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THE IMPACT OF RELIGIOSITY AND USER PERCEPTIONS ON MOBILE PAYMENT ADOPTION AMONG STUDENTS AT ISLAMIC UNIVERSITIES IN YOGYAKARTA

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ABSTRACT

This study aims to analyze the influence of religiosity on university students' interest in using mobile payment services through the extended Technology Acceptance Model (TAM). The research objective is to examine how perceived usefulness (PU), perceived ease of use (PEU), perceived security (PS), and religiosity (R) impact mobile payment adoption among students in Islamic universities in Yogyakarta. Data was collected from January to March 2024 via a Google Form questionnaire involving 203 students from Islamic universities in Yogyakarta. The quantitative analysis was performed using Smart-PLS. The findings indicate that among the four exogenous variables, only perceived usefulness (PU) significantly and positively affects mobile payment adoption, highlighting its crucial role in influencing student adoption decisions. Conversely, perceived ease of use (PEU), perceived security (PS), and religiosity (R) showed positive but insignificant effects on mobile payment adoption. Limitations include the relatively small sample size and the focus on a specific demographic, which may affect the generalizability of the results. Future research should explore a larger and more diverse population, include additional variables such as cultural and socioeconomic factors, and employ longitudinal studies to better understand the dynamics of mobile payment adoption over time.

Keywords: Mobile Payment, Technology Acceptance Model, Religiosity, University Students

A. INTRODUCTION

Technological advancements have significantly impacted society's daily lives, especially in payment transactions (Siswanti, 2022). Payments, which used to be conducted conventionally, can now be executed in many ways, even from distant locations. This technological development has positively impacted the transaction system (Hariyana, 2021; Maria & Widayati, 2020; Rifai et al., 2022). The use of technology in payment systems continues to evolve. E-commerce is one form of digital business that uses these digital payment systems (Gupta, 2014; Jílková & Králová, 2020; Ureche & Plamondon, 2000).

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This payment technology has become a crucial alternative in global business because of its flexibility (Oliveira et al., 2016; Ramos-de-Luna et al., 2016). However, considering its effectiveness and flexibility, many MSMEs are also interested in using this digital payment system. In Indonesia, the rise in mobile payment usage is closely linked to the increasing number of smartphone users and the development of digital payment systems. Financial applications like GoPay, OVO, ShopeePay, and LinkAja have become prominent in offering mobile payment services, facilitating the shift toward a cashless society (Bezovski, 2016; Pillai, 2019). Furthermore, Bank Indonesia's introduction of the QRIS (Quick Response Code Indonesian Standard) has enhanced the integration and interoperability of digital payment systems, promoting their widespread adoption (Annisa et al., 2023; Natakusumah et al., 2023; R et al., 2024; Rahadi et al., 2023).

Despite the growing adoption of mobile payments, factors such as religiosity (Cahya & Umam, 2023) and user perceptions still play a critical role in influencing mobile payment usage (Alkhowaiter, 2022; Natakusumah et al., 2023), particularly among specific demographic groups like university students in Indonesia. This study analyzes how religiosity, perceived ease of use, perceived security, and perceived usefulness influence mobile payment adoption among students at Islamic universities in Yogyakarta.

While previous studies have explored mobile payment adoption using the Technology Acceptance Model (TAM) and related frameworks, there is limited research examining the role of religiosity in shaping user attitudes toward mobile payments, especially in the context of Islamic universities (Alkhowaiter, 2022; Natakusumah et al., 2023). For instance, Alkhowaiter (2022) explored the role of Islamic religiosity in influencing m-payment behaviors within the Gulf Cooperation Council (GCC) countries, extending the meta-UTAUT model with trust and religiosity. Similarly, other studies, such as those by Elsotouhy et al. (2023), have highlighted religiosity as an essential factor influencing donation behaviors through mobile payment technologies. However, little is known about how religiosity influences day-to-day mobile payment adoption, particularly in the Indonesian context, which has distinct cultural and religious characteristics.

This paper addresses this gap by investigating the impact of religiosity on mobile payment adoption alongside the more established factors of perceived usefulness, perceived ease of use, and perceived security. By doing so, it contributes to the growing body of knowledge on technology adoption in culturally and religiously diverse settings, providing

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insights for policymakers and financial service providers on how to design mobile payment systems that cater to the needs of religious users.

B. LITERATURE REVIEW

Mobile Payment Technology

Mobile payment technology uses mobile devices to conduct financial transactions securely over various wireless technologies, facilitating payments for goods and services remotely or in person (de Luna et al., 2019; Oliveira et al., 2016; Ozturk et al., 2017). The rise of mobile payment systems globally has transformed how consumers and businesses interact, providing convenient, fast, and flexible payment solutions (Liébana-Cabanillas et al., 2018). Mobile payment has become a non-cash payment method in Indonesia, and it uses smartphones such as GoPay, LinkAja, DANA, OVO, ShopeePay, and others (Annisa et al., 2023). This digital-based payment development aligns with society's rising number of mobile phone users, especially with all the convenience and comfort offered. Mobile payment is a smartphone method or tool to help users make transactions anywhere and anytime (Prabowo & Widodo, 2021). One model often used to measure how society responds to mobile payment is the TAM (technology acceptance model) (Baber, 2021; Li et al., 2019; Najib & Fahma, 2020; Natakusumah et al., 2023; Thakur, 2013). The widespread acceptance of mobile payments in the region underscores the need to explore various factors influencing this adoption, including technological and sociocultural factors like religiosity.

Technology Acceptance Model (TAM)

TAM is a model that can analyze factors influencing technology acceptance (Malik & Annuar, 2021; Senali et al., 2023). TAM, proposed by Davis (1989), suggests that a person adopting technology will consider perceived usefulness and ease of use. One of the key advantages of TAM is that it is a simple but valid model because it is built on strong theory and has been tested in many studies, concluding that TAM is a good model. Generally, the use of TAM to measure interest in payment technology has been widely used by researchers (Najib & Fahma, 2020; Ramos-de-Luna et al., 2016; Zhong et al., 2021). Here is the description of the two aspects:

1. Perceived Usefulness (PU)

Davis (1989) defined perceived usefulness as the degree to which a person believes using a particular technology would enhance their performance. Numerous studies have

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demonstrated that PU is a critical factor influencing users' attitudes toward adopting new technologies, including mobile payments (Kumari & Biswas, 2023; Liu et al., 2022). Some scholars like Grover et al. (2019) and Moslehpour et al. (2018) found that in the context of online shopping, the usefulness of an application or system significantly determines consumer attitudes. Several researchers have found that perceived usefulness can increase interest in using a technology or system among the public (Kumari & Biswas, 2023; Liu et al., 2022; Najib & Fahma, 2020; Ricardianto et al., 2023; Tandon et al., 2016). In his research, Oliveira et al. (2016), perceived usefulness significantly impacts the intention to use mobile payment systems, as users perceive these systems as enhancing the speed and convenience of transactions. Hence, this study proposes the following hypothesis:

H1: PU positively influences students' interest in using mobile payment.

2. Perceived Ease of Use (PEU)

Perceived ease of use refers to the degree to which a person believes using technology will be free of effort (Davis, 1989). Frequent use and interaction between system users can also indicate ease of use. A more frequently used system means it is more familiar, easier to operate, and easier to use. According to Othman et al. (2022), perceived ease of use refers to how easy users believe it is to use a system. This concept is very important for mobile payments because applications that are easier and faster to use without extensive learning enhance user experience. Studies from Liébana-Cabanillas et al. (2018) and Liu et al. (2022) have found a positive correlation between PEU and mobile payment adoption, demonstrating that users are more inclined to adopt mobile payments if they perceive them as easy to use. Other research by Baliawan et al. (2024), Hasan et al. (2023), Malik & Annuar (2021), Othman et al. (2022), and Senali et al. (2023) found the influence of perceived ease of use on technology usage. Therefore, this study proposes the following hypothesis:

H2: Perceived Ease of Use (PEU) positively influences Mobile Payment Adoption.

Additionally, both PU and PEU have been extensively validated in various contexts, yet the impact of religiosity as a variable along with PU, PEU and PS remains underexplored. This study seeks to contribute to this gap by examining how religiosity interacts with these traditional TAM variables in the context of mobile payment adoption.

Perceived Security (PS)

According to Bhattacherjee (2001), Perceived security from the consumer's perspective is a cognitive process that influences consumers' emotions and interests when using something. Perceived security is always associated with the negative consequences that users might receive

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if they use a system. Previous studies have examined the relationship between perceived security and mobile payment usage (Grover et al., 2019; Moslehpour et al., 2018). Research by Liébana-Cabanillas et al. (2018), Lim et al. (2019 and Loh et al. (2020) state that perceived security positively and significantly affects interest in using mobile payments. Similarly, Lim et al. (2019) examined mobile payment usage in South Korea and found that perceived security is pivotal in determining continued usage, especially among users who have experienced prior security breaches. Users who are confident that mobile payment platforms have robust security measures are more inclined to trust the technology and use it more frequently. Moreover, Patil et al. (2020), in their study on mobile payment systems in India, found that perceived security was a stronger predictor of mobile payment adoption than perceived usefulness or ease of use. In regions where financial fraud and cyberattacks are prevalent, users prioritize the security of their financial transactions over other factors when deciding whether to adopt new payment technologies. Thus, this study proposes the following hypothesis:

H3: Perceived Security (PS) positively influences Mobile Payment Adoption.

Religiosity

Religiosity can be an indicator that influences individual and societal behavior patterns. If someone has high Islamic religiosity, they will behave according to religious values. Similarly, in using cashless transactions, someone with high Islamic religiosity will not use non-cash transactions for activities prohibited by religion (Cahya & Umam, 2023). Religiosity has a significant relationship with mobile payment usage. Several studies on this relationship have been conducted (Alkhowaiter, 2022; Cahya & Umam, 2023; Elsotouhy et al., 2023; Natakusumah et al., 2023; Soomro, 2019). Based on this information, the authors propose the next hypothesis:

H4: Religiosity (R) positively influences Mobile Payment Adoption

In this study, we adopted the research model by Natakusumah et al. (2023) as shown in Figure 1, with several adjustments to indicator items to align with the intent and context of this study. We propose this model because it has produced good results and aims to test it on a different demographic group.

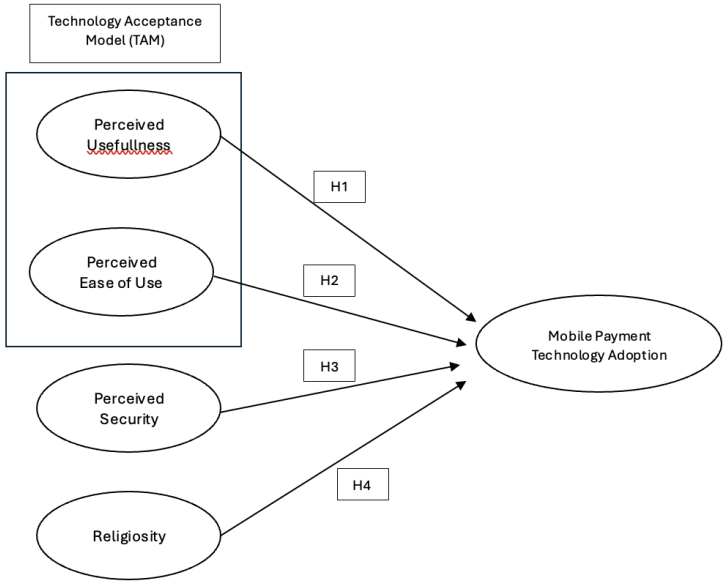

Figure 1. Research Framework

Source: Processed Image, 2024

C. RESEARCH METHOD

This quantitative study aims to evaluate the influence of religiosity, perceived ease of use, perceived usefulness, and perceived security on Muslim students' interest in using mobile payment technology in Yogyakarta. A quantitative design allows for collecting empirical data that can be statistically analyzed to test the relationships between the variables.

The sample in this study was determined using convenience sampling, a non-probability sampling technique involving individuals representing specific population types. Convenience sampling has been frequently applied in studies on mobile payment adoption and the Technology Acceptance Model (TAM) (Chawla & Joshi, 2019; Nareswari et al., 2022; Prabowo & Widodo, 2021). The sample for this study consists of 203 students from various Islamic universities in Yogyakarta, including Universitas Islam Indonesia (UII), UIN Sunan Kalijaga, Universitas Muhammadiyah Yogyakarta (UMY), and Universitas Ahmad Dahlan. These universities were chosen because Yogyakarta is known for its large population of students, including a significant number of students enrolled in Islamic universities. Focusing on students from Islamic universities allows the study to specifically assess the impact of religiosity on mobile payment adoption, as religiosity may play a more prominent role in this demographic compared to students at other universities. According to the sample size, following the guidelines suggested by J. Hair et al. (2022) and Kline (2016), a sample size of

203 is considered adequate for Structural Equation Modeling using Partial Least Squares (SEM-PLS).

Primary data for this study were collected through questionnaires distributed via Google form to respondents. Respondents were assured of the confidentiality and anonymity of their responses, and informed consent was obtained through a consent form embedded in the online survey. Respondents could withdraw from the study at any time without providing any reason. By continuing with the survey, they confirmed their consent to participate.

The collected data were analyzed using the Partial Least Square (PLS) method with Smart PLS version 4.1.0.0 software. According to Purwanto (2021), data analysis with the PLS-SEM approach involves two types of tests: internal model testing, including the R-square test, hypothesis test, and effect size test, and external model testing, including the convergent validity test, discriminant validity test, and reliability test.

This study examines five variables: four exogenous variables and one endogenous variable. The four exogenous variables are perceived usefulness, perceived ease of use, perceived security, and religiosity, while the endogenous variable is mobile payment adoption. The variables in this study are adapted from previous research, with some adjustments to indicator items to fit the study's objectives and context. The variable measurement items can be seen in Table 1.

Table 1. Operational Definitions of Variables

No.	Variable	Operational Definition	Question Items
1	Mobile payment technology	Mobile payment is a service for paying goods, services, and bills using a mobile device (phone or smartphone) connected to the internet.	1. Mobile payment technology increases my transaction effectiveness in daily life. 2. Using mobile payment technology improves my transaction performance. 3. Mobile payment technology makes payments easier for me. 4. In general, mobile payment technology is beneficial for me.
2	Religiosity	Religiosity is a complex system of beliefs, faith, attitudes, and rituals connecting individuals with God.	1. It is important for me to take time to worship Allah SWT. 2. I strive to live according to my religion. 3. My entire approach to life is based on my religion. 4. I worship for peace and happiness. 5. I worship for tranquility and protection.

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No.	Variable	Operational Definition	Question Items
3	TAM	TAM is a model used to explore users' reactions to technology.	1. Mobile payment technology increases my transaction effectiveness in daily life. 2. Using mobile payment technology improves my transaction performance. 3. Mobile payment technology makes payments easier for me. 4. In general, mobile payment technology is beneficial for me. 1. Learning to use mobile payment technology is easy for me. 2. For me, using mobile payment technology requires little effort. 3. Being skilled in using mobile payment technology is easy for me. 4. With mobile payment technology, using my phone makes transactions easier. 1. I worry about potentially misusing my financial information (including transactions and personal data) when using mobile payment technology. 2. I feel my financial information is not secure when using mobile payment technology. 3. I am concerned that others may access my financial information when using mobile payment technology.

D. RESULTS AND DISCUSSION

In this study, data were collected using questionnaires distributed via Google Forms through social media to the population of Islamic University students in Yogyakarta. Based on the data collection process, 203 respondents were gathered for this study.

The number of respondents in this study was 203. The classification of respondents can be seen in Table 2.

Table 2. Respondent profile

Topic	Category	Total	%
University	Universitas Islam Indonesia	45	22.2%
	UIN Sunan Kalijaga	53	26.1%
	Universitas Muhammadiyah Yogyakarta	53	26.1%
	Universitas Ahmad Dahlan	52	25.6%
	Total	**203**	**100%**
Gender	Male	106	52.2%

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Topic	Category	Total	%
	Female	97	47.8%
	Total	103	100%
Religion	Islam	203	100%
	Non-Islam	0	0%
	Total	202	100%

Sources: Data Processing Results Smart-PLS, 2024

Table 2 shows that the majority of respondents involved in this study are male, with 52.2% male and 47.8% female respondents. Respondents from UIN Sunan Kalijaga and Muhammadiyah University of Yogyakarta have the same number, each with 53 respondents, followed by Ahmad Dahlan University with 25.6% of respondents, and the last respondents from the Islamic University of Indonesia with 22.2%.

Outer Model Analysis

The results of the outer model analysis can be seen through convergent validity, construct validity, discriminant validity, and composite reliability. The first stage tests convergent validity, construct validity, and composite reliability using the Smart PLS algorithm. The results of this analysis are shown in Figure 2.

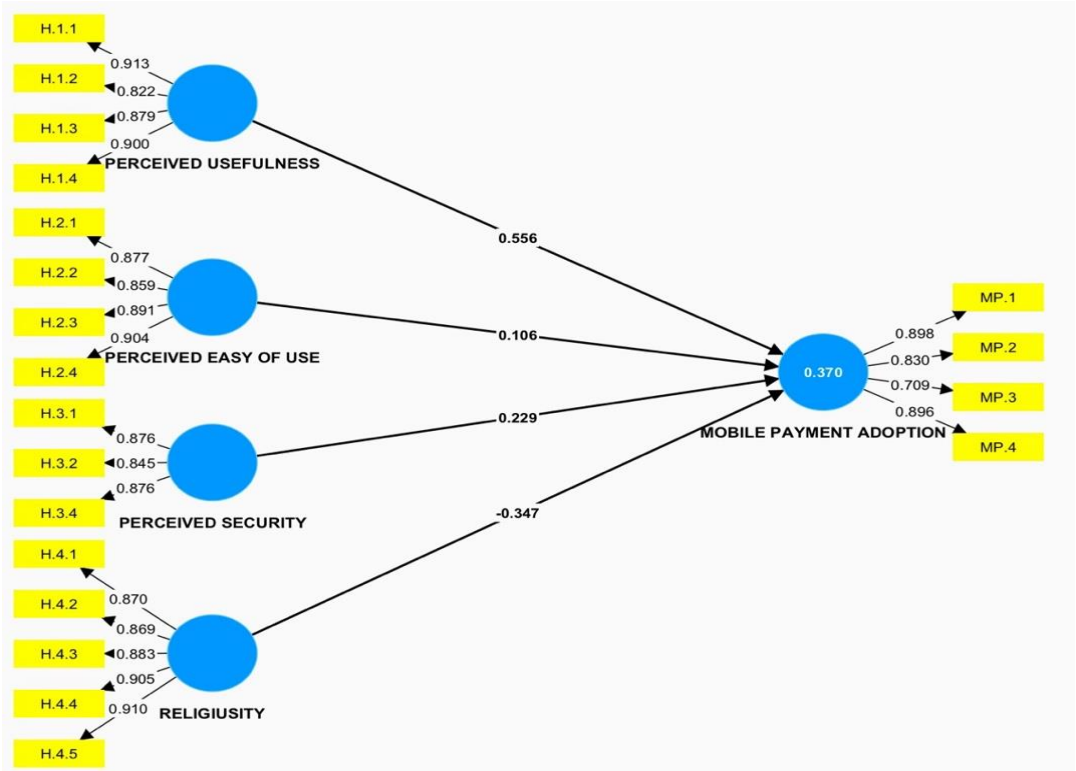

Figure 2. Outer Model Analysis

Sources: Data Processing Results Smart-PLS, 2024

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Convergent Validity

To determine the validity of each item indicator variable, a test called Convergent Validity Test is conducted. In Partial Least Square (PLS), this convergent validity test can be done by looking at the value of each Loading Factor. The Loading Factor values describe the magnitude of the relationship between each measurement item (questionnaire indicators) and the latent variable (construct). An item indicator is considered to meet Convergent Validity if the Loading Factor value in each path between components is greater than 0.7 (J. F. Hair et al., 2021).

Table 3. Outer Loading

Variable	Outer loadings	AVE	Status
H.1.1 PERCEIVED USEFULNESS	0.913	0.773	Valid
H.1.2 PERCEIVED USEFULNESS	0.822		
H.1.3 PERCEIVED USEFULNESS	0.879		
H.1.4 PERCEIVED USEFULNESS	0.900		
H.2.1 PERCEIVED EASE OF USE	0.877	0.780	Valid
H.2.2 PERCEIVED EASE OF USE	0.859		
H.2.3 PERCEIVED EASE OF USE	0.891		
H.2.4 PERCEIVED EASE OF USE	0.904		
H.3.1 PERCEIVED SECURITY	0.876	0.750	Valid
H.3.2 PERCEIVED SECURITY	0.845		
H.3.4 PERCEIVED SECURITY	0.876		
H.4.1 RELIGIOSITY	0.870	0.788	Valid
H.4.2 RELIGIOSITY	0.869		
H.4.3 RELIGIOSITY	0.883		
H.4.4 RELIGIOSITY	0.905		
H.4.5 RELIGIOSITY	0.910		
MP.1 MOBILE PAYMENT ADOPTION	0.898	0.700	Valid
MP.2 MOBILE PAYMENT ADOPTION	0.830		
MP.3 MOBILE PAYMENT ADOPTION	0.709		
MP.4 MOBILE PAYMENT ADOPTION	0.896		

Sources: Data Processing Results Smart-PLS, 2024

The results of the outer loading values shown in Table 3 indicate that all questionnaire items in this study meet the criteria of greater than 0.7 (J. F. Hair et al., 2021). Based on these

values, it is concluded that all variable items in this study meet the requirements for convergent validity, meaning that all items on the latent variables in this study are well understood by respondents and align with the purpose of this study. The AVE (Average Variance Extracted) values in this study are above 0.5, meaning that all questionnaire items meet the convergent validity requirements.

Discriminant Validity Test

One test conducted to determine discriminant validity is to examine the cross-loading values. The cross-loading values measure the magnitude of the correlation between each variable, its indicators, and the indicators from other constructs.

Table 4. Cross loading

	MPA	PEU	PS	PU	RELIGIOSITY
H.1.1	0.524	0.804	0.689	0.913	0.708
H.1.2	0.420	0.796	0.655	0.822	0.718
H.1.3	0.475	0.800	0.719	0.879	0.667
H.1.4	0.529	0.803	0.704	0.900	0.704
H.2.1	0.389	0.877	0.697	0.771	0.711
H.2.2	0.424	0.859	0.687	0.792	0.704
H.2.3	0.487	0.891	0.747	0.835	0.724
H.2.4	0.504	0.904	0.728	0.807	0.724
H.3.1	0.516	0.669	0.876	0.633	0.512
H.3.2	0.396	0.748	0.845	0.730	0.621
H.3.4	0.438	0.704	0.876	0.695	0.578
H.4.1	0.321	0.657	0.525	0.639	0.870
H.4.2	0.272	0.713	0.565	0.696	0.869
H.4.3	0.302	0.727	0.603	0.705	0.883
H.4.4	0.289	0.753	0.605	0.755	0.905
H.4.5	0.266	0.753	0.601	0.730	0.910
MP.1	0.898	0.501	0.507	0.536	0.324
MP.2	0.830	0.378	0.377	0.407	0.265
MP.3	0.709	0.349	0.363	0.374	0.202
MP.4	0.896	0.472	0.486	0.518	0.294

Sources: Data Processing Results Smart-PLS, 2024

The results of the cross-loading values shown in Table 4. indicate that all indicators have higher values on their respective constructs than other variables. Based on these values, it is concluded that the data meet the requirements for discriminant validity.

Reliability Test

The reliability test, also known as internal consistency reliability, measures how much the indicator variables increase when the latent variables increase. According to Purwanto (2021), the Cronbach's Alpha and Composite Reliability values that can be used as benchmarks are 0.7 for explanatory research and above 0.8 for more advanced research.

Table 5. Cronbach Alpha

Variable	Cronbach's alpha	Composite reliability
MOBILE PAYMENT ADOPTION	0.855	0.902
PERCEIVED EASE OF USE	0.906	0.934
PERCEIVED SECURITY	0.834	0.900
PERCEIVED USEFULNESS	0.902	0.932
RELIGIOSITY	0.933	0.949

Sources: Data Processing Results Smart-PLS, 2024

Based on Table 5, each variable's Cronbach's Alpha values are categorized as very reliable, with values above 0.8. According to Purwanto (2021), the higher the Cronbach's Alpha and composite reliability values, the higher the reliability can be assumed. If the Cronbach's Alpha value is 0.7, it is categorized as reliable, and values between 0.81 - and 1.00 are categorized as very reliable.

Inner Model Evaluation

The inner or structural model evaluation is conducted to estimate causal relationships between variables or test hypotheses. This test can be seen from the R-square value and path coefficient. If significant relationships between variables are identified, hypotheses related to the variables used in this study can be concluded. Hypothesis testing is done through bootstrapping. The output values from Partial Least Square (PLS) in this study are shown in Figure 3.

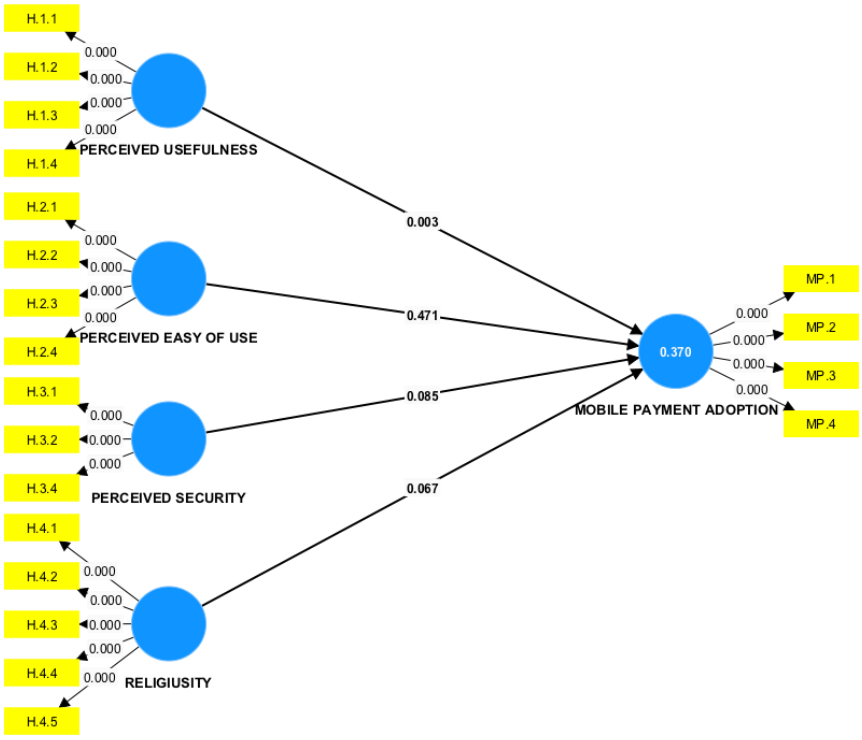

Figure 3. Path Coefficient Diagram

Sources: Data Processing Results Smart-PLS, 2024

The coefficient of determination test, or R-squared coefficient, is used to evaluate how well a linear regression model fits the observational data. The coefficient of determination provides information about the percentage of variation in the response variable that the independent variables in the model can explain. Based on Table 4, the coefficient of determination test results using the R-square value indicate that the exogenous variables can explain all endogenous variables well in this study. The R-square value for the consumer behavior variable is 0.370. This indicates that consumer behavior in this model can be explained by perceived ease of use (PEU), perceived usefulness (PU), perceived security (PS), and religiosity, with a value of 37%. The next step in the inner model analysis is path analysis. The path coefficient test, also known as the path coefficient, is used in structural equation modeling (SEM) to test the strength and significance of the relationships between variables in a model. This test provides information on the independent variables' direct influence on the model's dependent variable.

Hypothesis Testing

The R^2 or R-Square is useful for indicating the strength of the influence exerted by the independent variables on the dependent variable, and it can also show how strong or weak the

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research model is. Based on Table 4, the R^2 value in this study falls into the moderate category, which is 0.370 (Chin, 1998).

Hypothesis testing is one part of the inner model conducted using Smart-PLS. The inner model output can be obtained through the bootstrapping process, and the hypothesis testing results can be seen in the path coefficient table. Hypothesis testing results are evaluated based on the path coefficient estimates from the T-statistic and P-value. A measurement item is considered significant if the T-statistic value is greater than 1.96 and the P-value is less than 0.05 at a 5% significance level. In addition, the parameter coefficient shows the direction of influence, which can be seen from the positive or negative values of the original sample. The hypothesis testing results are presented in Table 6.

Table 6. Coefficient Determination and Hypothesis Results

Variable	**Path coefficients**	***T-Statistic***	***p-value***	***Result***	***R-value***
PERCEIVED EASE OF USE → MOBILE PAYMENT ADOPTION	0.106	0.721	0.471	Not supported	
PERCEIVED SECURITY → MOBILE PAYMENT ADOPTION	0.229	1.725	0.085	Not Supported	
PERCEIVED USEFULNESS → MOBILE PAYMENT ADOPTION	0.556	2.966	0.003	Supported	0.370
RELIGIOSITY → MOBILE PAYMENT ADOPTION	-0.347	1.829	0.067	Supported	

Sources: Data Processing Results Smart-PLS, 2024

The findings suggest that perceived usefulness (PU) has a significant positive effect on mobile payment adoption. This confirms that students are more likely to adopt mobile payment systems if they find them useful for daily transactions. However, perceived ease of use (PEU) does not significantly impact, indicating that ease of use is not a critical factor for this population when considering mobile payment adoption.

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Perceived security (PS) showed a positive but statistically insignificant relationship with mobile payment adoption. This suggests that while security concerns exist, they are not the primary factor influencing adoption decisions in this context.

Interestingly, religiosity (R) has a marginally significant effect on mobile payment adoption. This implies that students with higher religious values may adopt mobile payment systems if they perceive them to be compatible with their religious beliefs. However, further research may be required to explore this relationship further.

Based on Table 4, it can be concluded that:

1. The T-statistic value and p-value for the variable perceived ease of use (PEU) with mobile payment adoption are 0.721, less than 1.96, and the p-value is 0.471. Therefore, referring to these values, it can be concluded that the PEU variable has a positive but insignificant effect on mobile payment adoption.
2. The data above shows that the T-Statistic value for the variable perceived security (PS) with mobile payment adoption is 1.725, and the p-value is 0.085. Therefore, referring to these values, it can be concluded that the PS variable has a positive but insignificant effect on mobile payment adoption.
3. The data above shows that the T-statistic value for the variable perceived usefulness (PU) with mobile payment adoption is 2.966, and the p-value is 0.003. Therefore, referring to these values, it can be concluded that the PU variable positively and significantly affects mobile payment adoption.
4. The data above shows that the T-statistic value for the variable religiosity with mobile payment adoption is 1.829, and the p-value is 0.067. Therefore, referring to these values, it can be concluded that the religiosity variable has a positive but insignificant effect on mobile payment adoption.

Discussion

Perceived Ease of Use (PEU)

The positive relationship between the perceived ease of use (PEU) variable and mobile payment adoption indicates that the ease perceived by users does not significantly influence respondents' interest in using mobile payment technology. This finding aligns with previous research by Dara & Mariah (2020), which examined the role of fintech in enhancing financial literacy among Jakarta residents and found that perceived ease of use does not affect financial literacy. This may be due to the public's limited understanding of fintech products beyond mere

access. However, this finding contrasts with the study by Natakusumah et al. (2023), which stated that perceived ease of use increases the intention to adopt mobile payment and has a significant relationship. Therefore, easy access, simple consumer transactions, straightforward supplier transactions, simplified business practices, and easy-to-learn indicators contribute to the interest in using payment technology.

Perceived Usefulness (PU)

The positive and significant relationship between the perceived usefulness variable and mobile payment adoption indicates that the perceived benefits influence the interest in adopting mobile payment technology. The use of this technology serves to simplify transaction processes for both large and small businesses. This finding is consistent with the research by Natakusumah et al. (2023), which showed that perceived usefulness affects the interest in using mobile payment technology. Using mobile payment technology can be an opportunity to prepare for minor transaction changes, provide automatic record-keeping systems, and offer access to various financial products. Thus, perceived usefulness directly influences respondents' intentions to use mobile payment technology. Other studies have also found that perceived usefulness positively affects financial literacy. Based on the data obtained from respondents on the perceived usefulness variable, the public has recognized that fintech aids in transactions, making them easier and more practical, thereby saving time for those who wish to transact with financial products (Dara & Mariah, 2020).

Perceived Security (PS)

The positive relationship between the perceived security (PS) variable and mobile payment adoption indicates that perceptions of transaction security and user information confidentiality do not significantly affect respondents' interest in adopting mobile payment. This finding is similar to previous research on the influence of perceived ease, service quality, and security risks on e-wallet usage decisions in financial transactions, which showed that the security risk variable negatively affects e-wallet usage decisions. This suggests that the lower the perceived risk of a system, the more likely individuals are to use e-wallet services (Susanti & Dwiana Putra, 2023). However, this finding differs from earlier research on integrating religiosity into a technology acceptance model for mobile payment adoption, which indicated that perceived security could better predict and explain the interest in using mobile payments.

Nonetheless, due to security issues such as personal data breaches and account misuse, security factors need to be considered before using mobile payment technology.

Religiosity

The negative relationship between the religiosity (R) variable and mobile payment adoption indicates that religiosity, which serves as a value system and sets boundaries for its adherents, has a positive but insignificant influence on respondents' interest in mobile payment. This finding is similar to previous research on factors influencing the interest in using Pay Later services, with religiosity as a moderating variable, showing that religiosity can weaken the relationship between perceived ease of use and interest in using Pay Later. This suggests that the higher the level of religiosity, the weaker the relationship between perceived ease of use and interest in using pay later services. However, religiosity cannot moderate the relationship between financial literacy and perceived risk toward the interest in using pay later services (Nasution & Munir, 2023). Additionally, research on the influence of religiosity, risk, and consumer complaint handling on the decision to use Shopee Paylater, with interest as an intervening variable, found that religiosity does not positively and significantly affect the decision to use Shopee Paylater.

Furthermore, this study found that one variable, religiosity, negatively influences the four exogenous variables tested against the endogenous variable. This result is similar to previous research findings (Nasution & Munir, 2023). This finding is crucial for further in-depth studies through various other research within this theme.

One important variable in this study is PU. This research shows that PU influences students' interest in mobile payment services. This study recommends that financial service providers offering digital payments always consider the usefulness (PU) of the services offered, as it is proven to affect consumers' interest in using payment transaction services.

E. CONCLUSION

This study aimed to investigate the impact of perceived usefulness (PU), perceived ease of use (PEU), perceived security (PS), and religiosity (R) on mobile payment adoption among university students at Islamic universities in Yogyakarta. The findings provide important insights into the factors driving mobile payment adoption in a religiously influenced context.

The results align with existing literature on the significant role of perceived usefulness (PU) in mobile payment adoption, consistent with studies like Oliveira et al. (2016) and Kumari

& Biswas (2023). The high PU path coefficient confirms that students are more likely to adopt mobile payment systems if they perceive tangible benefits, reinforcing TAM's prediction of PU's central role.

However, the non-significant effect of perceived ease of use (PEU) contrasts with studies Liébana-Cabanillas et al. (2018). This may be because tech-savvy students are already familiar with technology, making ease of use less critical for adoption. Further research is needed to explore this in less technologically proficient populations.

While perceived security (PS) showed a positive but insignificant effect, it supports Williams (2021), suggesting that security concerns may subside as users become more familiar with mobile payments.

The marginal significance of religiosity (R) as a predictor rather than a moderating factor, as noted by Alkhowaiter (2022), highlights its role in influencing adoption decisions, though perhaps less strongly than anticipated. This adds to the ongoing debate about the impact of religiosity on consumer behavior, calling for further research on its influence on technology adoption.

This study makes several contributions to mobile payment adoption and technology acceptance. By positioning religiosity as a direct predictor rather than a moderating variable, the research offers a fresh perspective on how religious beliefs influence technology adoption, contrasting with earlier studies that viewed religiosity primarily as a factor modifying the relationships between TAM variables. Additionally, this study contributes to the growing literature on mobile payment adoption in Islamic contexts, demonstrating that religiosity plays a nuanced role in adoption decisions. This finding has important implications for mobile payment providers targeting religiously observant markets, emphasizing the need for services to align with Islamic principles. Furthermore, the reevaluation of perceived ease of use (PEU) suggests that ease of use may not be as critical for mobile payment adoption in tech-savvy populations. This insight provides a new understanding of how TAM variables may behave differently depending on the technological proficiency of the user demographic.

Despite its contributions, this study has several limitations. The use of convenience sampling limits the generalizability of the findings, as the sample may not represent the broader population of students or other demographic groups. Additionally, the study focuses exclusively on Islamic universities in Yogyakarta, which limits its applicability to other regions or educational contexts. Future research should consider expanding the sample to include more diverse populations regarding geography and religious orientation to determine whether the

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findings hold in different contexts. Finally, further exploration of the role of religiosity in technology adoption, especially with different types of technological products, would provide a deeper understanding of this important variable.

REFERENCES

Alkhowaiter, W. A. (2022). Use and behavioral intention of m-payment in GCC countries: Extending meta-UTAUT with trust and Islamic religiosity. *Journal of Innovation & Knowledge*, *7*(4), 100240. https://doi.org/10.1016/j.jik.2022.100240

Annisa, N., Rahawarin, M. A., & Pattimukay, H. V. R. (2023). Evaluasi Kebijakan Fitur Quick Response Code Indonesian Standard (QRIS) Di Kantor Perwakilan Bank Indonesia Provinsi Maluku. *JUPEIS : Jurnal Pendidikan Dan Ilmu Sosial*, *2*(3), Article 3. https://doi.org/10.57218/jupeis.Vol2.Iss3.761

Baber, H. (2021). Examining the intentions to use crowdfunding platform—An extended technology acceptance model. *International Journal of Services, Economics and Management*, *12*(2), 149–163. https://doi.org/10.1504/IJSEM.2021.117226

Baliawan, P. R. D., Putranti, L., & Herdiany, H. D. (2024). ANALYSIS OF THE INFLUENCE OF SELF-EFFICACY, PERCEIVED EASE TO USE, PERCEIVED BENEFITS, AND PERCEIVED RISK, ON INTENTION TO USE DIGITAL PAYMENT APPLICATIONS IN YOGYAKARTA. *Business Management Analysis Journal (BMAJ)*, *7*(1), Article 1. https://doi.org/10.24176/bmaj.v7i1.12292

Bezovski, Z. (2016). The Future of the Mobile Payment as Electronic Payment System. *European Journal of Business and Management*, *8*(8), Article 8.

Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, *25*(3), 351–370. https://doi.org/10.2307/3250921

Cahya, C. C., & Umam, K. (2023). Is the Islamic Religiosity Become the Cashless Behavior Among Muslim Community? In N. Mansour & L. M. Bujosa Vadell (Eds.), *Islamic Sustainable Finance, Law and Innovation: Opportunities and Challenges* (pp. 465–471). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-27860-0_42

Chawla, D., & Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India – An empirical study. *International Journal of Bank Marketing*, *37*(7), 1590–1618. https://doi.org/10.1108/IJBM-09-2018-0256

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, *295*(2), 295–336.

Dara, S. R., & Mariah, M. (2020). Peran Fintech Dalam Upaya Untuk Meningkatkan Literasi Keuangan Pada Masyarakat di Jakarta. *AKURASI: Jurnal Riset Akuntansi Dan Keuangan*, *2*(3), Article 3. https://doi.org/10.36407/akurasi.v2i3.240

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

de Luna, I. R., Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2019). Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. *Technological Forecasting and Social Change*, *146*, 931–944. https://doi.org/10.1016/j.techfore.2018.09.018

Elsotouhy, M. M., Mobarak, A. M. A., Dakrory, M. I., Ghonim, M. A., & Khashan, M. A. (2023). Integrating ISS and SOR models to investigate the determinants of continuance intention toward using m-payment for donations (Sadaqah): The moderating role of Islamic religiosity. *International Journal of Bank Marketing*, *41*(7), 1640–1670. https://doi.org/10.1108/IJBM-11-2022-0498

Grover, P., Kar, A. K., Janssen, M., & Ilavarasan, P. V. (2019). Perceived usefulness, ease of use and user acceptance of blockchain technology for digital transactions – insights from user-generated content on Twitter. *Enterprise Information Systems*. https://www.tandfonline.com/doi/abs/10.1080/17517575.2019.1599446

Gupta, A. (2014). *E-COMMERCE : ROLE OF E-COMMERCE IN TODAY'S BUSINESS*. *4*(1).

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *An Introduction to Structural Equation Modeling*. Springer. https://doi.org/10.1007/978-3-030-80519-7_1

Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.

Hariyana, T. D. (2021). Eksistensi Asas Iktikad Baik dalam Perjanjian Jual Beli melalui Internet dengan Sistem Pembayaran Cash On Delivery. *UNISKA Law Review*, *2*(2), 545072. https://doi.org/10.32503/ulr.v2i2.2287

Hasan, A., Yadav, A., Sharma, S., Singhal, A., Gupta, D., Raghuwanshi, S., Khare, V. K., & Verma, P. (2023). Factors Influencing Behavioural Intention to Embrace Sustainable Mobile Payment Based on Indian User Perspective. *Journal of Law and Sustainable Development*, *11*(4), e627–e627. https://doi.org/10.55908/sdgs.v11i4.627

Jílková, P., & Králová, P. (2020). *Digital Trends and New Payment Models in B2C E-Commerce Context*. 630–635. https://doi.org/10.2991/aebmr.k.200324.117

Kline, R. B. (2016). *Principles and practice of structural equation modeling, 4th ed* (pp. xvii, 534). Guilford Press.

Kumari, N., & Biswas, A. (2023). Does M-payment service quality and perceived value co-creation participation magnify M-payment continuance usage intention? Moderation of usefulness and severity. *International Journal of Bank Marketing*, *41*(6), 1330–1359. https://doi.org/10.1108/IJBM-11-2022-0500

Li, J., Wang, J., Wangh, S., & Zhou, Y. (2019). Mobile Payment With Alipay: An Application of Extended Technology Acceptance Model. *IEEE Access*, *7*, 50380–50387. https://doi.org/10.1109/ACCESS.2019.2902905

Liébana-Cabanillas, F., Marinkovic, V., Ramos de Luna, I., & Kalinic, Z. (2018). Predicting the determinants of mobile payment acceptance: A hybrid SEM-neural network approach. *Technological Forecasting and Social Change*, *129*, 117–130. https://doi.org/10.1016/j.techfore.2017.12.015

Lim, S. H., Kim, D. J., Hur, Y., & Park, K. (2019). An Empirical Study of the Impacts of Perceived Security and Knowledge on Continuous Intention to Use Mobile Fintech Payment Services. *International Journal of Human–Computer Interaction*, *35*(10), 886–898. https://doi.org/10.1080/10447318.2018.1507132

Liu, T.-L., Lin, T. T., & Hsu, S.-Y. (2022). Continuance Usage Intention toward E-Payment during the COVID-19 Pandemic from the Financial Sustainable Development Perspective Using Perceived Usefulness and Electronic Word of Mouth as Mediators. *Sustainability*, *14*(13), Article 13. https://doi.org/10.3390/su14137775

Loh, X.-M., Lee, V.-H., Tan, G. W.-H., Ooi, K.-B., & Dwivedi, Y. K. (2020). Switching from cash to mobile payment: What's the hold-up? *Internet Research*, *31*(1), 376–399. https://doi.org/10.1108/INTR-04-2020-0175

Malik, A. N. A., & Annuar, S. N. S. (2021). The Effect of Perceived Usefulness, Perceived Ease of Use, Reward, and Perceived Risk toward E-Wallet Usage Intention. In M. H. Bilgin, H. Danis, & E. Demir (Eds.), *Eurasian Business and Economics Perspectives* (pp. 115–130). Springer International Publishing. https://doi.org/10.1007/978-3-030-65147-3_8

Maria, N. S. B., & Widayati, T. (2020). Dampak Perkembangan Ekonomi Digital Terhadap Perilaku Pengguna Media Sosial dalam Melakukan Transaksi Ekonomi. *JKBM (JURNAL KONSEP BISNIS DAN MANAJEMEN)*, *6*(2), 234–239. https://doi.org/10.31289/jkbm.v6i2.3801

Moslehpour, M., Pham, V. K., Wong, W.-K., & Bilgiçli, İ. (2018). e-Purchase Intention of Taiwanese Consumers: Sustainable Mediation of Perceived Usefulness and Perceived Ease of Use. *Sustainability*, *10*(1), Article 1. https://doi.org/10.3390/su10010234

Najib, M., & Fahma, F. (2020). Investigating the Adoption of Digital Payment System through an Extended Technology Acceptance Model: An Insight from the Indonesian Small and Medium Enterprises. *International Journal on Advanced Science, Engineering and Information Technology*, *10*(4), Article 4. https://doi.org/10.18517/ijaseit.10.4.11616

Nareswari, K. P., Nuraisyah, R. A., Khaliq, F. P., & Natasari, D. (2022). Analisis Fenomena Cashless Society Terhadap Tingkat Kontrol Diri Belanja Mahasiswa (Studi Kasus Daerah Istimewa Yogyakarta). *Prosiding National Seminar on Accounting, Finance, and Economics (NSAFE)*, *2*(5), Article 5. http://conference.um.ac.id/index.php/nsafe/article/view/2780

Nasution, N. H., & Munir, M. (2023). Analisis Faktor-Faktor yang Mempengaruhi Minat Menggunakan Paylater dengan Religiusitas Sebagai Variabel Moderasi. *Al-Buhuts*, *19*(1), Article 1. https://doi.org/10.30603/ab.v19i1.3493

Natakusumah, K., Maulina, E., Muftiadi, A., & Purnomo, M. (2023). Integrating religiosity into a technology acceptance model for the adoption of mobile payment technology. *International Journal of Data and Network Science*, *7*(1), 305–312. https://doi.org/10.5267/j.ijdns.2022.10.003

Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, *61*, 404–414. https://doi.org/10.1016/j.chb.2016.03.030

Othman, N. A., Alamsyah, D. P., Ratnapuri, C. I., & Kurnianingrum, D. (2022). THE PERCEIVED EASE OF USE IN MOBILE PAYMENT SUPPORT BY RESPONSIVENESS, SMARTNESS AND MOBILITY. . . *Vol.*, *11*.

Ozturk, A. B., Bilgihan, A., Salehi-Esfahani, S., & Hua, N. (2017). Understanding the mobile payment technology acceptance based on valence theory: A case of restaurant transactions. *International Journal of Contemporary Hospitality Management*, *29*(8), 2027–2049. https://doi.org/10.1108/IJCHM-04-2016-0192

Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of*

Information Management, *54*, 102144. https://doi.org/10.1016/j.ijinfomgt.2020.102144

Pillai, S. (2019). *Impact of mobile wallets on cashless transaction*. *7*, 1164–1171.

Prabowo, R. S. H., & Widodo, T. (2021). Analisis Penerapan Model Unified Theory Of Acceptance And Use Of Technology 2 (utaut2) Pada Adopsi Penggunaan Mobile Payment Jenius (Studi Kasus Di Kota Bandung). *eProceedings of Management*, *8*(5), Article 5. https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/15871

Purwanto, A. (2021). *Partial Least Squares Structural Squation Modeling (PLS-SEM) Analysis for Social and Management Research: A Literature Review* (SSRN Scholarly Paper 3982764). https://papers.ssrn.com/abstract=3982764

R, N. P., H, L. F., Hwihanus, H., & Ratnawati, T. (2024). EFEKTIFITAS DAN EFISIENSI PENGGUNAAN QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) DALAM MENDORONG UMKM GO DIGITAL. *Musytari : Neraca Manajemen, Akuntansi, Dan Ekonomi*, *3*(5), Article 5. https://doi.org/10.8734/musytari.v3i5.1734

Rahadi, J., Agrecia, A., P, G. P. A., Valecia, V. G., & Nofirda, F. A. (2023). Pengaruh Penggunaan QRIS terhadap Perilaku Konsumen. *Jurnal Pendidikan Tambusai*, *7*(3), 31088–31093. https://doi.org/10.31004/jptam.v7i3.12063

Ramos-de-Luna, I., Montoro-Ríos, F., & Liébana-Cabanillas, F. (2016). Determinants of the intention to use NFC technology as a payment system: An acceptance model approach. *Information Systems and E-Business Management*, *14*(2), 293–314. https://doi.org/10.1007/s10257-015-0284-5

Ricardianto, P., Soekirman, A., Pribadi, O. S., Atmaja, D. B., Suryobuwono, A. A., Ikawati, I., Gutomo, T., Murtiwidayanti, S. Y., Cahyono, S. A. T., & Endri, E. (2023). Perceived of ease of use and usefulness: Empirical evidence of behavioral intention to use QR code technology on Indonesian commuter lines. *International Journal of Data and Network Science*, *7*(4), 1815–1828. https://doi.org/10.5267/j.ijdns.2023.7.010

Rifai, D., Fitri, S., Ramadhan, I. N., & Ramadan, R. (2022). Perkembangan Ekonomi Digital Mengenai Perilaku Pengguna Media Sosial Dalam Melakukan Transaksi. *ADI Bisnis Digital Interdisiplin Jurnal*, *3*(1), 49–52. https://doi.org/10.34306/abdi.v3i1.752

Senali, M., Iranmanesh, M., Ismail, F., Rahim, N., Khoshkam, M., & Mirzaei, M. (2023). Determinants of intention to use e-wallet: Personal innovativeness and propensity to

trust as moderators. *International Journal of Human-Computer Interaction*. https://doi.org/10.1080/10447318.2022.2076309

Siswanti, T. (2022). ANALISIS PENGARUH MANFAAT EKONOMI, KEAMANAN DAN RISIKO TERHADAP MINAT PENGGUNAAN FINANCIAL TECHNOLOGY (FINTECH) (Study Kasus pada Masyarakat di Wilayah Kecamatan Bekasi Timur). *JURNAL BISNIS & AKUNTANSI UNSURYA*, *7*(2), Article 2. https://doi.org/10.35968/jbau.v7i2.899

Soomro, Y. A. (2019). Understanding the Adoption of SADAD E-Payments: UTAUT Combined with Religiosity as Moderator. *International Journal of E-Business Research (IJEBR)*, *15*(1), 55–74. https://doi.org/10.4018/IJEBR.2019010104

Susanti, N. L. P. R., & Dwiana Putra, I. M. P. (2023). PENGARUH PERSEPSI KEMUDAHAN, KUALITAS LAYANAN, DAN RISIKO KEAMANAN TERHADAP KEPUTUSAN PENGGUNAAN E-WALLET DALAM TRANSAKSI KEUANGAN. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 407. https://doi.org/10.24843/EEB.2023.v12.i03.p05

Tandon, U., Kiran, R., & Sah, A. N. (2016). Analysing the complexities of website functionality, perceived ease of use and perceived usefulness on customer satisfaction of online shoppers in India. *International Journal of Electronic Marketing and Retailing*, *7*(2), 115. https://doi.org/10.1504/IJEMR.2016.077118

Thakur, R. (2013). Customer Adoption of Mobile Payment Services by Professionals across two Cities in India: An Empirical Study Using Modified Technology Acceptance Model. *Business Perspectives and Research*, *1*(2), 17–30. https://doi.org/10.1177/2278533720130203

Ureche, O., & Plamondon, R. (2000). Digital payment systems for Internet commerce: The state of the art. *World Wide Web*, *3*(1), 1–11. https://doi.org/10.1023/A:1019217210183

Williams, M. D. (2021). Social commerce and the mobile platform: Payment and security perceptions of potential users. *Computers in Human Behavior*, *115*, 105557. https://doi.org/10.1016/j.chb.2018.06.005

Zhong, Y., Oh, S., & Moon, H. C. (2021). Service transformation under industry 4.0: Investigating acceptance of facial recognition payment through an extended technology acceptance model. *Technology in Society*, *64*, 101515. https://doi.org/10.1016/j.techsoc.2020.101515