.

Chiu, W., & Cho, H. (2021). The role of technology readiness in individuals' intention to use health and fitness applications: A comparison between users and non-users. *Asia Pacific Journal of Marketing and Logistics, 33*(3), 807-825.

Chua, S. L., Chen, D. T., & Wong, A. F. (1999). Computer anxiety and its correlates: A meta-analysis. *Computers in Human Behavior, 15*(5), 609-623.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35*(8), 982-1003.

Eagly, A. H., & Chaiken, S. (2007). The advantages of an inclusive definition of attitude. *Social Cognition, 25*(5), 582-602.

Farhatunnada, I., & Wibowo, M. G. (2022). Determinants of Muslim intention in Yogyakarta to pay ZIS online during the Covid-19 pandemic. *AZKA International Journal of Zakat & Social Finance, 3*(2), 182-207.

Fazio, R. H., & Zanna, M. P. (1978). On the predictive validity of attitudes: The roles of direct experience and confidence 1. *Journal of Personality, 46*(2), 228-243.

Ferdana, A. D., Ridlwan, A. A., Canggih, C., & Fikriyah, K. (2022). Z generation's intention to use zakat digital payment: The mediating effect of trust. *ZISWAF: Jurnal Zakat dan Wakaf, 9*(2), 171-189.

Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis, 1*(2), 107-123.

Hasyim, F., Awwal, M. A. F., & Al Amin, N. H. (2020). ZISWAF digital payment as an effort to reach millennials. *Economica: Jurnal Ekonomi Islam, 11*(2), 183-210.

Irani, T. (2000). Prior experience, perceived usefulness and the web: Factors influencing agricultural audiences' adoption of internet communication tools. *Journal of Applied Communications, 84*(2), 49-63.

Jarrar, Y., Awobamise, A., & Sellos, P. (2020). Technological Readiness Index (TRI) and the intention to use smartphone apps for tourism: A focus on in Dubai mobile tourism app. *International Journal of Data and Network Science, 4*(3), 297-304.

Karahanna, E., Straub, D. W., & Chervany, N. L. (1999). Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS Quarterly, 23*(2), 183-213.

Kasri, R. A., & Yuniar, A. M. (2021). Determinants of digital zakat payments: Lessons from Indonesian experience. *Journal of Islamic Accounting and Business Research, 12*(3), 362-379.

Kim, T., & Chiu, W. (2018). Consumer acceptance of sports wearable technology: The role of technology readiness. *International Journal of Sports Marketing and Sponsorship, 20*(1), 109-126.

Lin, C. H., Shih, H. Y., & Sher, P. J. (2007). Integrating technology readiness into technology acceptance: The TRAM model. *Psychology & Marketing, 24*(7), 641-657.

Muflih, M. (2023). Muzakki's adoption of mobile service: integrating the roles of technology acceptance model (TAM), perceived trust and religiosity. *Journal of Islamic Accounting and Business Research, 14*(1), 21-33.

Ninglasari, S. Y. (2021). Determinants of online zakat intention amongst Muslim millennials: An integration of technology acceptance model and theory of planned behavior. *Shirkah: Journal of Economics and Business, 6*(2), 227-245.

Nuryahya, E., Mahri, A. J. W., Nurasyiah, A., & Adiresuty, F. (2022). Technology acceptance of zakat payment platform: An analysis of modified of unified theory of acceptance and use of technology. *al-Uqud: Journal of Islamic Economics, 6*(1), 170-190.

Oh, J., & Yoon, S. J. (2014). Validation of haptic enabling technology acceptance model (HE-TAM): Integration of IDT and TAM. *Telematics and Informatics, 31*(4), 585-596.

Oktavendi, T. W., & Mu'ammal, I. (2022). Acceptance model for predicting adoption of Zakat, Infaq, and Sodaqoh (ZIS) digital payments in Generation Z. *Journal of Islamic Accounting and Business Research, 13*(4), 684-700.

Parasuraman, A. (2000). Technology Readiness Index (TRI) a multiple-item scale to measure readiness to embrace new technologies. *Journal of Service Research, 2*(4), 307-320.

Parasuraman, A., & Colby, C. L. (2015). An updated and streamlined technology readiness index: TRI 2.0. *Journal of Service Research, 18*(1), 59-74.

Rachman, M. A., & Salam, A. N. (2018). The reinforcement of zakat management through financial technology systems. *International Journal of Zakat, 3*(1), 57-69.

Rahman, R. A., Sari, E. N., Radzi, S. H. M., Saragih, F., & Zakaria, N. B. (2025). Drivers influencing the usage intention towards online zakat payment system: Evidence from Malaysia. *Bangladesh Journal of Multidisciplinary Scientific Research, 10*(1), 1–10.

Roy, S. (2017). App adoption and switching behavior: Applying the extended tam in smartphone app usage. *Journal of Information Systems and Technology Management, 14*(1), 239-261.

Saad, N. A. M., Suffian, M. T. M., Abd Rashid, M. Z., Puteh, M. S., & Alias, A. Z. (2024). Understanding business zakat compliance: Insights from SME owners in Selangor. *Accounting and Finance Research, 13*(4), 26916-26916.

Saro, N., Bhari, A., Rani, A. M., & Yusof, M. F. M. (2023). Analysis of digital zakat payment implementation: A comparison in Southeast Asia. *International Journal of Academic Research in Business and Social Sciences, 13*(5), 1743-1749.

Sun, Y., & Gao, F. (2020). An investigation of the influence of intrinsic motivation on students' intention to use mobile devices in language learning. *Educational Technology Research and Development, 68*(1), 1181-1198.

Walczuch, R., Lemmink, J., & Streukens, S. (2007). The effect of service employees' technology readiness on technology acceptance. *Information & management, 44*(2), 206-215.

Wang, C., Wang, W., & Wu, H. (2020). Association between medical students' prior experiences and perceptions of formal online education developed in response to COVID-19: A cross-sectional study in China. *BMJ Open, 10*(10), e041886.

Wiese, M., & Humbani, M. (2020). Exploring technology readiness for mobile payment app users. *The International Review of Retail, Distribution and Consumer Research, 30*(2), 123-142.

Yang, M., Mamun, A. A., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Cashless transactions: A study on intention and adoption of e-wallets. *Sustainability, 13*(2), 1-18.

Zauro, N. A., Zauro, N. A., Saad, R. A. J., & Sawandi, N. (2020). Enhancing socio-economic justice and financial inclusion in Nigeria: The role of zakat, Sadaqah and Qardhul Hassan. *Journal of Islamic Accounting and Business Research, 11*(3), 555-572.