# MOBILE PAYMENT TECHNOLOGY ADOPTION IN INDONESIA: THE META UTAUT ANALYSIS

<sup>1</sup>\*Didik Permono, <sup>2</sup>Ascarya, <sup>3</sup>Rifki Ismal Institute Agama Islam Tazkia, Indonesia

\*Correspondence: Tel. + (62) 8129794191, E-mail:permono.didik@gmail.com

ABSTRACT: The development of digitalization requires the use of electronic money technology through mobile payment platforms to become more widespread. So the adoption of mobile payment technology from an Islamic point of view in Indonesia needs to be analyzed. This study explores the adoption of digital platforms using e-money mobile payment systems in Indonesian Muslim communities. The data analysis method in this study uses partial least squares structural equation modelling (PLS-SEM). Using the Meta UTAUT (Unified Theory of Acceptance and Use of Technology) theory, Islamic religiosity becomes a moderating variable between behavioural intention and the use of technology. The research sample consisted of 204 respondents from various cities in Indonesia, including Java, Sumatra, Kalimantan, Sulawesi, Bali, and NTT. Java Island is represented by Jakarta, Bandung, Solo, Yogyakarta, and Bogor. Sumatra Island is represented by Palembang and Bangka Belitung. Kalimantan Island is represented by Balikpapan, Sulawesi Island is represented by Kendari City. The islands of Bali and NTT are represented by Lombok. The analysis's findings indicate that Islamic religiosity has a significant negative effect on behavioural intention and the use of mobile payment technology in Indonesian Muslim communities. This means that because most of Indonesia's mobile payment technology is still general and not specific to Islamic mobile payments, the higher the understanding of Islam for Indonesian Muslims, the more selective the use of mobile payments will be on halal transactions. The results of this study are very specific and unique because Islamic religiosity in Saudi Arabia has a significant positive effect as a moderator between behavioural intention and the use of mobile payment. technology.

Keywords: Mobile Payment, Meta UTAUT, Islamic Religion

### 1. INTRODUCTION

Internationally, in the last 10 years, mobile payment has become a necessity for carrying out financial transaction activities. Every financial institution continues to improve services by building a system that is oriented towards technological innovation. The mobile payment service that is currently being created has a very important function in forming the technology ecosystem. So, understanding the main key factors in using mobile payment technology opens up opportunities for financial institutions to build mobile payment applications that suit their needs. According to the Central Bureau of Statistics (2020), in the last five years, the use of information and communication technology (ICT) in Indonesia has shown rapid development, as seen in the growth of internet use in households reaching 78.18% and the growth of cellular telephone use increasing to 62.84%. On the official KNEKS website (2022), Go-Pay and OVO are the e-payment services with the largest users in Indonesia. The existence of digital payments has become an attraction for the public because of the ease and comfort it provides. Sharia-based digital payments are of course also needed to accommodate the needs of the Muslim community, which amounts to 85% of the total population in Indonesia. Based on statistical data on payment systems and financial market infrastructure from Bank Indonesia in 2022, the total value of electronic money transactions has increased from year to year, including electronic money transactions using mobile banking and internet banking. The increasingly widespread use of electronic money applications encourages the adoption of digital money. E-commerce payments are currently developed almost entirely non-cash, with the main mechanisms via bank transfer (29%), electronic money (25%), and credit cards (20%). The development of digital money technology facilitates retail transactions for consumers and producers. By using e-money for business transactions, you will gain greater profits. However, the development of mobile payment applications is hampered by security risks, including cyber

attacks and fraud. Consequently, the Indonesian people have not fully embraced mobile payment technology. With the use of online financial services in mobile banking applications at 28.8%, the use of mobile payment service payments is only 21.6%. Studies related to mobile payments were carried out in various countries. analyzed the adoption of Near Field Communication (NFC) mobile payment systems by end-users in Thailand. analyzed consumer adoption of cashless payments in Malaysia. analyzed the use of mobile payments in Saudi Arabia. Based on the Scopus journal study, studies related to the adoption of mobile payment applications in Indonesia were carried out by. analyzed the adoption of epayment technology with the moderating effect of age. analyzed the factors that influence the use of the mobile payment system in Indonesia with a case study on Gopay analyzed the readiness of Small and Mobile Payment. Medium Enterprises in Indonesia to use e-money. analyzed the factors that influence the continuity of use of e-money applications in Indonesia. However, there have not been many studies related to the adoption of digital money transaction platforms in financial transactions that refer to Islamic consumer behaviour. The studies conducted generally refer to the context of digital transaction adoption in general. Research related to mobile payments was carried out by analyzing the adoption of e-payment systems in various generations using the TAM model. analyzed the use of emoney in micro, small, and medium enterprises (MSMEs). analyzed the main factors of mobile adoption of payment using meta-analysis and UTAUT approaches. analyzed the use of Sharia-compliant fintech in small businesses in Malaysia using the UTAUT development model. In general, technology adoption models use the TAM or UTAUT model and its modifications, both in conventional and Islamic contexts, the only difference being the respondent side and the Islamic platform application system. Research on the adoption of mobile payment technology with a conventional approach has been widely carried out by adopting the theories of

Extended TAM, TAM, UTAUT, UTAUT 2, Extended UTAUT, Diffusion of Innovation Model, Trusted Third Party Model, Value-Based Adoption Model, Technological Personal Environment (TPE) Framework,

TRA, TPB and Integrated Value Risk Perception Model. The adoption of mobile payment technology with a Sharia approach has also been widely implemented, including in various countries. Generally, in the Sharia context, the theory used is a modification of the UTAUT and UTAUT 2 approaches. However, there is still limited research on mobile payment adoption that uses Meta UTAUT for Indonesian society as a whole. Therefore, this research will fill this gap by focusing on the Islamic religiosity variable to explore the concept of sharia in the adoption of mobile payment technology in Indonesia. This research uses the Meta UTAUT method from. SEM analysis, while in this study PLS SEM was used. The construct variables used are performance expectancy, effort expectancy, attitude toward technology, self-efficacy, facilitating condition, social influence, anxiety, and Islamic religiosity on behavioural intention and usage in the use of mobile payment technology by the Indonesian Muslim community. It is hoped that this research will contribute to regulators and digital financial practitioners regarding the adoption of new e-money digital transaction platform technology in Indonesia.

#### 2. THE PROBLEM STATEMENT

The Indonesia. physical distancing policy during this pandemic has had an impact on increasing the use of digital infrastructure such as mobile payments, internet, and data. A direct contactless payment feature has even been created that has been approved by the government, such as the QR Indonesia Standard (QRIS) or barcode as a payment method in the pandemic era. From commercial to social financial systems using digital systems. The global pandemic brings challenges and opportunities for the financial technology industry to optimize areas of the digital financial market. However, behind the opportunity, there are also big obstacles. The digital financial concept requires internet access that must affordable to villages. Based on Indonesian Telecommunication Statistics from the 2021 National Socio-Economic Survey, almost all urban and rural areas of Indonesia do not have internet access. Java, Sumatra, Sulawesi, and Bali have strong internet access signals, while Kalimantan, Maluku, and Papua are hampered by weak signals. According to the World Bank (2014), digital finance will increase financial inclusion, and improve financial and non-financial services because 50% of people in developing countries already have cell phones. This condition encourages the adoption of new digital transaction platform technology. However, the adoption of new digitalization technology cannot be fully absorbed by society at various levels. Especially in the Indonesian Muslim community as the majority population must practice muamalah in halal transactions. Mobile Payment digital technology platforms in Indonesia are almost all general transaction models, not specific mobile payment technology, which is by Sharia rules. There are only a few mobile payment technologies, but their development is not as massive as ordinary mobile payment technology. So, it is necessary to research whether the concept of Islamic religiosity influences the use of mobile

payment technology in Muslim communities in Literature review

#### 3. PREVIOUS STUDIES

Karsen[12]identified 54 studies related to Mobile Payment with the conceptual framework models used including Extended TAM, TAM, UTAUT, UTAUT 2, Extended UTAUT, Diffusion of Innovation Model, Trusted Third Party Value-Based Adoption Model. Technological Personal Environment (TPE) Framework, TRA, TPB, and Integrated Value Risk Perception Model. believes 44 main factors influence the adoption of mobile payments, which are classified into 3 clusters, including technology, personnel, and environment. Studies on mobile payment adoption in Indonesia using the Meta UTAUT theory, especially from an Islamic perspective, are still rarely carried out. Previous studies regarding mobile payment adoption using Meta UTAUT were carried out using the SEM method. The research uses the construct variables performance expectancy, effort expectancy, social influence, facilitating condition, trust, attitude, behavioural intention, and use with the moderating variable Islamic religiosity. His research concluded that trust has a significant effect on behavioural intention mobile payment. Performance expectancy is the most important predictor that influences behavioural intention. Islamic religiosity is positively and significantly a factor that moderates the relationship between behavioural intention and the use of mobile payment. technology.

# 4. HYPOTHESES DEVELOPMENT

# Performance expectations (PE)

Performance expectancy is defined as the level of individual confidence that using a new technology system will help him improve performance. Five indicators form performance expectations, including perceived usefulness, extrinsic motivation, job fit, relative advantage, and outcome expectations. In studies regarding mobile payment, the higher the mobile payment service, the greater the adoption of mobile payment, where performance expectancy (PE) has a significant effect on the behavioural intention of using mobile payment;

**H1:** Performance expectancy (PE) positively influences the attitude towards the use of Mobile Payment in the Indonesian Muslim community

**H2:** Performance expectancy (PE) positively influences the behavioural intention towards the use of Mobile Payment in the Indonesian Muslim community

# Effort expectancy (EE)

Effort Expectancy (EE) is defined as the level of ease of use of technology [13]. There are three influential indicators, including perceived ease of use, complexity, and ease of use [13]. Based on studies related to Mobile Payment adoption, Effort Expectancy (EE) is one of the most effective factors influencing Mobile Payment adoption [15].

**H3:** Effort expectancy (EE) positively influences the attitude towards using Mobile Payment in the Indonesian Muslim community

**H4**: Effort expectancy (EE) positively influences the behavioural intention towards the use of Mobile Payment in the Indonesian Muslim community

#### Social influence (SI)

Social Influence (SI) is defined as the degree to which individuals feel that factors around them suggest using technology [13]. Social Influence directly influences technology usage behaviour, with several indicators including subjective norms, social factors and image.

**H5:** Social Influence (SI) positively influences the attitude towards the use of Mobile Payment in the Indonesian Muslim community

**H6:** Social Influence (SI) positively influences the behavioural intention towards the use of Mobile Payment in the Indonesian Muslim community

#### Facilitating conditions (FC)

Facilities are structural factors from a traditional perspective. Previous research found that Facilitating Conditions can have a positive influence on Behavioral Intention [16].

**H7:** Facilitating conditions (FC) positively influence Attitudes towards the use of Mobile Payment in the Indonesian Muslim community

**H8:** Facilitating Conditions (FC) positively influence the behavioural intention towards the use of Mobile Payment in the Indonesian Muslim community

#### Self-efficacy (SE)

Self-efficacy (SE) refers to the ability of a technology to measure and utilize innovation to achieve specific jobs [13]. Based on studies regarding Mobile Payment adoption, self-efficacy influences behavioural intention to use Mobile Payment [17].

**H9**: Self Efficacy positively influences the attitude towards using mobile payment in the Indonesian Muslim community

**H10**: Self-efficacy positively influences the behavioural intention towards the use of Mobile Payment in the Indonesian Muslim community

H11: Computer anxiety positively influences the attitudes towards using mobile payments in the Indonesian Muslim community

**H12:** Computer anxiety positively influences the behavioural intention towards the use of Mobile Payment in the Indonesian Muslim community.

Intention and Usage are two variables that are interrelated to Behavioral [18]. Usage is assessed as actual behaviour after several evaluations of the technology [18].

**H13**: Behavioral Intention has a significant influence on the usage of Mobile Payment in the Indonesian Muslim community.

Islamic religiosity can be an intrinsic or extrinsic factor. Islamic religiosity can influence materialistic behavior [19] but its influence is more oriented towards recognition of social status [20]. Although research regarding the influence of religiosity on the influence of information technology is very rare, it was found that religiosity influences attitude [21]. Islamic religiosity is significant in the GCC countries and the power of religiosity influences every aspect of life. Islamic norms influence all aspects of human life, including the use of technology. So, it is suspected that Islamic religiosity moderates Behavioral Intention and usage of Mobile Payment.

**H14**: Islamic religiosity positively moderates the relationship between behavioural intention and the usage of mobile payment in the Indonesian Muslim community.

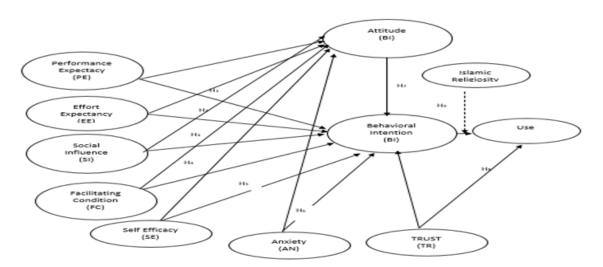


Figure 1. Research Model Modification of Meta UTAUT, Alkhowaiter (2022)

The population in this study were all Indonesian citizens. Samples were taken using the simple random sampling method. For sample size, this research considered the guidelines of [22] that acceptable sample size is ten times the number of arrows pointing to latent variables when PLS-SEM is used as a data analysis tool. Because this study had 14 arrows, the minimum sample size was 140 respondents. However, [23] argues that if the number of observations is

more than 200, the regression distribution on the standard residuals is normally distributed so that the normality assumption is met. In this research, using the assumptions above, the sample selected was based on a simple random sampling method of 204 samples. The data used is primary data from 204 respondents. The number of respondents was calculated using the Solvin Formula. The population of

Table 1. Respondent Profile							
Respondent Profile	Frequency	Percentage (%)					
Gender		_					
Man	142	69.21					
Woman	62	30.39					
Age							
< 20	6	2.94					
20 - 29	32	15.69					
30 - 39	42	20.59					
40 - 49	93	45.59					
> 50	31	15.20					
Generation							
1946 - 1964 (Baby Boomers)	8	3.92					
1965 - 1980 (Generation X)	85	41.67					
1981 – 1996 (Generation Y/Millennials)	85	41.67					
1997 – 2012 (Generation Z)	26	12.75					
Level of education							
Doctor	4	1.96					
Master's	41	20.10					
Bachelor	128	62.75					
high school	31	15.20					
D 4 4 3 11 D 47							
Duration of Cell Phone Use	2	0.00					
Never	2	0.98					
Seldom	5	2.45					
Sometimes	34	16.67					
Often	47	23.04					
Very often	116	56.86					
Mobile Payment Transaction Experience							
Never	5	2.45					
Seldom	14	6.86					
Sometimes	38	18.63					
Often	55	26.96					
	92	45.10					
Very often  Table 2 Outer Leading and Items	92	43.10					

y often		72 43.10
Т	Table 2. Outer Loading and Items	
Measurement Items	Loadings	PValues
AN2	0.926	0,000
AN3	0.959	0,000
AT1	0.875	0,000
AT2	0.903	0,000
BI1	0.897	0,000
BI2	0.954	0,000
BI3	0.933	0,000
EE1	0.920	0,000
EE2	0.914	0,000
FC1	0.852	0,000
FC2	0.899	0,000
FC3	0.850	0,000
IR3	1,000	0,000
PE1	0.846	0,000
PE2	0.921	0,000
PE3	0.944	0,000
PE4	0.823	0,000
SE1	1,000	0,000
SI1	0.951	0,000
SI2	0.951	0,000
TR1	0.951	0,000
TR2	0.943	0,000
TR3	0.779	0,000
U1	0.840	0,000
U2	0.923	0,000

Mobile Payment users in Indonesia based on 2021 statistics is 63.6 million people. And significant alpha is 7%.

As shown in Table 2, all outer loading values are > 0.70, namely in the range 0.779 - 1.000 and all are significant [24]. After measuring the outer loading model, convergent validity

was then measured using the average variance extracted (AVE) value and reliability using Cronbach's alpha and composite reliability (CR) value analysis. Reliability and validity results are shown in Table 3.

**Table 1 Reliability and Validity** 

Construct	α	Rho_A	CR	AVE
ANT	0.877	0.929	0.941	0.889
AT	0.736	0.743	0.883	0.790
BI	0.920	0.924	0.949	0.862
BI*IR	1,000	1,000	1,000	1,000
EE	0.812	0.813	0.914	0.842
FC	0.835	0.837	0.901	0.753
IR	1,000	1,000	1,000	1,000
P.E	0.906	0.909	0.935	0.783
S.E	1,000	1,000	1,000	1,000
SI	0.894	0.894	0.950	0.904
TR	0.874	0926	0.923	0.800
USE	0.738	0.821	0.880	0.786

as presented in Table 3. Cronbach's alpha value is in the range of 0.736-1.000 (greater than 0.70) while composite reliability (CR) is in the range of 0.880-1.000. These results confirm the construct's internal reliability consistency (Cronbach's alpha and composite reliability > 0.70) as

suggested by [24]. The average variance extracted (AVE) value is in the range 0.753 – 1.000 (greater than 0.5). This value indicates convergent validity between construct variables [24].

**Table 2 Heterotrait-Monotrait Ratio of Correlations** 

	1	2	3	4	5	6	7	8	9	10	11	12
ANT												
AT	0.508											
BI	0.182	0.514										
BI*IR	0.076	0.227	0.117									
EE	0.531	0.986	0.438	0.244								
FC	0.498	0.997	0.446	0.181	0.821							
IR	0.128	0.463	0.139	0.070	0.396	0.439						
P.E	0.426	0.978	0.473	0.216	0.920	0.800	0.407					
S.E	0.477	0.706	0.451	0.016	0.729	0.704	0.133	0.674				
SI	0.262	0.633	0.235	0.099	0.526	0.689	0.334	0.541	0.436			
TR	0.224	0.713	0.460	0.100	0.536	0.634	0.382	0.571	0.543	0.410		
USE	0.199	0.565	0.384	0.158	0.600	0.424	0.148	0.633	0.465	0.281	0.295	

Next, test the discriminant validity by analyzing the Heterotrait-Monotrait Ratio of Correlations and the Fornell-Larcker criterion value based on the recommendations of [24]. Hair [24] recommends using the Heterotrait-Monotrait Ratio of Correlations with criteria below 0.90 so that the

discriminant validity value has been established. In this study, the Heterotrait-Monotrait Ratio of Correlation values in Table 5 are all below 0.90.

Table 3 Fornell-Larcker Criterion

				I able 5	of hen-La	arcker c	111011					
	1	2	3	4	5	6	7	8	9	10	11	12
ANT	0.943											
AT	-0.409	0.889										
BI	-0.172	0.426	0.928									
BI*IR	0.074	-0.195	0.111	1,000								
EE	-0.450	0.764	0.378	-0.222	0.917							

FC	-0.437	0.780	0.391	-0.166	0.677	0.867						
IR	-0.129	0.398	0.134	-0.070	0.358	0.400	1,000					
P.E	-0.386	0.805	0.433	-0.206	0.789	0.694	0.387	0.885				
S.E	-0.450	0.610	0.433	-0.016	0.656	0.643	0.133	0.641	1,000			
SI	-0.236	0.517	0.214	-0.094	0.449	0.594	0.317	0.486	0.412	0.951		
TR	-0.216	0.580	0.420	-0.094	0.461	0.551	0.352	0.515	0.520	0.366	0.895	
USE	-0.174	0.434	0.325	-0.145	0.484	0.342	0.137	0.540	0.420	0.243	0.259	0.887

Fornell-Larcker Criterion is also a measure of discriminant validity. Based on this criterion, the second root of the average construct variance must be greater than the correlation between the construct and other constructs [25]. Based on these criteria, the Fornell-Larcker requirements have been met.

#### Structural Model Assessment (Inner Model)

Standardized root means square residual (SRMR) is used as a benchmark for model accuracy. The SRMR was obtained at 0.076. this value is per the recommendations given by [25] that a good SRMR value is <0.080, the data is shown in Table 6 below.

Table 4 Fit Models					
	Saturated	Estimated Model			
	Model				

SRMR	0.055	0.076
------	-------	-------

The results of the PLS-SEM analysis in Table 4.6 show that BI has a significant positive effect on USE ( $\beta$ =0.293, P-value = 0.000). The moderating variable IR has a significant negative effect on the relationship between BI and USE ( $\beta$ = 0.156, P-value = 0.019). This means that the higher the IR, the more selective the USE will be in using Mobile Payment transactions that comply with Sharia rules. EE has a significant positive effect on AT ( $\beta$ =0.219, P-value = 0.010). FC has a significant positive effect on AT ( $\beta$ =0.368, P-value = 0.000). PE has a significant positive effect on AT ( $\beta$ =0.378, P-value = 0.000). SE has a significant positive effect on BI ( $\beta$ =0.210, P-value = 0.026). TR has a significant positive effect on BI ( $\beta$ =0.195, P-value = 0.030). The Path Model results are shown in Figure 2.

l'able 5 Hypothesis	Ί	`est	
---------------------	---	------	--

			re e rry pourreurs r			
PLS-Path	β	Mean	St. Dev	t-values	P-value	Supported
AN->AT	-0.011	-0.015	0.044	0.248	0.805	No
AN->BI	0.059	0.058	0.054	1,107	0.269	No
AT->BI	0.099	0.118	0.126	0.773	0.440	No
BI->USE	0.293	0.298	0.074	3,933	0,000	Yes
BI*IR->USE	-0.156	-0.157	0.066	2,352	0.019	Yes
EE->AT	0.219	0.222	0.085	2,578	0.010	Yes
EE->BI	-0.029	-0.023	0.104	0.280	0.780	No
FC->AT	0.368	0.369	0.088	4,171	0,000	Yes
FC->BI	0.044	0.032	0.100	0.442	0.659	No
IR->USE	0.049	0.054	0.070	0.706	0.481	No
PE->AT	0.378	0.370	0.090	4,186	0,000	Yes
PE->BI	0.171	0.160	0.106	1,615	0.107	No
SE->AT	-0.028	-0.030	0.061	0.454	0.650	No
SE->BI	0.210	0.200	0.094	2,241	0.026	Yes
SI->AT	0.025	0.029	0.046	0.539	0.590	No
SI->BI	-0.078	-0.074	0.071	1,095	0.274	No
TR->BI	0.195	0.202	0.090	2,175	0.030	Yes
TR->USE	0.104	0.099	0.092	1.126	0.261	No

# Effect Size and Predictive Relevance

Cohen's f2 is used to identify the influence between variables in the model, which indicates the change in R2 value when one exogenous construct variable is removed from the model.

Cohen's f2 values of 0.02 (small), 0.15 (medium), and 0.35 (large) can be a predictor measure [24].

**Table 8 Effect Size and Multicollinearity** 

PLS-Path	VIF	f2	BCCI(2.5%)	BCCI(97.5%)
AN->AT	1,353	0,000	-0.085	0.077
AN->BI	1,371	0.004	-0.053	0.146
AT->BI	4,347	0.003	-0.118	0.342
BI->USE	1,249	0.081	0.131	0.424
BI*IR->USE	1,039	0.031	-0.302	-0.053
EE->AT	3,147	0.063	0.057	0.384
EE->BI	3,363	0,000	-0.194	0.205
FC->AT	2,749	0.204	0.199	0.532
FC->BI	3,358	0.001	-0.130	0.258
IR->USE	1,144	0.003	-0.094	0.179
PE->AT	3,146	0.188	0.184	0.536

PE->BI	3,742	0.011	-0.022	0.422
SE->AT	2,136	0.002	-0.144	0.106
SE->BI	2,257	0.027	0.043	0.420
SI->AT	1,574	0.002	-0.058	0.115
SI->BI	1,577	0.005	-0.217	0.061
TR->BI	1,669	0.031	0.008	0.354
TR->USE	1.387	0.009	-0.094	0.260

Table 8 explains all the results of Cohen's f2 values in the range 0.000 - 0.204. The variable effect size of Facilitating Condition and Performance Expectancy on Attitude is classified as moderate. Other effect sizes are low anxiety, effort expectancy, self-efficacy, and Social Influence on Attitude. All latent variables namely anxiety, attitude, effort expectancy, facilitating condition, self-efficacy, social influence and trust on the Behavioral Intention variable are small. After measuring the effect size, the variance inflation factor (VIF) value is then measured which is used to verify multicollinearity. The VIF value was obtained in the range 1.144 - 4.347 where this value is below 5 as suggested [24].

This means that there are no data multicollinearity problems as shown in Table 8. After that, relevant predictive analysis was carried out using Stone- Geisser's Q2. The Stone – Geisser's Q2 value can be used as a reference for the predictive relevance of the independent variable with the dependent variable [24]. Stone – Geisser's Q2 values for Attitude (0.555), Behavioral Intention (0.221), and Use (0.102). This value is > 0, indicating that the observation value has been reconstructed correctly so that the model obtained is relevant as a predictor.

Table 6 Coefficient Determination and Blindfolding

Construct	SSO	SSE	Q2	R2	R2 Adj
AT	408,000	181,399	0.555	0.759	0.751
BI	612,000	476,854	0221	0.269	0.239
USE	408,000	366,585	0.102	0.153	0.135

The second process that must be carried out after testing the suitability of the outer model is testing the inner model. The inner model tests carried out were goodness of fit and hypothesis testing. Goodness of fit represents the suitability of the model and measures whether or not the hypothesis measures the data studied [26] (Cooper & Schindler, 2014). When conducting structural model analysis, the determinant coefficient (R2) is the most frequently used measure [25]. For endogenous latent variables, the R2 value of 0.67 is high, 0.33

is moderate and 0.19 is weak (Chinn, 1998). To increase the accuracy of the model, in this study a modified adjusted coefficient determinant was used. The results of the research analysis in Table 9 determine the determinant coefficient (R2) value for the Attitude variable of 0.759 (high), the Behavioral Intention variable of 0.269 (weak) and the Use variable of 0.153 (weak).

# Path Models

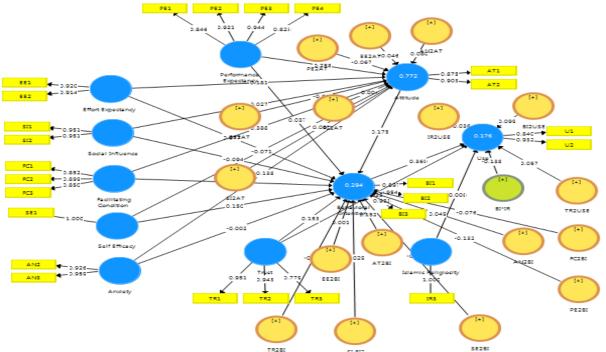


Figure 2. Path Inner Model with Quadratic Effect

This research empirically proves how individuals behave towards using mobile payments in Indonesia. Based on the results of data processing using Stata, G Power, RStudio, and SmartPLS3, it is proven that effort expectancy, facilitating conditions, and performance expectancy have a significant positive effect on attitudes toward using Indonesian mobile payment technology. Self-efficacy and trust have a significant positive effect on behavioural intention. Behavioural intention has a significant positive effect on Indonesia's use of mobile payment technology. Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions should have a positive effect on attitude and behavioural intention. The results of research related to performance expectancy on behavioural intention are different from other research conducted in various countries. The most important thing found in this research is that Islamic religiosity has a significant negative effect as a moderator between behavioural intention and the use of mobile payment technology in Indonesia. However, the results of this research are different from the results of research conducted on mobile payment technology in Saudi Arabia, where Islamic religiosity had a positive effect as a moderator between behavioural intention and use. This means that because most of Indonesia's mobile payment technology is still general and not specific to Islamic mobile payment, then share The higher the Indonesian Muslim community's understanding of Islam, the more selective their use of mobile payments will be regarding halal transactions. The results of this research are very specific and unique because Islamic religiosity in Saudi Arabia has a significant positive effect as a moderator between behavioural intention and the use of mobile payment technology. This difference could occur because in Saudi Arabia the number of Islamic mobile payment platforms with Sharia-compliant transactions is greater than in Indonesia. The mobile payment system in Indonesia also does not receive the legality of halal transactions from the MUI. So the Indonesian Muslim community must be selective individually regarding halal transactions. According to statistics from the Financial Services Authority (OJK), Indonesia's Sharia financial market share is only 8.1%, while in Saudi Arabia the Sharia financial market share has reached 25%, with the share of Islamic banking assets reaching 49% of the total GCC countries. In the banking system, mobile payment technology is used to maximize service to customers. So adoption of the use of payment cars is very important. In research related to mobile payments conducted at Bank Jordan using the Extended UTAUT 2 method, it was found that performance expectancy, effort expectancy, and trust affected behavioural intention. Thus, this research concludes the same thing: trust is an important variable in mobile payment adoption. This research also proves that the trust variable is important in the adoption of mobile payments in Indonesia apart from Islamic religiosity in the adoption of Islamic mobile payments. Mobile payment application providers are required to provide quality assurance regarding financial transactions with good security. In another study, it was found that MEs believe that Shariah-compliant fintech can help business resilience, so Muslim MEs will use Shariah compliant fintech. Anxiety does not have a significant effect on attitude or behavioural intention in using mobile payment technology in Indonesia.

This means that in Indonesia, both the younger generation and the previous generation are accustomed to the existence of the mobile payment transaction platform due to the intensity of cell phone use. So anxiety is not a factor that influences attitude and behavioral intention. Facilitating conditions have a significant effect on attitude but do not affect behavioural intention. This means that mobile payment facilities provided by the government and financial institutions will have more influence on usage behaviour and will not become a habitual behaviour every time they make a transaction, so there are some Indonesian Muslims who still carry out cash transactions compared to mobile payment transactions. Performance expectancy has a significant effect on attitude but not significantly on behavioural intention. This analysis is the same as the Facilitating Condition variable, where the expectation of smooth use of the mobile payment application influences attitude, not the habit of carrying out financial transactions. Social influence has no significant effect on attitude or behavioural intention. When compared with the previous variables analyzed, the behavioural intention of the Indonesian Muslim community is driven more by trust towards mobile payment applications compared to social influence [15].

#### REFERENCES

- [1]Statista. (2020) "Ecommerce In Indonesia." [On Line]. Available: Https://Www.Statista.Com.
- [2] Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Under- Standing 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.
- [3]Riskinanto, Anggar, Bayu Kelana, And Deliar Rifda Hilmawan. (2017) "The Moderating Effect Of Age On Adopting E-Payment Technology." Procedia.
- [4] Alkhowaiter, WA (2020). Digital Payment And Banking Adoption Research In Gulf Countries: A Systematic Literature Review. International Journal Of Information Management, 53, 102102.
- [5] Chandra, Yakob & Kristin, Desi & Suhartono, Joni & Sutarto, Fina & Sung, Minseol. (2018). Analysis Of Determinant Factors Of User Acceptance Of Mobile Payment System In Indonesia (A Case Study Of Go-Pay Mobile Payment). 1-6. 10.1109/Icimtech.2018.8528182.
- [6]Gunawan, H., Sinaga, B. L., & Sigit Purnomo, W. P. (2019). Assessment Of The Readiness Of Micro, Small And Medium Enterprises In Using E-Money Using The Unified Theory Of Acceptance And Use Of Technology (UTAUT) Method. In *Procedia Computer Science* (Vol. 161, Pp. 316–323). Elsevier B.V.
- [7]Sasongko, D. T., Handayani, P. W., & Satria, R. (2021). Analysis Of Factors Affecting Continuance Use Intention Of The Electronic Money Application In Indonesia. In *Procedia Computer Science* (Vol. 197, Pp. 42–50). Elsevier B.V.
- [8] Riskinanto, A., Kelana, B., & Hilmawan, D. R. (2017). The Moderation Effect Of Age On Adopting E-Payment

- Technology. In *Procedia Computer Science* (Vol. 124, Pp. 536–543). Elsevier B.V.
- [9] Andrews, J. E., Ward, H., & Yoon, J. W. (2021). UTAUT As A Model For Understanding Intention To Adopt AI And Related Technologies Among Librarians. *Journal Of Academic Librarianship*, 47(6).
- [10] Puspitasari, N., Firdaus, M. B., Haris, C. A., & Setyadi, H. J. (2019). An Application Of The UTAUT Model For Analysis Of Adoption Of Integrated License Service Information System. In *Procedia Computer Science* (Vol. 161, Pp. 57–65). Elsevier B.V.
- [11] Azman, N. H. N., Zabri, M. Z. M., Masron, T. A., & Malim, N. A. K. (2020). The Utilisation Of Islamic Fintech (I-Fintech) In Promoting Sustainable Inclusive Growth: Evidence From Micro-Entrepreneurs In Malaysia. *Journal Of Islamic Monetary Economics And Finance*, 6(3), 555–576.
- [12] Karsen, M., Chandra, Y. U., & Juwitasary, H. (2019). Technological Factors Of Mobile Payment: A Systematic Literature Review. In *Procedia Computer Science* (Vol. 157, Pp. 489–498). Elsevier B.V.
- [13] Venkatesh, MG Morris, GB Davis, FD Davis, User Acceptance Of Information Technology: Toward A Unified View, MIS Q. 27 (3) (2003) 425–478, Https://Doi.Org/ 10.2307/30036540, Fied. MIS Quarterly, 27(3), 425–478.
- [14] Migliore, G., Wagner, R., Cechella, F.S., Li Ebana-Cabanillas, F., 2022. Antecedents To The Adoption Of Mobile Payment In China And Italy: An Integration Of UTAUT2 And Innovation Resistance Theory. Information Systems Frontiers 1–24.
- [15] Alalwan, YK Dwivedi, NP Rana, Factors Influencing Adoption Of Mobile Banking By Jordanian Bank Customers: Extending UTAUT2 With Trust, Int. J. Inf. Manag. 37(3) (2017) 99–110.
- [16] Kabra, G., Ramesh, A., Akhtar, P., & Dash, M. K. (2017). Understanding Behavioral Intention To Use Information Technology: Insights From Humanitarian Practitioners. Telematics And Informatics, 34(7), 1250– 1261.
- [17] Yu, Factors Influencing Individuals To Adopt Mobile Banking: Empirical Evidence From The UTAUT Model, J. Electron. Commer. Res. 13 (2012) 104–121.

- [18] Singh, N., & Sinha, N. (2020). How Perceived Trust Mediates Merchant's Intention To Use A Mobile Wallet Technology. Journal Of Retailing And Consumer Services, 52, 101894.
- [19] Casabayo, M., D? Avila, J.F., & Rayburn, S.W. (2020). Thou Shalt Not Covet: The Role Of Family Religiosity In Anti-Consumption. International Journal Of Consumer Studies, 44(5), 445–454.
- [20]Demira?G, B., Durmaz, Y., & Tutu,S, G. (2021). Effects Of Intrinsic And Extrinsic Religiosity On Value-Expressive And Social-Adjustive Attitude Functions Towards Product. Journal Of Islamic Marketing. Doi:10.1108/JIMA-02-2021-0045 Vol.
- [21]Felix, R., Hinsch, C., Rauschnabel, P. A., & Schlegelmilch, B. B. (2018). Religiousness And Environmental Concern: A Multilevel And Multi-Country Analysis Of The Role Of Life Satisfaction And Indulgence. Journal Ofbusiness Research, 91, 304–312.
- [22]Chinn, W.W. (1998). The Partial Least Squares Approach To Structural Equation Modeling. Modern Methods For Business Research.
- [23]Bartlett, J.E., Kotrlik, J.W., & Higgins, C.C. (2001).

  Organizational Research: Determining Appropriate Sample Size In Survey Research. Information Technology, Learning And Performance Journal, 19(1), 43–50.
- [24] Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool In Business Research. European Business Review.
- [25] Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009).
  The Use Of Partial Least Squares Path Modeling In International Marketing. Advances In International Marketing.
- [26]Cooper, DR, & Schindler, P.S. (2014). Business Research Methods Donald R. Cooper. Mcgraw-Hill.