

Uncovering the Factors Influencing the Decision to Use Open Islamic Banking in East Java

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Abstract

Keywords:

Perceived usability, perceived ease of use, attitude towards use, behavioral intention to use, actual system use, attitude towards behavior, subjective norms, perceived behavioral control, religiosity.

This study addresses the growing transformation of the financial sector through digital innovation, particularly the emergence of Open Islamic Banking as an integrated technology-based service aligned with Sharia principles. Although this model offers significant opportunities for expanding Islamic financial inclusion, its adoption among Generation Z remains shaped by a complex interaction of technological, psychological, social, and religious determinants. This research aims to identify and empirically map the underlying factor structure influencing Generation Z's decision to use Open Islamic Banking in East Java, Indonesia. Employing an exploratory quantitative design, the study applies Exploratory Factor Analysis (EFA) to data collected from 388 respondents through a structured questionnaire comprising 54 measurement items across nine theoretical constructs. The analysis reveals the emergence of 13 principal factors that collectively explain 55.062% of the total variance, indicating a multidimensional decision-making structure. Among these, perceived ease of use, perceived usefulness, attitude toward behavior, and religiosity emerge as the most influential determinants. The findings demonstrate that adoption decisions are not solely driven by technological efficiency, but also by social influence, behavioral control, user experience, and adherence to religious values. This study contributes theoretically by proposing the Sharia Open Banking Usage Determinant Model (MPP-OBS), which extends conventional technology acceptance frameworks by integrating contextual Islamic values into digital banking adoption analysis. Practically, the study offers strategic guidance for financial service providers to strengthen system accessibility, functional value, and Sharia compliance in order to enhance adoption among younger digital-native consumers.

INTRODUCTION

The development of Islamic banking shows a positive trend in line with the increasing need for financial services in accordance with sharia principles (Rafiuddin et.al 2024). The digitalization of the financial sector also encourages innovation through the concept of open banking, which is a technology-based financial services integration system that allows for the secure exchange of data with customer consent (World Bank 2020). In this context, Open Bank Syariah is present as a solution that offers ease of transaction while upholding the values of justice, transparency, and free of usury. However, the adoption rate of this service, especially among Generation Z, is still relatively low due to the limitations of digital literacy, understanding of Islamic finance, and concern for data security (Siska et al. 2022).

The decision to use digital financial services has been widely studied using the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) approaches. TAM emphasizes the importance of perceived usability and ease of use as the main determinants of technology acceptance (Davis 1989), while TPB explains the role of attitudes towards behavior, subjective norms, and perceived behavioral control in shaping the intention to use (Ajzen 2002). Various

empirical studies show that the perception of benefits and convenience has a positive effect on the use of digital services (Putri et al., 2020; (Hakeem & Ratnasari 2021), while subjective norms and behavioral controls help drive adoption (Fitri Wahyuningtyas et al. 2023). In addition, in the context of Islamic banking, the religiosity factor is also beginning to be recognized as an important variable that affects individual preferences in choosing financial services.

However, the results of previous studies still show inconsistencies related to the dominant factors that affect the decision to use Islamic digital banking services. Some studies emphasize the technological aspect as the main factor, while other studies show that social and psychological factors have a more significant influence. In addition, most of the research still focuses on testing certain theoretical models, so it does not have an exploratory picture of the structure of factors formed from various relevant variables. Therefore, research questions arise regarding what factors empirically influence the decision to use Sharia Open Banks among Generation Z.

Generation Z as a group that grows in the digital era has great potential in encouraging the adoption of Sharia Open Bank services (Judijanto & Apriyanto 2025). Their characteristics of being adaptive to technology and having extensive access to information make this generation the main target in the development of Islamic digital banking services. However, in reality, the level of use of Open Bank Sharia among Generation Z is still not optimal, which indicates that there are certain factors that influence the decision to use the service.

Based on this phenomenon, this study aims to identify and uncover the structure of factors that influence the decision of Generation Z to use Sharia Open Bank through the Exploratory Factor Analysis (EFA) approach. Unlike previous research, this study does not focus on testing specific models, but rather explores factors that are empirically formed from various relevant variables. Thus, this research offers a novelty in the form of an exploratory approach that integrates technological, social, psychological, and religious aspects in one comprehensive analytical framework.

METHODS

This study uses a quantitative approach with the type of exploratory research. The quantitative approach is used because the research focuses on the measurement of numerical data and statistical analysis of the factors that influence the decision to use the Sharia Open Bank. Meanwhile, the nature of exploration was chosen because this study aims to identify the structure of factors formed from a number of variables without departing from a rigidly defined theoretical model (Sugiono, 2019; Rambut et al. 2019). Therefore, the analysis method used is Exploratory Factor Analysis (EFA), which is a multivariate statistical technique used to reduce a number of variables into a few simpler and more representative main factors (Ghozali 2008).

The population in this study is Generation Z who are related to digital Islamic banking services. The criteria for respondents in this study include: (1) individuals who are included in the Generation Z category (aged around 17-26 years), (2) have knowledge of or have used digital banking services, especially Open Bank Sharia or similar services, and (3) domiciled in the East Java city area (Rosyidah et.al 2024). Sample determination was carried out using *Non-probability sampling* with a purposive sampling approach, where respondents are selected based on these criteria (Syahroni 2022). The number of respondents in this study was 388 people.

The data used in this study are primary data obtained through the distribution of questionnaires to respondents. The research instrument was compiled based on variable indicators relevant to the technology acceptance model and the behavior of using digital financial services.

The variables analyzed consisted of nine constructs, namely perceived usefulness (X1) as the belief that the system provides benefits; perceived ease of use (X2) as the perception of the ease of use of the system (Davis 1989); attitude towards use (X3) as attitude towards the use of the system (Hakeem & Ratnasari 2021); behavioral intent to use (X4) as intent to use the service (Venkatesh et., 2012); actual system use (X5) as actual system use; attitudes toward behavior (X6) as assessment of usage behavior; subjective norms (X7) as social influence on consumption decisions; perceived behavioral control (X8) as perception of ability and opportunity to use services (Ajzen 2002); and religiosity (X9) as a level of belief and adherence to sharia values in choosing financial services (Ancok & Suroso 2008).

The data analysis technique in this study was carried out in stages. The initial stage included validity and reliability tests to ensure the feasibility of the research instrument. Next, a feasibility test was carried out for factor analysis using Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity to measure the adequacy of the sample and the relationship between variables (Ghozali 2008). After that, factor analysis is carried out using the EFA method through the process of factor extraction, factor rotation, and factor matrix interpretation to identify the structure of the factors formed.

RESULTS AND DISCUSSION

This study uses factor analysis techniques with the help of SPSS software. Factor analysis is a statistical method used to identify relationships between a number of observed variables, so that they can be grouped into new constructions in the form of latent factors or variables. The main purpose of this analysis is to simplify the data by uncovering patterns of correlation between variables based on their degree of correlation.

Statistics descriptive

Table 1. Descriptive Statistic

Descriptive statistics					
Variabel	N	Minimum	Maximum	Mean	Std. deviation
<i>Perceived Use</i>	388	1	5	43,7	0,63
Perceived Ease of Use	388	1	5	43,4	0,67
Attitudes Towards Use	388	1	5	43,3	0,69
Behavioral Intent to Use	388	1	5	42,7	0,72
Actual System Usage	388	1	5	43,4	0,69
Attitudes Towards Behavior	388	1	5	43,3	0,66
Subjective Norms	388	1	5	42,3	0,75
Perceived Behavior Control	388	1	5	43,8	0,66
Religiuisitas	388	1	5	43,7	0,66
Valid N Listwise	388				

Based on the descriptive table, all variables had a total of 388 respondents on a scale of 1 to 5. The average score was in the range of 4.23 to 4.38, which indicates that respondents tended to give a positive assessment of all variables. The highest scores were found in Perceived

Behavioral Control and Religiosity, while the lowest scores were in Subjective Norms. Meanwhile, the standard deviation values ranged from 0.63 to 0.75 indicating that respondents' answers were relatively consistent. Overall, the data described a good and stable perception of respondents towards the study variables.

Validity Test

Table 2. Validity Test

	Perceived Usefulness	Alfa	Remarks
PU1	0.000	< 0.05	Valid
PU2	0.001	< 0.05	Valid
PU3	0.001	< 0.05	Valid
PU4	0.000	< 0.05	Valid
PU5	0.001	< 0.05	Valid
PU6	0.009	< 0.05	Valid

	Perceived Ease Of Use	Alfa	Remarks
PEU1	0.000	< 0.05	Valid
PEU2	0.000	< 0.05	Valid
PEU3	0.000	< 0.05	Valid
PEU4	0.001	< 0.05	Valid
PEU5	0.000	< 0.05	Valid
PEU6	0.000	< 0.05	Valid

	Attitude Toward Using	Alfa	Remarks
TU1	0.000	< 0.05	Valid
ATU2	0.000	< 0.05	Valid
TU3	0.000	< 0.05	Valid
ATU4	0.000	< 0.05	Valid
ATU5	0.000	< 0.05	Valid
TU6	0.000	< 0.05	Valid

	Behavioral Intention to Use	Alfa	Remarks
BIU1	0.000	< 0.05	Valid
BIU2	0.000	< 0.05	Valid
BIU3	0.000	< 0.05	Valid
BIU4	0.000	< 0.05	Valid
BIU5	0.000	< 0.05	Valid
BIU6	0.000	< 0.05	Valid

	Actual System Use	Alfa	Remarks
ASU1	0.000	< 0.05	Valid
ASU2	0.003	< 0.05	Valid
ASU3	0.000	< 0.05	Valid

ASU4	0.000	< 0.05	Valid
ASU5	0.000	< 0.05	Valid
ASU6	0.000	< 0.05	Valid

	Attitude Toward Behavior	Alfa	Remarks
ATB1	0.000	< 0.05	Valid
ATB2	0.000	< 0.05	Valid
ATB3	0.000	< 0.05	Valid
ATB4	0.000	< 0.05	Valid
ATB5	0.000	< 0.05	Valid
ATB6	0.000	< 0.05	Valid

	Subjective Norm	Alfa	Remarks
SN1	0.000	< 0.05	Valid
SN2	0.001	< 0.05	Valid
SN3	0.000	< 0.05	Valid
SN4	0.000	< 0.05	Valid
SN5	0.000	< 0.05	Valid
SN6	0.005	< 0.05	Valid

	Perceived Behavioral Control	Alfa	Remarks
PBC1	0.000	< 0.05	Valid
PBC2	0.001	< 0.05	Valid
PBC3	0.007	< 0.05	Valid
PBC4	0.022	< 0.05	Valid
PBC5	0.017	< 0.05	Valid
PBC6	0.075	< 0.05	Valid

	RELIGIOUS	Alfa	Remarks
REL1	0.000	< 0.05	Valid
REL2	0.000	< 0.05	Valid
REL3	0.000	< 0.05	Valid
REL4	0.000	< 0.05	Valid
REL5	0.002	< 0.05	Valid
REL6	0.000	< 0.05	Valid

Based on the results of the validity test in Table 2, all statement items have a correlation significance value below < 0.05 , which indicates that each indicator is significantly related to the constructed measured. This condition confirms that all items are able to accurately represent the research variables in accordance with the conceptual framework used. Therefore, all indicators are declared valid and suitable as data collection instruments. These results also show that the

questionnaire prepared has adequate measurement quality, so that the data obtained can be optimally used in follow-up analysis, including reliability tests and *Exploratory Factor Analysis* (EFA), to produce more accurate and accountable findings.

Reliability Test

Table 3. Reliability Test

Alfa Cronbach	N item
0.935	54

Based on the results of the reliability test in Table 3, the Alpha Cronbach value obtained was above the minimum limit of > 0.70 . The results show that the research instrument has an adequate level of internal consistency, so that each statement item is able to measure the research construct stably and uniformly. Thus, all instrument items can be declared reliable for use in the data collection process. This good level of reliability also reflects that the questionnaire used has reliable measurement quality, thus supporting the accuracy of further analysis and strengthening the overall validity of the research findings.

KMO dan Bartlett's Test

Table 4. KMO dan Bartlett's Test

Test	Value
Kaiser-Meyer-Olkin measures the adequacy of sampling.	0.898
Tes Spherisitas Bartlett	
Chi-Square Approximation	7537.791
df	1431
sig	.000

Based on the results of the data feasibility test in Table 4, a Kaiser-Meyer-Olkin (KMO) value of 0.898 was obtained, which indicates that the level of sample adequacy is in the category of very good for factor analysis. This value shows that the pattern of relationships between variables is compact enough to allow the formation of a representative factor structure. Meanwhile, the results of Bartlett's Test of Sphericity show high significance ($\chi^2 = 7537.791$; $df = 1431$; $p < 0.05$), which indicates an adequate correlation between the study variables. This finding confirms that the correlation matrix is not in the form of identity, so the data meets the statistical prerequisites for further analysis using *Exploratory Factor Analysis* (EFA).

Furthermore, the feasibility of each variable is also reviewed through *the Measure of Sampling Adequacy* (MSA) value. An MSA value close to 1 indicates that a variable has a good relationship with another variable, while a value below 0.5 indicates that it is not worthy of further analysis.

Test Measure of Sampling Adequacy

Tabel 5. Test MSA

Variable	MSA	CUT OFF	Remarks
OBS makes transactions easy	0.914	> 0,05	Valid
OBS speeds up transactions	0.865	> 0,05	Valid
OBS adds value	0.854	> 0,05	Valid
OBS is more efficient than conventional	0.830	> 0,05	Valid
OBS digital services are convenient	0.866	> 0,05	Valid
OBS saves time & energy	0.870	> 0,05	Valid
OBS is easy to learn	0.896	> 0,05	Valid
I can control OBS transactions	0.928	> 0,05	Valid
OBS features are easy to understand	0.938	> 0,05	Valid
Flexible OBS used	0.907	> 0,05	Valid
OBS is easy for everyday activities	0.910	> 0,05	Valid
I am confident in using OBS	0.886	> 0,05	Valid
OBS as per my requirements	0.937	> 0,05	Valid
OBS increases effectiveness	0.932	> 0,05	Valid
OBS is easy & convenient to access	0.901	> 0,05	Valid
I feel comfortable using OBS	0.925	> 0,05	Valid
I am satisfied with using OBS	0.931	> 0,05	Valid
I want to continue using OBS	0.898	> 0,05	Valid
Intention to continue using OBS	0.924	> 0,05	Valid
OBS financial activities section	0.942	> 0,05	Valid
Consistent OBS usage plan	0.887	> 0,05	Valid
Regular desire to use OBS	0.902	> 0,05	Valid
Choosing OBS over others	0.924	> 0,05	Valid
OBS's key commitments	0.928	> 0,05	Valid
I actually use OBS	0.906	> 0,05	Valid
OBS is used as needed	0.940	> 0,05	Valid
OBS is routinely used	0.934	> 0,05	Valid
High frequency of OBS usage	0.911	> 0,05	Valid
I am satisfied with OBS	0.929	> 0,05	Valid
OBS quality is satisfactory	0.960	> 0,05	Valid
OBS has a positive impact	0.901	> 0,05	Valid
OBS as expected	0.948	> 0,05	Valid
OBS is beneficial (efficient & easy)	0.886	> 0,05	Valid
OBS ready to use	0.899	> 0,05	Valid
Prefer OBS	0.879	> 0,05	Valid
OBS is easy to use	0.915	> 0,05	Valid
Family supports OBS	0.924	> 0,05	Valid
Friend tested positive for OBS	0.889	> 0,05	Valid
Environment encourages OBS	0.877	> 0,05	Valid
Motivated important people	0.909	> 0,05	Valid
Follow social expectations	0.875	> 0,05	Valid

Keeping Up With Social Influences	0.636	> 0,05	Valid
Able to use OBS	0.633	> 0,05	Valid
Understanding how OBS works	0.853	> 0,05	Valid
Have access (internet/device)	0.894	> 0,05	Valid
Facilities support OBS	0.922	> 0,05	Valid
Control usage decisions	0.932	> 0,05	Valid
Be confident despite obstacles	0.844	> 0,05	Valid
OBS is in accordance with Islamic principles	0.906	> 0,05	Valid
Choosing an Islamic bank (halal)	0.929	> 0.05	Valid
Be spiritually calm with OBS	0.947	> 0.05	Valid
OBS is in accordance with sharia economic values	0.911	> 0.05	Valid
OBS for justice and well-being	0.892	> 0,05	Valid
Religious value in the use of OBS	0.914	> 0,05	Valid

Based on the results of the *Measure of Sampling Adequacy* (MSA) test in the table above, all research variables showed values above 0.50, which indicates that each indicator has sufficient sample adequacy to be analyzed in the factor model. This value reflects that each variable has a strong enough relationship with the other variables, so it is worth maintaining in the factor extraction process. Thus, there are no variables that need to be eliminated at the initial stage of analysis.

Furthermore, the determination of the number of factors was carried out through several statistical criteria, namely *the eigenvalue* of more than 1, the percentage of diversity described, and the interpretation of *the scree plot*. Based on these criteria, thirteen main factors were identified that were considered to be able to represent the latent structure of the research data. This finding was strengthened by *the scree plot* pattern which showed the transition point when the curve began to flatten, thus providing visual confirmation of the number of factors formed. Overall, these results confirm that the research data have sufficient quality to produce a stable, representative, and relevant factor structure in explaining the decision to use Open Islamic Banking.

Total Variance Explained

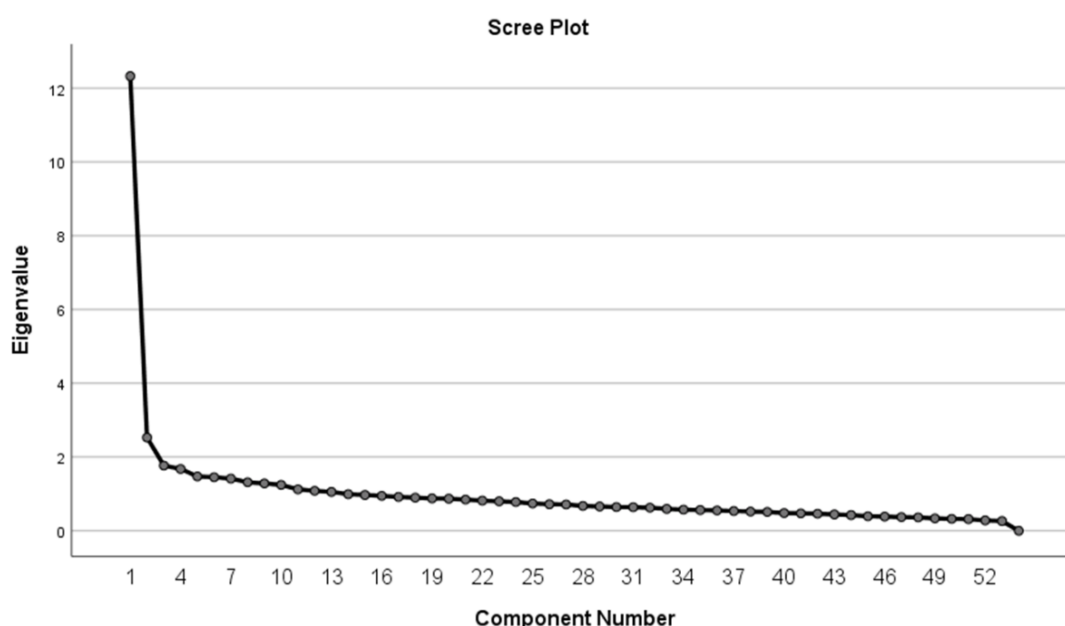
Table 6. Explanation of Total Variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Quantity	% of Variance	% cumulative	Quantity	% of Variance	% cumulative	Quantity	% of Variance	% cumulative
1	12.325	22.824	22.824	12.325	22.824	22.824	3.095	5.731	5.731
2	2.526	4.679	27.503	2.526	4.679	27.503	2.654	4.914	10.645
3	1.768	3.274	30.777	1.768	3.274	30.777	2.569	4.757	15.403
4	1.675	3.103	33.880	1.675	3.103	33.880	2.510	4.648	20.050
5	1.474	2.729	36.609	1.474	2.729	36.609	2.481	4.594	24.644

6	1.452	2.689	39.298	1.452	2.689	39.298	2.418	4.478	29.122
7	1.413	2.617	41.915	1.413	2.617	41.915	2.276	4.216	33.338
8	1.315	2.434	44.349	1.315	2.434	44.349	2.266	4.196	37.534
9	1.284	2.378	46.727	1.284	2.378	46.727	2.255	4.177	41.711
10	1.243	2.302	49.029	1.243	2.302	49.029	1.933	3.580	45.291
11	1.123	2.079	51.108	1.123	2.079	51.108	1.916	3.548	48.840
12	1.082	2.004	53.112	1.082	2.004	53.112	1.714	3.174	52.013
13	1.053	1.950	55.062	1.053	1.950	55.062	1.646	3.049	55.062
14	0.992	1.836	56.898						
15	0.970	1.797	58.694						
16	0.946	1.752	60.446						
17	0.918	1.699	62.146						
18	0.896	1.660	63.806						
19	0.877	1.624	65.430						
20	0.869	1.609	67.039						
21	0.845	1.565	68.604						
22	0.816	1.511	70.115						
23	0.799	1.480	71.595						
24	0.778	1.441	73.036						
25	0.740	1.370	74.406						
26	0.720	1.334	75.740						
27	0.712	1.319	77.058						
28	0.673	1.246	78.304						
29	0.658	1.219	79.523						
30	0.642	1.189	80.712						
31	0.638	1.182	81.894						
32	0.626	1.159	83.053						
33	0.593	1.097	84.150						
34	0.571	1.058	85.208						
35	0.561	1.039	86.247						
36	0.550	1.019	87.266						
37	0.535	0.990	88.256						
38	0.521	0.965	89.221						
39	0.510	0.945	90.166						
40	0.480	0.889	91.055						
41	0.472	0.874	91.929						
42	0.462	0.856	92.785						
43	0.442	0.819	93.604						
44	0.425	0.788	94.392						
45	0.393	0.728	95.120						
46	0.384	0.710	95.831						
47	0.371	0.688	96.518						
48	0.363	0.672	97.190						
49	0.336	0.623	97.813						
50	0.323	0.597	98.410						
51	0.316	0.585	98.995						
52	0.281	0.519	99.515						
53	0.262	0.485	100.00						
54	3.884	7.193	100.00						

Based on the results of the analysis of the *Initial Eigen Value*, of the 54 variables studied, 13 main factors were formed with an eigenvalue criterion of > 1 . The first factor had an eigenvalue of 12.325 and was able to explain 22.824% of the data variation. The second and third factors had an eigenvalue of 2.526 and 1.768, respectively, with a contribution of variation of 4.679% and 3.274%. While the fourth factor had an eigenvalue of 1.675 with a contribution of 3.103%. The fifth to thirteenth factors also met the criteria with an eigenvalue above 1, and provided a relatively smaller variation. Cumulatively, the thirteen factors were able to explain 55.062% of the total data variation.

Gambar 1. Plot Scree



The results of the *Scree Plot* are used to determine the optimal number of factors in the analysis. The determination is made by looking at the components that have an eigenvalue of > 1 and a change in the slope of the graph. The graph shows that there are 13 components that are above the eigenvalue of 1 before the curve starts to tilt. Factor rotation helps to group items into the right factor based on their contribution value. In this study, the rotation results group variables into thirteen main factors, with each characteristic as follows:

Rotating Component Matrix

Table 7. Rotated Component Matrix

Rotated Component Matrix													
	Components												
	1	2	3	4	5	6	7	8	9	10	11	12	13
PU1	0.190		0.172			0.103	0.620	0.166		0.132			0.222
PU2	0.155	0.337	0.318	0.106		0.480		0.215	-0.132	0.133			
PU3		0.102	0.127	0.124	0.117				0.721	0.121		0.184	
PU4	0.141	0.113		0.200			0.211				-0.100		0.722

PU5		0.150	0.121				0.179	0.137		0.144	0.697		- 0.110
PU6	0.186	0.432	0.238		0.121	0.316			0.231		- 0.346	0.157	0.175
PEU1	0.525							0.184		0.187	0.201	0.106	0.233
PEU2	0.484		0.344	0.158		0.297	0.166						
PEU3	0.133		0.295				0.520	0.114	0.271				0.161
PEU4		0.558	0.197	0.117					0.153		0.196	0.111	0.144
PEU5	0.135	0.205	0.431						0.187	0.178		0.305	
PEU6	0.474		0.181	0.122		0.147		- 0.169		0.193		0.311	
TU1	0.141	0.112			0.109	0.234	0.323	0.376	0.389				
ATU2		0.244	0.512	0.184		0.230	0.135	0.125		0.164	0.207		0.174
TU3	0.558	0.131			- 0.166	0.186	0.170	0.201	0.114			0.299	
ATU4	0.144	0.308	0.450	0.144		0.236	0.149				0.254		0.118
ATU5	0.511	0.244				0.131	0.249		0.311				0.142
TU6	0.205		0.552	0.116			0.249		0.272		0.103	0.148	- 0.152
BIU1	0.156	0.195	0.171	0.225				0.131	0.459		0.174	0.232	0.162
BIU2	0.358	0.253	0.213			0.327	0.122				0.236	0.120	0.119
BIU3		0.127	0.124	0.157			0.237	0.269	0.260	- 0.276	0.289	0.322	0.190
BIU4		0.250	0.117	0.158		0.317			0.145		0.473		
BIU5	0.146		- 0.196	0.371		0.271		0.168	0.231	0.282	0.212	0.121	0.166
BIU6	0.141	- 0.118		0.296		0.474		0.260	0.163		0.131	0.321	
ASU1		0.448		0.209	0.202	0.109	0.324				0.135	0.263	0.129
ASU2	0.188		0.114	0.177		0.346		0.177	0.354	0.147	0.101		0.309
ASU3	0.266	0.243	- 0.134	0.432		0.132	0.298		0.119		0.165		0.256
ASU4		0.116		0.675	0.122	0.190	0.141			0.114		0.120	
ASU5	0.430	0.410			0.162	0.212	0.206		0.163	- 0.126	0.204		- 0.138
ASU6	0.172	0.152	0.296	0.179		0.348			0.395	0.143	0.152		
ATB1		0.285	0.117	0.258	0.138	0.116	0.588			0.161	0.135		
ATB2	0.149		0.202	- 0.108		0.289	0.195	0.129	0.273	- 0.114	0.299		0.290
ATB3		0.666	0.190				0.102	0.159	0.100	0.136			
ATB4	0.161		0.211	0.275	0.175		0.211				0.435	0.341	0.110
ATB5	0.134	0.108	0.169	0.751					0.166				
ATB6	0.148	0.130			0.163	0.671	0.280						
SN1	0.319		0.243	0.126				0.496	0.132	0.123			0.138
SN2	0.137	0.124	0.105		0.198			- 0.180	0.133	0.285	0.303	0.334	0.332
SN3	0.503		0.129	0.281	0.240	- 0.137		0.375		0.115			- 0.108
SN4	0.306		0.110	0.433	0.299	0.144		0.139	0.194	- 0.140			0.166

SN5	0.269			0.319	0.365				0.286	0.167		- 0.198	0.217
SN6					0.946								
PBC1					0.946								
PBC2	0.198		0.245	0.153	0.130		0.164			0.550			- 0.136
PBC3			0.234			0.238		0.312	0.105	0.398		0.102	0.249
PBC4	0.210	0.445				0.124	0.178	0.112		0.392			
PBC5	0.112	0.144						0.145				0.639	
PBC6		0.160						0.148	0.119	0.668			0.171
REL1		0.126					0.221	0.668	0.128				
REL2	0.186		0.208	0.128		0.362	0.232	0.383			- 0.121	0.197	0.146
REL3	0.380	0.115	0.281	0.124	0.114	0.129	0.201	0.257	0.201	0.121			
REL4	0.245	0.378				0.112		0.476	- 0.130	0.153	0.193	0.130	
REL5	0.141				0.114	0.107	0.323		0.277	0.341	0.106	0.351	- 0.190
REL6		0.148	0.557					0.331					0.101

Based on the results of *Exploratory Factor Analysis* (EFA) using the rotation method, the structure of the research variables was successfully simplified into 13 main factors that were considered more stable and representative in explaining the behavior of using Sharia Open Banking. The rotation process showed that there was a grouping of indicators based on the proximity of the factor load, so that each group reflected a latent dimension that had its own conceptual characteristics.

- a) Factor 1 is made up of nine indicators, including PEU1, PEU2, PEU6, ATU3, ATU5, BIU2, ASU5, SN3, and REL3.
- b) Factor 2 consists of six indicators, namely PU6, PEU4, ASU1, ATB3, PBC4, and REL4.
- c) Factor 3 consists of five indicators, namely PEU5, ATU2, ATU4, ATU6, and REL6.
- d) Factor 4 is built through five indicators, consisting of BIU5, ASU3, ASU4, ATB5, and SN4.
- e) Factor 5 is supported by three indicators, namely SN5, SN6, and PBC1.
- f) Factor 6 is formed from three main indicators, namely PU2, BIU6, and ATB6.
- g) Factor 7 has three constituent indicators, namely PU1, PEU3, and ATB1.
- h) Factor 8 consists of three indicators, including SN1, REL1, and REL2.
- i) Factor 9 consists of five indicators, namely PU3, ATU1, BIU1, ASU2, and ASU6.
- j) Factor 10 is formed through three indicators, namely PBC2, PBC3, and PBC6.
- k) Factor 11 has four forming indicators, namely PU5, BIU4, ATB2, and ATB4.
- l) Factor 12 consists of four indicators, namely BIU3, SN2, PBC5, and REL5.
- m) Factor 13 is represented by only one indicator, namely PU4.

The results of the analysis show that there are thirteen factors that play a role in explaining user behavior in utilizing Sharia Open Bank services. The thirteen factors are then named Perceived Ease of Use, Attitude Towards Behavior, Attitude Towards Use, Actual System Use, Subjective Norm, Efficiency in Use, Perceived Usefulness, Religiosity, Value of Benefit, Perceived Behavioral Control, User Satisfaction, Social Considerations, and System Excellence.

DISCUSSION

The results of the study show that Generation Z's decision to use Open Bank Sharia is influenced by 13 main factors formed through the *Exploratory Factor Analysis* (EFA) approach. This finding confirms that the behavior of using digital Islamic banking services is multidimensional, because it involves the interaction between technological, psychological, social, and religious aspects. The structure of the factors formed shows that the decision to use is not only determined by the perception of the system, but also by personal values and the influence of the social environment that surrounds it.

The most dominant factors are *Perceived Ease of Use*, which shows that ease of understanding, accessing, and operating systems is a key consideration in the adoption of digital financial technology (Rahma Wulandari 2023). These findings are in line with the framework *Technology Acceptance Model* (TAM) which places the perception of convenience as an initial determinant of technology acceptance. The simpler the interface and service flow offered, the higher the likelihood of users adopting and utilizing the service on an ongoing basis.

In addition, the *Attitude Toward Behavior* and *Attitude Toward Using* also have an important contribution in shaping usage decisions. Both of these factors reflect an individual's positive assessment of the benefits, convenience, and effectiveness of the service (Carranza et.al 2021). In perspective *Theory of Planned Behavior* (TPB), a positive attitude towards a behavior will strengthen the intention to do so, thereby encouraging real use decisions.

Factors *Actual System Use* affirms that usage decisions do not stop at the level of intent, but rather are reflected in actual behavior, such as frequency, consistency, and user engagement in utilizing the service (Hayam 2025). This shows that some respondents have made Open Bank Syariah part of their daily financial activities, so that the adoption of services is no longer experimental, but has entered the implementation stage.

From the social side, the *Subjective Norm* and *Social Considerations* emphasizing that the surrounding environment, such as family, friends, and community, plays a role in shaping usage decisions (Usman et al., 2025). For Generation Z who grew up in a strong digital ecosystem and social networks, social validation is one of the important considerations in choosing the financial technology to use.

On the functional dimension, the *Efficiency in Use*, *Perceived Usefulness*, and *Value of Benefit* shows that users judge the service based on the real benefits obtained, such as time efficiency, ease of activity, and perceived added value (Yunda et al. 2025). These findings confirm that practical utility remains a key foundation in driving the use of digital services, particularly in a generation that demands speed and effectiveness.

Factors *Perceived Behavioral Control* shows that an individual's ability to access, understand, and control the system also influences usage decisions (Ali et al. 2021). The greater the user's confidence in their ability to operate the service, the higher their tendency to adopt the technology on an ongoing basis.

In the context of Islamic banking, the *Religiosity* is a significant differentiator compared to conventional digital financial services. The suitability of services with Islamic principles, such as free usury, justice, and blessings of transactions, is a separate consideration in choosing financial services (Suryani 2022). The presence of this factor confirms that the decision to use the Islamic financial sector is not solely driven by economic rationality, but also by value orientation and spiritual beliefs.

Furthermore, the *User Satisfaction* Indicates that a positive experience while using the service will strengthen loyalty and encourage continued use (Widjayanti 2026). Satisfaction is not

only an indicator of the success of a service, but it is also a strategic element in maintaining a long-term relationship with users.

The last factor, namely *System Excellence*, represents the perception of service superiority over conventional systems, especially in terms of quality, efficiency, and innovation (Cahyana & Azwari 2023). This factor confirms that users are not only looking for a service that works, but also one that offers a superior experience and has a clear competitiveness.

Conceptually, the results of this study expand the scope of TAM and TPB by including the dimensions of religiosity and service experience as key elements in explaining the behavior of using digital Islamic financial services. Based on this integration, this study formulates the *Sharia Open Bank Usage Determinant Model* (MPP-OBS) as a new conceptual model that is more relevant to explain the decision to use the Islamic Open Bank. This model emphasizes that the success of service adoption does not only rely on the quality of technology, but must also consider the social, psychological, and spiritual values that live in the user ecosystem.

CONCLUSION

This study succeeded in identifying the determinants of Generation Z's decision in using Sharia Open Bank through the *Exploratory Factor Analysis* (EFA) approach. The results of the analysis produced 13 main factors, namely *Perceived Ease of Use*, *Attitude Towards Behavior*, *Attitude Towards Use*, *Actual System Use*, *Subjective Norm*, *Efficiency of Use*, *Perceived Usefulness*, *Religiosity*, *Value of Benefits*, *Perceived Behavioral Control*, *User Satisfaction*, *Social Considerations*, and *System Excellence*. Thus, it emphasizes that the decision to use digital Islamic financial services is multidimensional. The dominant factors found include *perceived ease of use*, *perceived usefulness*, and *religiosity*, which shows that the convenience of the system, real benefits, and conformity with sharia principles are the main considerations in the adoption of services.

This study also formulates *the Sharia Open Bank Usage Determinant Model* (MPP-OBS) as a conceptual framework that explains the determinants of simultaneous service use. This model expands the study of *Technology Acceptance Model* (TAM) and *Theory of Planned Behavior* (TPB) by including the dimension of religiosity as a typical characteristic of Islamic banking. Thus, this research makes a scientific contribution to the development of a more contextual and comprehensive digital Islamic financial services adoption model.

This study has limitations in the coverage of the area focused on East Java and the characteristics of respondents that are limited to Generation Z, so the generalization of results needs to be done carefully. In addition, the use of EFA in this study is still exploratory and has not tested the causal relationship between variables.

Therefore, further research is recommended to expand geographical coverage, increase the variety of respondents, and use *the Confirmatory Factor Analysis* (CFA) or *Structural Equation Modeling* (SEM) approach to test the validity of the model in more depth. The addition of variables such as trust, data security, digital literacy, and user loyalty can also be considered to enrich the research model. From a practical perspective, Open Bank Sharia service providers need to improve system quality, transaction security, and innovation based on user needs in order to be able to expand the adoption rate among the younger generation.

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