Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6, 345-362
2025
Publisher: Learning Gate
DOI: 10.55214/25768484.v9i6.7812

Digital financial transformation in religious traditions: Analyzing Qris usage intentions for dana Punia in Bali

Putu Laksmita Dewi Rahmayanti[1*], I Gusti Ayu Ketut Giantari[2], Ni Wayan Ekawati[3], Putu Yudi Setiawan[4]
[1,2,3,4]Faculty of Economic and Business, Udayana University, Bali – Indonesia; laksmita362@gmail.com (P.L.D.R.).

Abstract: This study aims to investigate the influence of usage barriers, risk barriers, tradition barriers, product knowledge, attitude, and personal norms on the intention to use QRIS (Quick Response Code Indonesian Standard) for almsgiving at temples in Bali. This research provides culturally grounded recommendations for temple managers, QRIS service providers, and policymakers to promote QRIS adoption in religious settings. A quantitative survey method was employed, involving 189 temple devotees in Bali. Structural Equation Modeling (SEM) was used to analyze the relationships among variables, including the effects of attitude and personal norms as mediators. The results reveal that usage and tradition barriers significantly and negatively affect the intention to use QRIS, while risk barriers show a minor negative impact. Conversely, product knowledge, attitude, and personal norms positively and significantly influence QRIS adoption. Attitude and personal norms also serve as key mediators. The findings highlight the importance of reducing technological and cultural barriers and enhancing digital literacy. Practical implications include the need for consistent user education, involvement of religious leaders, and the development of trust through transparent practices and better user experiences. This study contributes original insights into the intersection of technology adoption and religious-cultural practices, offering a roadmap for sustainable QRIS integration in similar contexts.

Keywords: *Attitudes, Barriers to use, Intention to use, Personal norms, Product knowledge, QRIS, Traditional barriers.*

1. Introduction

The adoption of technology in Indonesian society has accelerated significantly. The essential transition from manual and traditional tasks to the adoption of technology. This phenomenon indicates that Indonesia has entered a period of turmoil. QRIS is a QR Code standard for payment systems in Indonesia, established by Bank Indonesia (BI) and the Indonesian Payment System Association (ASPI). The introduction of QRIS exemplifies the ambition for the Indonesian Payment System by 2025. Bank Indonesia (BI) reported 28.75 million Quick Response Code Indonesia Standard (QRIS) users in Indonesia in 2022. QRIS represents a technological advancement in digital finance. The application's usage evidences the acceptance of technical innovation; high utilization indicates successful acceptance of the innovation [1].

QRIS is anticipated to enhance its users' accountability. All organizations, especially religious institutions like temples, must implement the principle of responsibility. Temples serve as places of worship for Hindus and are distributed over Indonesia, with the highest concentration in the Province of Bali. Pura is a non-governmental and non-profit organization operating within the religious sector. To support its operational activities, a temple can collect financial contributions from the community, known as dana punia, a voluntary donation given by devotees to express devotion and support for the temple. Presently, QRIS can contribute to several temples in Bali in addition to cash. Utilizing QRIS will expedite and enhance the transparency of donation activities. The donation comprises funds gathered from contributions to the temple, which will thereafter be used for operational processes and

History: Received: 10 March 2025; Revised: 15 May 2025; Accepted: 19 May 2025; Published: 4 June 2025
* Correspondence: laksmita362@gmail.com

the building of the temple. A method to assess the acceptance of this digital innovation is to determine the desire to utilize QRIS for donations, referred to as usage intention.

Research by Atmika and Sulindawati [2] indicates that the devotees are unmotivated to embrace changes in the contribution system and continue to choose traditional techniques. This scenario indicates persistent community resistance inside the donation system. The theoretical framework addressing rejection or resistance to technological innovation is the Innovation Resistance Theory (IRT), initially established by Ram and Sheth [3]. This idea aids in comprehending user behavior characterized by resistance. Innovation resistance is characterized as behavior stemming from rational cognition and decision-making concerning the acceptance and utilization of innovation, prompted by the prospective alterations induced by current changes [4]. Consumer resistance significantly influences the success or failure of innovation [3]. According to IRT, one of the challenges that emerges is the utilization barrier. A new product that breaks usage habits and introduces more problems than convenience may encounter user rejection [5]. This study indicates that the complexity of QRIS for the "*dana punia*" may present obstacles for users with limited technical abilities. This suggests that the usage barrier could influence the desire to utilize QRIS for the "*dana punia*". Alongside the challenges posed by evolving usage contexts, the appearance of uncertainty constitutes an additional impediment associated with new technologies.

Risk barriers pertain to opposition from uncertainty, an inherent aspect of any innovation. Dunphy and Herbig [6] propose that adopting innovation is contingent upon the degree of uncertainty it generates. Utilizing digital financial technology may expose customers to the risks of financial loss, inadequate Internet access, or diminished smartphone battery life [7]. Alongside obstacles stemming from uncertainty, tradition also serves as a hindrance when innovations emerge. Traditional barriers describe obstacles arising from innovation when such innovation alters established user routines, culture, and behavior [8]. Traditional barriers negatively impact the intention to accept new technologies [9]. For instance, QRIS mandates customers to make donations electronically, which contrasts with cash-based payment systems.

Implementing QRIS for donation funds is perceived as insufficiently socialized, resulting in widespread unfamiliarity among individuals [2]. Understanding a product is crucial in consumer decision-making [10]. Studies by Ningrum, et al. [11] and Deccasari, et al. [12] indicate that product knowledge positively and significantly influences the intention to use.

The Theory of Planned Behavior (TPB) posits that attitude is a primary factor in elucidating intention and conduct. Attitude is a primary element in the Theory of Planned Behavior (TPB). Human behavior is shaped by newly developed or existing attitudes retrieved from memory. According to research by Alifah and Kusumawati [13] usage restrictions diminish users' views towards a product. Research conducted by An, et al. [14] indicates that usage restrictions negatively and significantly influence perceptions.

Consumer attitudes will deteriorate if there are significant risk barriers [15]. The impression of significant risk barriers in transactions will deteriorate user attitudes [16]. The comprehension of financial technology concerns affects user behavior, since enhanced knowledge of financial technology promotes user understanding. Research by Sun and Wang [17] demonstrates that awareness of ecologically friendly items is crucial in cultivating pro-environmental attitudes.

Product knowledge can alter attitudes and impact personal norms. Personal norms are a primary element within the Norm Activation Model. The Norm Activation Model (NAM), proposed by Schwartz [18] was developed from a pro-social viewpoint. NAM posits that individual behavior is determined by personal norms (i.e., internal standards for specific activities) rather than subjective norms that impose external regulations [19].

Personal norms are ethical standards or behavioral guidelines that individuals select according to their ideas or values. Personal norms frequently diverge from societal norms. Personal norms are influenced not only by product knowledge but also by traditional obstacles. The two concepts are interrelated, as an individual's norms may occasionally collide with societal traditional restrictions.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

Tradition pertains to human behaviors within social contexts [20]. Habits can affect an individual's norms [21, 22]. When the perceived impediments of tradition are sufficiently robust, they will influence the individual's norms [23]. Personal norms may also affect behavioral intentions. In Schwartz [24] Norm Activation Model, personal norms denote individual moral convictions on executing specific behaviors. Personal norms are the primary determinants that elicit pro-social conduct [25]. Numerous prior studies indicate that personal norms favor and significantly influence donation intentions [19, 26, 27].

In the Theory of Planned Behavior, intention is asserted to be affected by attitude. An individual's attitude toward a specific activity is "the degree to which one holds a favorable or unfavorable evaluation or assessment of the behavior in question" [28]. A favorable disposition toward behavior fosters an inclination to partake in consumption activity [29]. Studies on consumer purchasing intentions for healthy food indicate that attitude variables strongly predict customer buy intentions for a product Yamoah and Acquaye [30] and Al Kurdi, et al. [31]. Mensah, et al. [32] showed that attitude directly influences behavioral intentions toward using government e-services.

Personal norms can influence both intentions and an individual's attitudes. Jansson and Dorrepaal [33] showed that personal norms correlate with attitudes, values, and beliefs. Research by Roos and Hahn [34] indicates that elevated consumer morals and obligations towards the social environment foster a good consumer attitude. Strong personal norms among customers will influence their opinions [35].

Based on the theory and empirical studies conducted and the business phenomena in the field, this study further explores the integration of innovation resistance theory and the theory of planned behavior by adding product knowledge and personal norm variables. Therefore, this study discusses the development of QRIS user intentions for *Dana Punia Pura* in Bali (based on Innovation Resistance Theory, Theory of Planned Behavior, Product Knowledge, and Personal Norm).

2. Literature Review

2.1. Innovation Resistance Theory

Innovation resistance, an individual reaction that questions the legitimacy of changes brought about by innovation, occurs when individuals perceive that new attributes will adversely affect their current circumstances or contradict deeply held convictions [3, 36]. This hypothesis, introduced by Sheth [37] emphasizes tradition and risk variables as primary contributors to resistance across physical, social, and economic risk dimensions. Innovation resistance is a dual phenomenon, comprising active resistance arising from functional impediments (value, use, risk) and passive resistance resulting from psychological barriers (tradition, image) [38, 39]. Innovation Resistance Theory (IRT) is a theoretical framework that elucidates consumers' opposition to innovation [40]. Unlike acceptance theories such as the Technology Acceptance Model (TAM), IRT emphasizes the adoption of technology and the actual resistance to it Dwivedi, et al. [41]. Consequently, IRT is pertinent for identifying characteristics that contribute to resistance towards new products, particularly in social contexts, and aids in elucidating obstacles to usage that can significantly influence the success or failure of a technology [3].

2.2. Theory of Planned Behavior (TPB)

One of the most used behavioral theory frameworks to explain the link between intention and human behavior is the Theory of Planned Behavior (TPB). The TPB posits that behavior intention predicts behavior conditioned by three main factors: attitude toward behavior, subjective norm, and perceived behavioral control [28, 42]. Two of this theory's components are attitude and subjective norm, where attitude is a positive or negative appraisal of behavior, and subjective norm is the social pressure exerted by others. Additionally, perceived behavioral control is a crucial aspect of this theory, referring to an individual's perception of how easy or difficult it would be to perform a behavior, based on available resources, past experiences, and anticipated obstacles [43]. In the scope of this research, TPB was applied to investigate attitude as one of the major predictors of consumers' intention to use

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

QRIS for *dana punia*, which can be valued to determine whether or not it is accepted as a user of this technology, which measures good or bad results.

2.3. Norm Activation Model (NAM)

One social-psychological model is the Norm Activation Model (NAM) [18] which tries to characterize and explain pro-social behavior. A theoretical framework was applied based on personal norms (an individual's internal preferences about specific acts, which are shaped by awareness of consequences and a sense of personal responsibility) [44]. Personal norms motivate a person to engage in moral behavior and can evoke feelings of pride when the standard is adhered to or remorse when the norm is breached [24, 45]. This study regards personal norms as endogenous variables that examine pro-social behavioral intentions, such as QRIS for donations. In the temple, donations are not profit-driven for business purposes, but rather pro-social, as the funds support initiatives that best serve the community, including the temple's operations, development, and social activities. This model will elucidate the influence of personal norms on the intention to utilize QRIS in this setting

2.4. Hypotheses and Research Model

2.4.1. Hypotheses Development

2.4.1.1. The Effect of Usage Barriers on Intention to Use

Usage barriers are defined as the complexity of the innovation or the difficulty associated with its utilization [46]. The intention to use a new system is frequently reduced due to the challenges associated with adjusting to and relearning its utilization Sivathanu [47]. Khanra, et al. [48] have confirmed that this barrier constitutes a significant impediment to adoption. Hameed, et al. [49] established an inverse link between barriers to utilization and the intention to utilize digital payments. Hypotheses are formulated as follows based on this:

H_1: Usage barriers negatively affect the intention to use.

2.4.1.2. The Effect of Risk Barriers on Intention to Use

Obstacles to risk encompass apprehensions regarding adverse outcomes, such as system failures or data breaches, which may dissuade users from adopting an innovation [3]. Users apprehend cyber dangers or transactional inaccuracies within digital payment services Arif, et al. [9]. Memon, et al. [50] and Behera, et al. [51] study how trust level factors diminish adoption and heighten resistance. The lens I propose is:

H_2: Risk barriers have a negative effect on intention to use.

2.4.1.3. The Effect of Traditional Barriers on Intention to Use

Traditional barriers emerge when innovation conflicts with established customs [9]. Consumers tend to reject technology essential for services that impose new expectations or challenge their perspectives, such as digital payments and e-learning [52, 53]. High traditional barriers can obstruct the adoption of technology. Consequently, we put up the following hypothesis:

H_3: Traditional barriers have a negative effect on intention to use.

2.4.1.4. The Effect of Product Knowledge on Intention to Use

Product knowledge is critical in developing the intention to implement an innovation. A more comprehensive comprehension of the product fosters adoption and enhances user confidence [54]. Intention to use is positively influenced by product knowledge, according to research on digital services [11, 12]. Consequently, the hypothesis that has been put forth is as follows:

H_4: Intention to use is positively influenced by product knowledge.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

2.4.1.5. The Effect of Usage Barriers on Attitudes

Usage barriers are associated with perceiving the complexity or difficulty of utilizing an innovation [55]. This obstacle can have a detrimental impact on an individual's mindset, particularly if users perceive the new system as excessively intricate or incompatible with their existing routines. Ashraf [56] conducted research indicating that usage barriers adversely affect attitudes. In light of this, the hypothesis that has been put forth is as follows:

H_5: Attitude is negatively influenced by usage barriers.

2.4.1.6. The Impact of Risk Barriers on Attitudes

The perception of risk to the security or reliability of technology that can negatively affect user attitudes is reflected in risk barriers Nel and Boshoff [57]. Sivathanu [47] conducted research demonstrating the substantial detrimental effects of risk barriers on attitudes toward digital technology. In light of this, the hypothesis that has been suggested is as follows:

H_6: Attitude is negatively influenced by risk barriers.

2.4.1.7. The Impact of Product Knowledge on Attitudes

Situmorang, et al. [58] demonstrate that product knowledge can ultimately influence positive attitudes toward a product by increasing user understanding and trust. As indicated by pertinent research, user attitudes are positively and significantly associated with product knowledge [59]. In light of this, the hypothesis that has been suggested is as follows:

H_7: Attitude is positively influenced by product knowledge.

2.4.1.8. The Influence of Product Knowledge on Personal Norm

Product knowledge can shape personal norms by increasing an individual's moral responsibility [60]. Deeper knowledge of a product or service encourages individuals to develop personal norms that support adoption [61]. Based on this, the proposed hypothesis is:

H_8: Product knowledge has a positive effect on personal norms.

2.4.1.9. The Influence of Traditional Barriers on Personal Norm

Traditional barriers often conflict with an individual's norms, especially in the context of innovations that are inconsistent with old values [23]. When traditional barriers are strong enough, personal norms tend to be negatively affected [62]. Based on this, the proposed hypothesis is:

H_9: Traditional barriers have a negative effect on personal norms.

2.4.1.10. The Influence of Personal Norm on Intention to Use

Strong personal norms, such as a sense of moral responsibility, encourage individuals to demonstrate pro-social intentions, including the adoption of relevant innovations [63]. Research supports that personal norms have a significant effect on behavioral intentions [64]. Based on this, the proposed hypothesis is:

H_{10}: Personal norms have a positive effect on intention to use.

2.4.1.11. The Influence of Attitude on Intention to Use

A positive attitude toward innovation is an important predictor of intention to adopt technology [65]. Research shows that a more positive attitude significantly increases intention to use [66]. Based on this, the proposed hypothesis is:

H_{11}: Attitude has a positive effect on intention to use.

2.4.1.12. The Mediating Role of Attitudes and Personal Norms

Attitudes and personal norms serve as important mediators in the relationship between various barriers (usage barriers, risk barriers, tradition barriers) and intention to use. Research shows that

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

attitudes and personal norms can significantly explain this influence [43, 56]. Strong personal norms, such as a sense of moral responsibility, can positively influence an individual's attitude, which in turn influences their intention to use a service or technology [67]. Attitude has been shown to be a significant mediator in the relationship between personal norms and intention to use [68].
Based on the results of previous studies, the mediation hypotheses are:

H_{12}: Attitude can mediate the effect of usage barriers on intention to use.
H_{13}: Attitude can mediate the effect of risk barriers on intention to use.
H_{14}: Personal norms can mediate the effect of traditional barriers on intention to use.
H_{15}: Attitude can mediate the effect of product knowledge on intention to use.
H_{16}: Personal norms can mediate the effect of product knowledge on intention to use.
H_{17}: Attitude can mediate the effect of personal norms on intention to use.
H_{18}: Attitude can mediate the influence of personal norms on intention to use

2.4.2. Research Model

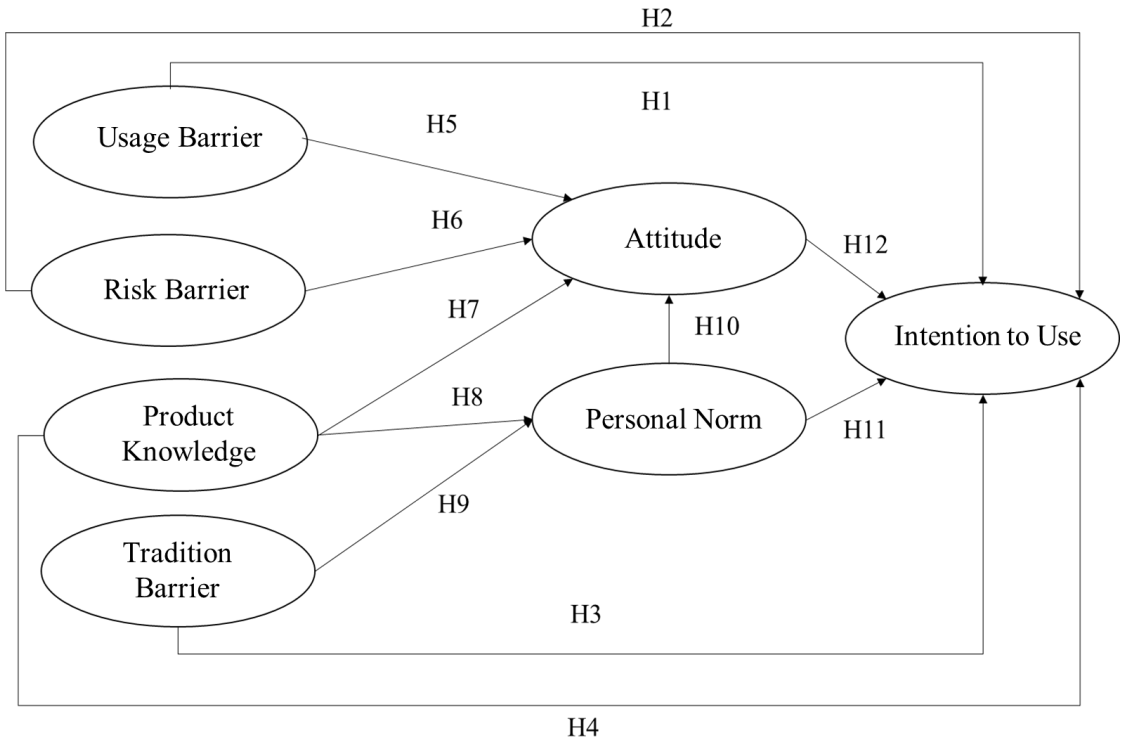

Figure 1.
Research Framework.

3. Methods

This study uses a quantitative approach with a positivist paradigm to analyze the causal relationship between variables such as usage barriers, risk barriers, tradition barriers, and product knowledge on attitudes, personal norms, and intentions to use QRIS for "*dana punia*". The study was conducted in Bali Province, known as the Island of a Thousand Temples, because the adoption rate of QRIS for "*dana punia*" at temples in Bali is still low. Data collection was carried out using a combination of online and offline questionnaires to maximize practicality and efficiency. The population of the study was the temple devotees in Bali, with sample criteria including individuals who have mobile banking services,

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

have never used QRIS for "*dana punia*", but know information related to QRIS. The sample was determined using a non-probability sampling method, namely purposive sampling, with the number of samples calculated based on the number of indicators in the study. Based on the calculation of the theory of Hair, et al. [69] this study involved 189 respondents. The research variables include endogenous variables (attitudes, personal norms, and intentions to use) and exogenous variables (usage barriers, risk barriers, tradition barriers, and product knowledge). Each variable is measured using indicators that have been compiled based on relevant literature and using a five-point Likert scale. The collected data were tested for validity and reliability before being analyzed. The validity test showed that all instruments had a correlation coefficient above the minimum limit of 0.361.

In contrast, the reliability test showed a Cronbach's Alpha value above 0.6 for all variables, which means that the instruments are valid and reliable. Data analysis was carried out using the Structural Equation Modeling (SEM) technique based on Partial Least Squares (PLS). This method is used to test the measurement model to evaluate validity and reliability, as well as the structural model to test the causal hypothesis. Descriptive analysis was also carried out to describe the characteristics of respondents and their perceptions of the research variables using percentages and averages. The results of this study are expected to provide an in-depth understanding of the factors that influence the intention to use QRIS for "*dana punia*" in Bali.

4. Results

4.1. Respondent characteristics

The characteristics of respondents in this study describe the criteria of 189 respondents based on gender, age, education, occupation, and income. The detailed characteristics of the respondents are presented in Table 1.

Overall, these data show that the intention to use QRIS as a payment method for temple offerings in Bali is mostly found in women aged 18-26, with a bachelor's degree, working as a student or college student, and domiciled in Denpasar. This phenomenon indicates that digital payment technology, such as QRIS, is increasingly accepted by the community, especially the younger generation and the educated, as a modern solution to support religious traditions in Bali.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

Table 1.
Characteristics of Respondents.

No	Characteristics	Classification	Number of Respondents (people)	Percentage of Respondents (%)
1	Gender	Man	79	41,8
		Woman	110	58,2
Total			189	100
2	Age	18 - 26 years old	97	51.32
		27 - 35 years old	62	32.80
		36 - 44 years old	21	11.11
		45 - 53 years old	6	3.17
		> 54 years old	3	1.59
Total			189	100
3	Education Background	Highschool	54	28.6
		Bachelor	117	61.9
		Master/PhD	18	9.5
Total			189	100
4	Occupation	Civil Servant	43	22.8
		State-Owned Enterprise Employees	8	4.2
		Private Sector Employees	42	22.2
		Students	75	39.7
		Entrepreneurs	14	7.4
		Others	7	3.7
Total			189	100
5	Income	> 25.000.000	6	3.2
		>15.000.000 – 25.000.000	11	5.8
		> 5.000.000 – 15.000.000	49	25.9
		2.000.000 – 5.000.000	84	44.4
		Less than 2.000.000	39	20.6
		Total	189	100
6	Domicile	Badung	28	14.8
		Bangli	3	1.6
		Buleleng	43	22.8
		Denpasar	61	32.3
		Gianyar	27	14.3
		Jembrana	4	2.1
		Karangasem	7	3.7
		Klungkung	4	2.1
		Tabanan	12	6.3
		Total	189	100

4.2. Results of Measurement Model Evaluation (Outer Model)

The outer model, namely the specification of the relationship between latent variables and their indicators, or also called the outer relation or measurement model, defines the characteristics of the construct with its manifest variables.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

Table 2.
Results of Convergent Validity Test, Discriminant Validity, and Construct Reliability.

Variable	Convergent Validity (Loading Factor)	Cross-Loading Validity (>0.5)	AVE (>0.5)	RSAVE (> Correlation)	Cronbach's Alpha (>0.7)	Composite Reliability (>0.7)
Usage Barrier (X1)	0.770-0.938	Valid	0.796	0.892	0.913	0.94
Risk Barrier (X2)	0.770-0.852	Valid	0.668	0.817	0.834	0.889
Tradition Barrier (X3)	0.851-0.918	Valid	0.786	0.887	0.909	0.936
Product Knowledge (X4)	0.865-0.937	Valid	0.832	0.912	0.932	0.952
Attitude (Y1)	0.846-0.930	Valid	0.817	0.904	0.925	0.947
Personal Norm (Y2)	0.755-0.928	Valid	0.75	0.866	0.888	0.923
Intention to use (Y3)	0.890-0.957	Valid	0.859	0.927	0.917	0.948

Based on the results of the outer model test, the validity and reliability of all constructs in this study have met the established criteria. Convergent validity is shown through the loading factor value on each indicator, which is in the range of 0.770–0.957, exceeding the minimum threshold of 0.60. This indicates that all indicators have a significant and strong correlation with their respective latent variables. In addition, the discriminant validity tested using cross-loading shows that the cross-loading value of the indicator on each latent variable is greater than that of the other variables, so that all indicators are declared valid in distinguishing each construct.

Further testing using the Average Variance Extracted (AVE) value also shows that all constructs have an AVE value of more than 0.5, with a range of 0.668 to 0.859. This confirms that the latent variables can explain more than half of the variance of their indicators on average. The root square of average variance extracted (RSAVE) value for each construct is also greater than the correlation between other constructs, indicating good discriminant validity.

In terms of reliability, the Cronbach's Alpha and Composite Reliability values of all latent variables are above the minimum threshold of 0.7, with a range of 0.834–0.932 and 0.889–0.952, respectively. This indicates that the internal consistency of the indicators for each construct is very good, so that the data is declared reliable. Thus, the measurement model (outer model) in this study can be concluded as valid and reliable to support further analysis.

5. Results of Hypothesis Testing

5.1. Results of the Direct Effect Test

The outcomes of the direct effect assessment utilizing Partial Least Squares (PLS) indicated that 12 hypotheses were evaluated by the bootstrap method to mitigate data irregularity issues. Several significant findings were derived from the test results.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

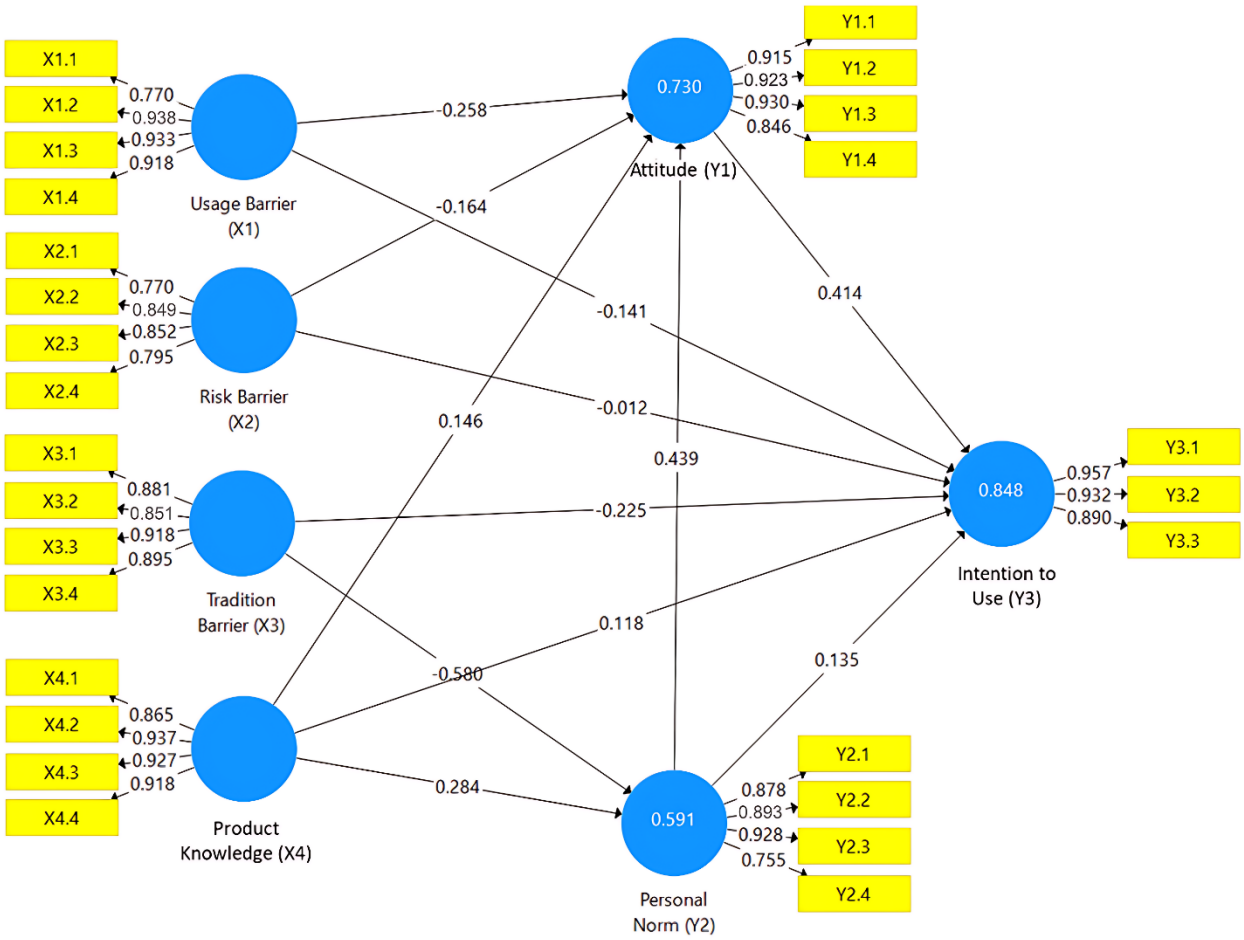

Figure 2.
Structural Model.

Table 3.
Results of Direct Influence Test.

	Path Coefficient	t statistics	P Values	Description
Usage Barrier (X1) -> Intention to Use (Y3)	-0.141	2.103	0.036	Significant
Risk Barrier (X2) -> Intention to Use (Y3)	-0.012	0.262	0.793	Not Significant
Tradition Barrier (X3) -> Intention to Use (Y3)	-0.225	2.129	0.034	Significant
Product Knowledge (X4) -> Intention to Use (Y3)	0.118	2.767	0.006	Significant
Usage Barrier (X1) -> Attitude (Y1)	-0.258	3.359	0.001	Significant
Risk Barrier (X2) -> Attitude (Y1)	-0.164	2.945	0.003	Significant
Product Knowledge (X4) -> Attitude (Y1)	0.146	2.244	0.025	Significant
Product Knowledge (X4) -> Personal Norm (Y2)	0.284	4.595	0.000	Significant
Tradition Barrier (X3) -> Personal Norm (Y2)	-0.580	10.584	0.000	Significant
Personal Norm (Y2) -> Intention to Use (Y3)	0.135	2.417	0.016	Significant
Attitude (Y1) -> Intention to Use (Y3)	0.414	6.320	0.000	Significant
Personal Norm (Y2) -> Attitude (Y1)	0.439	6.719	0.000	Significant

The use barrier exerts a negative and substantial influence on the intention to utilize QRIS (β = -0.141; p = 0.036), hence validating the hypothesis that the usage barrier adversely affects the desire to use. In contrast, the risk barrier exhibits a negative albeit minor impact on the intention to use (β = -0.012; p = 0.793), leading to the rejection of the associated hypothesis.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

Moreover, the tradition barrier demonstrates a negative and substantial impact on the intention to utilize QRIS (β = -0.225; p = 0.034), corroborating the proposed hypothesis. Conversely, product knowledge exerts a positive and significant influence on the intention to use (β = 0.118; p = 0.006), indicating that increased product knowledge correlates with a greater intention to utilize QRIS.

Furthermore, the usage barrier exerts a negative and substantial impact on attitude (β = -0.258; p = 0.001), while the risk barrier similarly demonstrates a negative and significant effect on attitude (β = -0.164; p = 0.003). The hypothesis concerning the influence of product knowledge on attitude is accepted, demonstrating a positive and significant effect (β = 0.146; p = 0.025).

Subsequent testing revealed that product knowledge exerted a positive and substantial influence on personal norms (β = 0.284; p = 0.000), while the tradition barrier demonstrated a negative and significant impact on personal norms (β = -0.580; p = 0.000). Personal norms exert a positive and significant influence on the intention to use QRIS (β = 0.135; p = 0.016). Additional data indicate that attitudes exert a positive and substantial influence on the intention to utilize QRIS (β = 0.414; p = 0.000), whereas personal norms positively and significantly affect attitudes (β = 0.439; p = 0.000). The results indicate that factors such as usage hurdles, traditional obstacles, product knowledge, personal norms, and attitudes significantly influence the intention to utilize QRIS for punia money.

5.2. Testing of Direct, Indirect, and VAF Effects

This study will examine the mediating role of attitude and personal norm variables. The examination of indirect effects in this study can be seen in the explanation of the analysis results in Table 4.

Table 4.
Recapitulation of Mediating Variable Test Results.

Variable Relationship	Effect					Description
	(A)	(B)	(C)	(D)	(E)	
Usage Barrier (X1) -> Attitude (Y1) -> Intention to Use (Y3)	-0.107 (Sig.)	-0.141 (Sig.)	-0.258 (Sig.)		0.414 (Sig.)	Partial Mediation
Risk Barrier (X2) -> Attitude (Y1) -> Intention to Use (Y3)	-0.068 (Sig.)	-0.012 (Non Sig.)	-0.164 (Sig.)		0.414 (Sig.)	Full Mediation
Tradition Barrier (X3) -> Personal Norm (Y2) -> Intention to Use (Y3)	-0.078 (Sig.)	-0.225 (Sig.)		-0.580 (Sig.)	0.135 (Sig.)	Partial Mediation
Product Knowledge (X4) -> Attitude (Y1) -> Intention to Use (Y3)	0.061 (Sig.)	0.118 (Sig.)	0.146 (Sig.)		0.414 (Sig.)	Partial Mediation
Product Knowledge (X4) -> Personal Norm (Y2) -> Intention to Use (Y3)	0.038 (Sig.)	-0.141 (Sig.)		0.284 (Sig.)	0.135 (Sig.)	Partial Mediation
Personal Norm (Y2) -> Attitude (Y1) -> Intention to Use (Y3)	0.182 (Sig.)	-0.012 (Sig.)	0.439 (Sig.)		0.414 (Sig.)	Partial Mediation

The hypothesis testing results indicate that the indirect effect of usage barrier on intention to use via attitude demonstrates that attitude partially mediates this relationship, evidenced by a regression coefficient of -0.107. The usage barrier has a strong direct influence on intention to use (-0.141) and on attitude (-0.258), as does attitude on intention to use (0.414). The findings suggest that an increased barrier to using diminishes favorable views, hence reducing the intention to use. In the context of risk barriers, the indirect effect via attitude results in complete mediation, with a coefficient of -0.068. The risk barrier does not directly influence the intention to use (- -0.012, not significant); rather, it can

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

diminish intention to use indirectly by reducing attitude (-0.164 on attitude). The examination of the impact of traditional barriers on usage intention via personal norms indicates partial mediation, with a coefficient of -0.078. The direct impact of the tradition barrier on the intention to use (-0.225) and on personal norm (-0.580) is significant, as is the effect of personal norm on intention to use (0.135). This affirms that an increase in conventional barriers will diminish personal norms, hence decreasing the will to utilize. Conversely, product knowledge exhibits partial mediation via attitude (0.061) and personal norm (0.038). Product knowledge enhances positive attitude (0.146 to attitude) and personal norm (0.284), so finally augmenting the intention to utilize (0.118 to intention).

Ultimately, personal norm partially mediates its influence on the intention to use via attitude, with a regression coefficient of 0.182. The direct effect of personal norm on attitude (0.439) and the effect of attitude on intention to use (0.414) are significant. However, the direct effect of personal norm on intention to use is not significant (-0.012). Consequently, elevated personal norms enhance good attitudes, which ultimately augment the purpose to utilize. These findings validate the significance of attitude and personal norm as mediators in diverse variable correlations.

6. Discussions

This study identifies multiple elements that affect the intention to utilize QRIS for donation monies in Balinese temples, encompassing usage hurdles, risk barriers, traditional barriers, product knowledge, personal norms, and attitudes. The results demonstrate a multifaceted link among these elements, corroborated by theoretical frameworks including Innovation Resistance Theory (IRT), Norm Activation Model (NAM), and Theory of Planned Behavior (TPB).

The investigation results indicate that usage barriers adversely and significantly impact the intention to utilize QRIS for donation funds in Balinese temples. This research suggests that increased perceived usage obstacles correlate with a diminished inclination to utilize QRIS. Conversely, diminished barriers correlate with an increased inclination to utilize this technology as a way of giving. The barriers to utilization encompass the belief that QRIS is challenging to utilize, impractical, ineffective, and features ambiguous directions. These factors affect users' intention to use QRIS for digital donations in temples.

These results theoretically corroborate the Innovation Resistance Theory (IRT) proposed by Ram and Sheth [3]. IRT elucidates that resistance to innovation frequently arises from a discord between new technology and people's perceptions of its intricacy. Within the framework of QRIS, perceptions of ambiguous instructions and convoluted processes establish functional impediments, hence diminishing the intention to utilize it. Prior research by Moorthy, et al. [70] and Khanra, et al. [48] corroborates that perceived usage obstacles would substantially influence technology adoption.

Alongside utilization obstacles, risk barriers were also identified as having a negative impact on the desire to utilize QRIS, but this effect was not statistically significant. Users consider transaction risks, including incorrect amounts, erroneous payment destinations, account breaches, and interrupted connections. Nevertheless, our findings suggest that these worries are insufficiently robust to impede user intentions substantially. Research conducted by Rahmayanti, et al. [71] indicates that the younger generation, which constitutes the majority of respondents in this study, exhibits greater confidence in managing digital hazards. This aligns with the findings of Nurlaily, et al. [72] which indicate that the younger generation possesses superior risk management skills.

Simultaneously, traditional hurdles were identified as having a detrimental and significant impact on the intention to utilize QRIS. This obstacle stems from consumer inclinations towards conventional procedures, the belief that digital transactions contradict cultural values, and the challenges associated with adapting to new techniques. Within the IRT paradigm, this barrier is classified as a psychological barrier that signifies the discord between innovation and tradition. Studies by Tandon, et al. [15] and Himel, et al. [73] indicate that traditional hurdles frequently impede the adoption of new technology.

Conversely, product knowledge exerts a favorable and considerable influence on the inclination to utilize QRIS. A comprehensive grasp of the advantages of QRIS, including efficiency and transparency,

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

enhances the user's intention to adopt this technology. Within the framework of the Cognitive-Affective-Conative (CAC) Theory, product knowledge establishes a robust foundational understanding, subsequently leading to a favorable attitude towards the technology. Research conducted by Khan, et al. [74] indicates that product knowledge enhances attitudes and intentions towards the adoption of new technology.

Moreover, utilization restrictions exert a detrimental and substantial impact on user attitudes towards QRIS. Increased impediments to usage correlate with a more negative user attitude. This pertains to IRT, where functional impediments like perceived complexity affect resistance to innovation. Studies conducted by An, et al. [14]; Lee and Kim [75] and Das and Ray [76] indicate that perceptions of usability can influence adverse attitudes towards emerging technology.

Risk barriers exert a detrimental and substantial influence on user attitudes. Concerns over transaction risks foster adverse impressions of QRIS, as evidenced by the studies conducted by Mathew, et al. [77] and Hameed, et al. [49]. In contrast, product knowledge exerts a favorable and considerable influence on user views toward QRIS. Comprehensive knowledge establishes the notion that QRIS is an effective contemporary answer, as evidenced by the research conducted by Tarigan and Aldama [78].

Personal norms were identified as having a favorable and significant impact on the intention to utilize QRIS. Heightened moral awareness regarding the openness and efficiency of donations enhances users' propensity to use QRIS. Research conducted by Schwartz [24] and Chuah, et al. [79] demonstrated that robust personal norms can promote pro-social behaviors, including technology adoption.

Attitudes about QRIS exert a positive and significant influence on the intention to utilize it. Individuals with favorable opinions towards QRIS are more likely to intend to utilize this technology. This discovery corroborates [28] Theory of Planned Behavior (TPB), which posits that attitude is the primary predictor of behavioral intention. Moreover, personal norms exert a favorable and considerable influence on user sentiments. Robust personal norms foster favorable assessments of QRIS, thus affecting the intention to utilize it. Research conducted by Schwartz [24] and Liu, et al. [68] indicates that robust personal norms enhance favorable views towards pro-social action.

In a mediation framework, attitude may mediate the impact of usage barriers on the intention to utilize QRIS. Significant usage constraints foster adverse sentiments, thus diminishing the intention to utilize QRIS. This pertains to the Theory of Planned Behavior, wherein attitude serves as a cognitive process linking negative judgments to behavioral intentions. Ashraf [56] study indicates that usage restrictions influence unfavorable sentiments, thereby diminishing the inclination to adopt technology.

Attitude modulates the impact of risk barriers on the intention to utilize. Risk barriers initially influence unfavorable attitudes, thereby diminishing user intentions. Chaveesuk, et al. [80] demonstrate that perceived risk influences unfavorable attitudes, which subsequently impact the intention to utilize technology.

Personal norms affect the impact of traditional restrictions on the intention to utilize. Traditional barriers diminish personal norms, thereby decreasing the intention to utilize QRIS. Research by Schwartz [24] and Sholehuddin, et al. [20] indicates that traditional barriers can diminish personal norms, thereby lowering behavioral intentions.

Product knowledge influences intentions by fostering favorable sentiments. A comprehensive comprehension of QRIS fosters a favorable disposition, thus enhancing the intention to utilize it. The research by Kusumaningtyas and Mujiasih [81] indicates that product knowledge fosters the development of positive sentiments.

Ultimately, personal norms mediate the influence of product knowledge on the intention to utilize QRIS. Comprehensive information stimulates personal norms, thereby enhancing user intentions. Research by Wu, et al. [60] indicates that robust personal norms can enhance the intention to adopt novel technology.

This study's findings underscore the necessity of surmounting obstacles to usage, mitigating hazards, and addressing traditions while enhancing users' digital literacy. Efficient educational and

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

socialization tactics can cultivate favorable attitudes and reinforce users' norms, thereby enhancing the acceptance of QRIS as a contemporary giving method in Balinese temples.

6.1. Implication

This study's results possess substantial theoretical and practical ramifications, particularly regarding the adoption of digital payment technology within cultural and religious contexts. These findings theoretically enhance the examination of obstacles to technology adoption, including usage, risk, and tradition barriers, while underscoring the significant influence of product knowledge, personal norms, and attitudes on the intention to utilize QRIS. This study offers a novel viewpoint on the dynamics of QRIS adoption within the framework of Balinese culture, which steadfastly upholds tradition, emphasizing the interplay of psychological, social, and technological aspects in consumer decision-making.

Temple administrators and QRIS service providers might leverage the findings of this study to formulate initiatives aimed at enhancing QRIS adoption. Measures such as socialization that highlight the compatibility of QRIS with tradition, ongoing education by religious leaders, and straightforward usage instructions might mitigate obstacles to acceptance. Furthermore, enhancing the application's user-friendliness and ensuring transparency in transaction security would bolster the congregation's confidence and convenience in utilizing QRIS. Enhanced product knowledge can be conveyed via social media, pamphlets, and educational sessions at temples to augment congregational comprehension. Highlighting the principles of virtue and moral responsibility in the support of temples via contemporary technologies can enhance individual standards and cultivate favorable attitudes within the congregation towards QRIS. This stage aims to enhance the adoption of QRIS while respecting current cultural and traditional values.

7. Conclusion

The study's results demonstrate that usage barriers and traditional barriers significantly negatively impact the intention to utilize QRIS for temple funds in Bali. In contrast, the risk barrier has a negative but no effect. Conversely, product knowledge exerts a favorable and considerable influence on the inclination to utilize QRIS. Attitudinal and personal normative elements significantly influence intention, with favorable attitudes and robust personal norms demonstrated to enhance the intention to utilize QRIS. Moreover, usage barriers and risk barriers exert a considerable negative influence on attitude, but product knowledge positively impacts both attitude and personal norm. Personal norms exert a considerable favorable influence on attitudes and intentions to utilize QRIS. Multiple variables exhibit a mediating relationship, including attitude mediating the effects of use barrier, risk barrier, and product knowledge on the intention to use, as well as personal norm mediating the effects of tradition barrier and product knowledge on the intention to use. These findings affirm that attitude and personal norm significantly influence the intention to utilize QRIS within the Balinese cultural setting.

Institutional Review Board Statement:

This study followed the ethical procedures outlined by tUdayana University'sresearch ethics guidelines Prior to data collection, participants were informed about the ostudy's objectives assured of the confidentiality of their responses, and provided informed consent. No personal identifiers were collected, and participation was entirely voluntary.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

Acknowledgements:
The author wishes to convey profound appreciation to the supervisor and examiner for their guidance, direction, and significant contributions during the study process. The feedback, critique, and recommendations provided have assisted the author in refining this research to its ultimate state. Hopefully, the guidance that has been given will be useful knowledge and provide a meaningful contribution to academic and practical developments in this field.

References
[1] M. Kalogiannakis and S. Papadakis, "Evaluating pre-service kindergarten teachers' intention to adopt and use tablets into teaching practice for natural sciences," *International Journal of Mobile Learning and Organisation*, vol. 13, no. 1, pp. 113-127, 2019. https://doi.org/10.1504/IJMLO.2019.096479

[2] I. G. A. G. W. W. Atmika and L. G. E. Sulindawati, "Analysis of the implementation of the Quickresponse Indonesian standard in increasing accountability of the management of Punia funds at Jagatnatha Temple, Singaraja," *Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, vol. 12, no. 2, pp. 425-435, 2021.

[3] S. Ram and J. N. Sheth, "Consumer resistance to innovations: the marketing problem and its solutions," *Journal of Consumer Marketing*, vol. 6, no. 2, pp. 5-14, 1989.

[4] J.-J. Hew, L.-Y. Leong, G. W.-H. Tan, K.-B. Ooi, and V.-H. Lee, "The age of mobile social commerce: An Artificial Neural Network analysis on its resistances," *Technological Forecasting and Social Change*, vol. 144, pp. 311-324, 2019.

[5] L. Ma and C. S. Lee, "Understanding the barriers to the use of MOOCs in a developing country: An innovation resistance perspective," *Journal of Educational Computing Research*, vol. 57, no. 3, pp. 571-590, 2019. https://doi.org/10.1177/0735633118757732

[6] S. Dunphy and P. A. Herbig, "Acceptance of innovations: The customer is the key!," *The Journal of High Technology Management Research*, vol. 6, no. 2, pp. 193-209, 1995.

[7] C.-C. Chen, C.-H. Chang, and K.-L. Hsiao, "Exploring the factors of using mobile ticketing applications: Perspectives from innovation resistance theory," *Journal of Retailing and Consumer Services*, vol. 67, p. 102974, 2022. https://doi.org/10.1016/j.jretconser.2022.102974

[8] M. Sadiq, M. Adil, and J. Paul, "An innovation resistance theory perspective on purchase of eco-friendly cosmetics," *Journal of Retailing and Consumer Services*, vol. 59, p. 102369, 2021.

[9] I. Arif, W. Aslam, and Y. Hwang, "Barriers in adoption of internet banking: A structural equation modeling-Neural network approach," *Technology in Society*, vol. 61, p. 101231, 2020. https://doi.org/10.1016/j.techsoc.2020.101231

[10] N. K. Maharani and A. Silvia, "Analysis of the influence of knowledge and religiosity on purchase intention of Halal cosmetic products," *AL-URBAN: Journal of Islamic Economics and Islamic Philanthropy*, vol. 3, no. 1, pp. 81-94, 2019.

[11] N. K. Ningrum, A. Lukitaningsih, and I. H. Larasati, "The influence of perceived value, perceived environmental knowledge and attitude towards green products on green purchasing intentions of Ades mineral water consumers in the Special Region of Yogyakarta," *Scientific Journal of Batanghari Jambi University*, vol. 22, no. 1, pp. 16-21, 2022.

[12] D. D. Deccasari, D. Mawar, and M. Marli, "The influence of brand image and product knowledge on purchase intention with green price as a moderating variable on The Body Shop products," *Dinamika Ekonomi: Jurnal Ekonomi Dan Bisnis*, vol. 15, no. 1, pp. 69-88, 2022.

[13] Q. Alifah and N. Kusumawati, "Determining determinants and barriers that influence smart home appliances adoption intention using the behavioral reasoning theory method," in *Proceedings of the 4th International Conference on Economics, Business and Economic Education Science, ICE-BEES 2021, 27-28 July 2021, Semarang, Indonesia. Presented at the International Conference on Economics, EAI, Semarang, Indonesia*, 2022.

[14] D. An, S. Ji, and I. U. Jan, "Investigating the determinants and barriers of purchase intention of innovative new products," *Sustainability*, vol. 13, no. 2, p. 740, 2021. https://doi.org/10.3390/su13020740

[15] A. Tandon, A. Dhir, P. Kaur, S. Kushwah, and J. Salo, "Why do people buy organic food? The moderating role of environmental concerns and trust," *Journal of Retailing and Consumer Services*, vol. 57, p. 102247, 2020.

[16] D. L. Kasilingam, "Understanding the attitude and intention to use smartphone chatbots for shopping," *Technology in Society*, vol. 62, p. 101280, 2020. https://doi.org/10.1016/j.techsoc.2020.101280

[17] Y. Sun and S. Wang, "Understanding consumers' intentions to purchase green products in the social media marketing context," *Asia Pacific Journal of Marketing and Logistics*, vol. 32, no. 4, pp. 860-878, 2020.

[18] S. H. Schwartz, "Normative explanations of helping behavior: A critique, proposal, and empirical test," *Journal of Experimental Social Psychology*, vol. 9, no. 4, pp. 349-364, 1973.

[19] Y. Chen, R. Dai, J. Yao, and Y. Li, "Donate time or money? The determinants of donation intention in online crowdfunding," *Sustainability*, vol. 11, no. 16, p. 4269, 2019. https://doi.org/10.3390/su11164269
[20] M. S. Sholehuddin, M. Munjin, and H. H. Adinugraha, "Islamic tradition and religious culture in halal tourism: empirical evidence from Indonesia," *IBDA: Jurnal Kajian Islam Dan Budaya*, vol. 19, no. 1, pp. 79-100, 2021.
[21] R. Setiawan, W. Santosa, and A. Sjafruddin, "Effect of habit and car access on student behavior using cars for traveling to campus," *Procedia Engineering*, vol. 125, pp. 571-578, 2015.
[22] A. Aziz, D. Dharmayanti, J. Mualimin, W. Wartoyo, A. S. Prabuwono, and A. Hidayat, "Analysis of the factors influencing the philanthropy behavior in the industrial revolution Era 4.0," *Pakistan Journal of Life and Social Sciences*, vol. 22, no. 1, pp. 2904-2923, 2024.
[23] D. Havlíčková, P. Zámečník, M. Šimeček, and S. Klečková, "The two-level complex of traffic behavior assessment focused on driving skills in the context of autonomous driving," in *Advances in Simulation and Digital Human Modeling: Proceedings of the AHFE 2020 Virtual Conferences on Human Factors and Simulation, and Digital Human Modeling and Applied Optimization, July 16-20, 2020, USA*, 2021: Springer, pp. 124-135.
[24] S. H. Schwartz, "Normative influences on altruism," *Advances in Experimental Social Psychology*, vol. 10, pp. 221-279, 1977.
[25] Y. H. Shin, J. Im, S. E. Jung, and K. Severt, "The theory of planned behavior and the norm activation model approach to consumer behavior regarding organic menus," *International Journal of Hospitality Management*, vol. 69, pp. 21-29, 2018.
[26] X. He and W. Zhan, "How to activate moral norm to adopt electric vehicles in China? An empirical study based on extended norm activation theory," *Journal of Cleaner Production*, vol. 172, pp. 3546-3556, 2018.
[27] N. Manosuthi, J.-S. Lee, and H. Han, "Predicting the revisit intention of volunteer tourists using the merged model between the theory of planned behavior and norm activation model," *Journal of Travel & Tourism Marketing*, vol. 37, no. 4, pp. 510-532, 2020.
[28] I. Ajzen, "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179-211, 1991. https://doi.org/10.1016/0749-5978(91)90020-T
[29] O. Akintimehin, I. Phau, R. Ogbechie, and A. Oniku, "Investigating boycotts and buycotts as antecedents towards attitude and intention to engage in ethical consumption," *International Journal of Ethics and Systems*, vol. 38, no. 4, pp. 661-681, 2022. https://doi.org/10.1108/IJOES-06-2021-0117
[30] F. A. Yamoah and A. Acquaye, "Unravelling the attitude-behaviour gap paradox for sustainable food consumption: Insight from the UK apple market," *Journal of Cleaner Production*, vol. 217, pp. 172-184, 2019.
[31] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. AlHamad, and H. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *International Journal of Data and Network Science*, vol. 6, no. 4, pp. 1135-1146, 2022.
[32] I. K. Mensah, P. Vera, and J. Mi, "Factors determining the use of e-government services: An empirical study on Russian students in China," *International Journal of E-Adoption*, vol. 10, no. 2, pp. 1-19, 2018.
[33] J. Jansson and E. Dorrepaal, "Personal norms for dealing with climate change: results from a survey using moral foundations theory," *Sustainable Development*, vol. 23, no. 6, pp. 381-395, 2015. https://doi.org/10.1002/sd.1598
[34] D. Roos and R. Hahn, "Understanding collaborative consumption: An extension of the theory of planned behavior with value-based personal norms," *Journal of Business Ethics*, vol. 158, pp. 679-697, 2019.
[35] L. Zhang, J. Ruiz-Menjivar, B. Luo, Z. Liang, and M. E. Swisher, "Predicting climate change mitigation and adaptation behaviors in agricultural production: A comparison of the theory of planned behavior and the Value-Belief-Norm Theory," *Journal of Environmental Psychology*, vol. 68, p. 101408, 2020.
[36] D. Kim and J. K. Bae, "The effects of protection motivation and perceived innovation characteristics on innovation resistance and innovation acceptance in internet primary bank services," *Global Business & Finance Review*, vol. 25, no. 1, pp. 1-12, 2020.
[37] J. N. Sheth, *An integrative theory of patronage preference and behavior*. Urbana, IL, USA: College of Commerce and Business Administration, Bureau of Economic and Business Research, University of Illinois, Urbana-Champaign, 1981.
[38] V. Joachim, P. Spieth, and S. Heidenreich, "Active innovation resistance: An empirical study on functional and psychological barriers to innovation adoption in different contexts," *Industrial Marketing Management*, vol. 71, pp. 95-107, 2018. https://doi.org/10.1016/j.indmarman.2017.12.011
[39] M. Talwar, L. Corazza, R. Bodhi, and A. Malibari, "Why do consumers resist digital innovations? An innovation resistance theory perspective," *International Journal of Emerging Markets*, vol. 19, no. 11, pp. 4327-4342, 2024.
[40] D. Brandon, H. Lee, and R. Patel, "Challenging the traditional models: A review of alternative theories in technology acceptance and adoption," *Journal of Technology and Innovation Management*, vol. 32, no. 4, pp. 215-229, 2021.
[41] Y. K. Dwivedi, N. P. Rana, A. Jeyaraj, M. Clement, and M. D. Williams, "Revisiting the technology acceptance model: A systematic review of empirical research," *International Journal of Information Management*, vol. 45, pp. 98-119, 2019.
[42] Y. J. Jang, "Understanding restaurant customers' environmental behavior in the social media context: An application of theory of planned behavior," *Global Business & Finance Review*, vol. 27, no. 2, pp. 48-60, 2022.

[43] S. Wang, C. Ji, H. He, Z. Zhang, and L. Zhang, "Tourists' waste reduction behavioral intentions at tourist destinations: An integrative research framework," *Sustainable Production and Consumption*, vol. 25, pp. 540-550, 2021.
[44] R. Doran and S. Larsen, "The relative importance of social and personal norms in explaining intentions to choose eco-friendly travel options," *International Journal of Tourism Research*, vol. 18, no. 2, pp. 159-166, 2016.
[45] B. Wang, X. Wang, D. Guo, B. Zhang, and Z. Wang, "Analysis of factors influencing residents' habitual energy-saving behaviour based on NAM and TPB models: Egoism or altruism?," *Energy Policy*, vol. 116, pp. 68-77, 2018.
[46] S. Iyanna, P. Kaur, P. Ractham, S. Talwar, and A. N. Islam, "Digital transformation of healthcare sector. What is impeding adoption and continued usage of technology-driven innovations by end-users?," *Journal of Business Research*, vol. 153, pp. 150-161, 2022.
[47] B. Sivathanu, "Adoption of internet of things (IOT) based wearables for healthcare of older adults–a behavioural reasoning theory (BRT) approach," *Journal of Enabling Technologies*, vol. 12, no. 4, pp. 169-185, 2018.
[48] S. Khanra, A. Dhir, P. Kaur, and R. P. Joseph, "Factors influencing the adoption postponement of mobile payment services in the hospitality sector during a pandemic," *Journal of Hospitality and Tourism Management*, vol. 46, pp. 26-39, 2021. https://doi.org/10.1016/j.jhtm.2020.11.004
[49] F. Hameed, A. Qayyum, and F. A. Khan, "A new trend of learning and teaching: Behavioral intention towards mobile learning," *Journal of Computers in Education*, vol. 11, no. 1, pp. 149-180, 2024.
[50] N. A. Memon, G. M. Shah, and G. Tunio, "Barriers toward adoption of mobile payment in Pakistan," *Annals of Human and Social Sciences*, vol. 3, no. 2, pp. 180-190, 2022.
[51] R. K. Behera, P. K. Bala, and N. P. Rana, "Assessing factors influencing consumers' non-adoption intention: exploring the dark sides of mobile payment," *Information Technology & People*, vol. 36, no. 7, pp. 2941-2976, 2023. https://doi.org/10.1108/ITP-11-2021-0863
[52] G. Migliore, R. Wagner, F. S. Cechella, and F. Liébana-Cabanillas, "Antecedents to the adoption of mobile payment in China and Italy: an integration of UTAUT2 and innovation resistance theory," *Information Systems Frontiers*, vol. 24, no. 6, pp. 2099-2122, 2022.
[53] A. Ray, P. K. Bala, and Y. K. Dwivedi, "Exploring barriers affecting eLearning usage intentions: An NLP-based multi-method approach," *Behaviour & Information Technology*, vol. 41, no. 5, pp. 1002-1018, 2022.
[54] I. K. Suarjana and N. W. S. Suprapti, "The influence of price perception, product knowledge, and company image on purchase intention of multi-service services of the Indihome brand," Doctoral Dissertation, Udayana University, 2018.
[55] T.-H. Cham, J.-H. Cheah, B.-L. Cheng, and X.-J. Lim, "I Am too old for this! Barriers contributing to the non-adoption of mobile payment," *International Journal of Bank Marketing*, vol. 40, no. 5, pp. 1017-1050, 2022. https://doi.org/10.1108/IJBM-03-2021-0133
[56] M. A. Ashraf, "Comprehending the intention to use branchless banking by rural people during the corona pandemic: Evidence from Bangladesh," *Journal of Financial Services Marketing*, vol. 28, no. 1, p. 99, 2022. https://doi.org/10.1057/s41264-022-00175-1
[57] J. Nel and C. Boshoff, "'I just don't like digital-only banks, and you should not use them either': Traditional-bank customers' opposition to using digital-only banks," *Journal of Retailing and Consumer Services*, vol. 59, p. 102368, 2021.
[58] T. P. Situmorang, F. Indriani, R. A. Simatupang, and H. Soesanto, "Brand positioning and repurchase intention: The effect of attitude toward green brand," *The Journal of Asian Finance, Economics and Business*, vol. 8, no. 4, pp. 491-499, 2021.
[59] K. E. Bol, L. Lee, and H.-L. Chen, "Does green packaging matter? Investigating consumer self-image congruity and green knowledge toward attitude and purchase intention," *Soochow Journal of Economics and Business*, vol. 102, pp. 1-34, 2021.
[60] L. Wu, Y. Zhu, and J. Zhai, "Understanding waste management behavior among university students in China: environmental knowledge, personal norms, and the theory of planned behavior," *Frontiers in Psychology*, vol. 12, p. 771723, 2022.
[61] M. J. Kim, C. M. Hall, and M. Bonn, "Can the value-attitude-behavior model and personality predict international tourists' biosecurity practice during the pandemic?," *Journal of Hospitality and Tourism Management*, vol. 48, pp. 99-109, 2021. https://doi.org/10.1016/j.jhtm.2021.05.014
[62] N. Linder, M. Giusti, K. Samuelsson, and S. Barthel, "Pro-environmental habits: An underexplored research agenda in sustainability science," *Ambio*, pp. 1-11, 2022. https://doi.org/10.1007/s13280-021-01619-6
[63] C.-W. Ho and C.-C. Wu, "Exploring Intention toward using an electric scooter: Integrating the technology readiness and acceptance into norm activation model (TRA-NAM)," *Energies*, vol. 14, no. 21, p. 6895, 2021.
[64] V. Carfora, C. Cavallo, P. Catellani, T. Del Giudice, and G. Cicia, "Why do consumers intend to purchase natural food? Integrating theory of planned behavior, value-belief-norm theory, and trust," *Nutrients*, vol. 13, no. 6, p. 1904, 2021. https://doi.org/10.3390/nu13061904
[65] G. Rodrigues, J. Sarabdeen, and S. Balasubramanian, "Factors that influence consumer adoption of e-government services in the UAE: A UTAUT model perspective," *Journal of Internet Commerce*, vol. 15, no. 1, pp. 18-39, 2016.
[66] H. A. Kadir, R. Ismail, S. Wok, and K. A. Manan, "The mediating effect of attitude on e-wallet usage among users in Malaysia," *Journal of Communication Education*, vol. 2, no. 1, pp. 58-77, 2022.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 345-362, 2025
DOI: 10.55214/25768484.v9i6.7812

[67] E. Elahi, H. Zhang, X. Lirong, Z. Khalid, and H. Xu, "Understanding cognitive and socio-psychological factors determining farmers' intentions to use improved grassland: Implications of land use policy for sustainable pasture production," *Land use Policy*, vol. 102, p. 105250, 2021. https://doi.org/10.1016/j.landusepol.2020.105250

[68] M. T. Liu, Y. Liu, and Z. Mo, "Moral norm is the key: An extension of the theory of planned behaviour (TPB) on Chinese consumers' green purchase intention," *Asia Pacific Journal of Marketing and Logistics*, vol. 32, no. 8, pp. 1823-1841, 2020. https://doi.org/10.1108/APJML-05-2019-0285

[69] J. F. Hair, C. M. Ringle, and M. Sarstedt, "Partial least squares: The better approach to structural equation modeling?," *Long Range Planning*, vol. 45, no. 5-6, pp. 312-319, 2012. https://doi.org/10.1016/j.lrp.2012.09.008

[70] K. Moorthy *et al.*, "Barriers of mobile commerce adoption intention: Perceptions of generation X in Malaysia," *Journal of Theoretical and Applied Electronic Commerce Research*, vol. 12, no. 2, pp. 37-53, 2017.

[71] D. Rahmayanti *et al.*, "What drives millennials and zillennials continuously using instant messaging? Perspective from Indonesia," *International Journal of Data & Network Science*, vol. 6, no. 1, pp. 17-26, 2022.

[72] F. Nurlaily, E. K. Aini, and P. S. Asmoro, "What determines generation Z continuance intention of fintech? The Moderating Effect of Gender," presented at the 3rd Annual International Conference on Public and Business Administration (AICoBPA 2020), Atlantis Press, 2021.

[73] M. T. A. Himel, S. Ashraf, T. A. Bappy, M. T. Abir, M. K. Morshed, and M. N. Hossain, "Users' attitude and intention to use mobile financial services in Bangladesh: An empirical study," *South Asian Journal of Marketing*, vol. 2, no. 1, pp. 72-96, 2021.

[74] S. Khan, A. Rashid, R. Rasheed, and N. A. Amirah, "Designing a knowledge-based system (KBS) to study consumer purchase intention: The impact of digital influencers in Pakistan," *Kybernetes*, vol. 52, no. 5, pp. 1720-1744, 2023. https://doi.org/10.1108/K-06-2021-0497

[75] G. Lee and Y. Kim, "Effects of resistance barriers to service robots on alternative attractiveness and intention to use," *Sage Open*, vol. 12, no. 2, p. 21582440221099293, 2022.

[76] S. Das and A. Ray, "Identifying barriers of financial app usage and their impact on negative emotions, customer ratings and recommendation intention: A text-mining based approach," *Asia-Pacific Journal of Business Administration*, 2024. https://doi.org/10.1108/APJBA-07-2023-0445

[77] A. O. Mathew, A. N. Jha, A. K. Lingappa, and P. Sinha, "Attitude towards drone food delivery services—role of innovativeness, perceived risk, and green image," *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 7, no. 2, p. 144, 2021. https://doi.org/10.3390/joitmc7020144

[78] Y. Tarigan and V. Aldama, "Analysis of the influence of product knowledge, attitude, and halal certification on purchase intention in halal food products," *Journal of Applied Business Administration*, vol. 7, no. 1, pp. 100-108, 2023.

[79] S. H.-W. Chuah, R. Y. Sujanto, J. Sulistiawan, and E. C.-X. Aw, "What is holding customers back? Assessing the moderating roles of personal and social norms on CSR'S routes to Airbnb repurchase intention in the COVID-19 era," *Journal of Hospitality and Tourism Management*, vol. 50, pp. 67-82, 2022. https://doi.org/10.1016/j.jhtm.2021.12.008

[80] S. Chaveesuk, B. Khalid, and W. Chaiyasoonthorn, "Digital payment system innovations: A marketing perspective on intention and actual use in the retail sector," *Innovative Marketing*, vol. 17, no. 3, p. 109, 2021. https://doi.org/10.21511/im.17(3).2021.09

[81] A. R. Kusumaningtyas and E. Mujiasih, "Hubungan Antara Pengetahuan Produk Dengan Intensi Membeli Smartphone Pada Karyawan PT."X"," *Jurnal Empati*, vol. 5, no. 2, pp. 413-416, 2016.