

Digital Transformation Model Of Sharia Financial Information Systems In Increasing Gen Z's Interest In Conducting Transactions At Sharia Banks

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Abstract: The digital transformation of the Islamic financial information system is a strategic need in the midst of rapid technological developments and changes in consumer behavior, especially generation Z. Islamic banks face the challenge of low interest in generation Z in making transactions, one of which is due to the limited ease of use and optimization of digital information systems. This study aims to analyze the influence of the digital transformation of the Islamic financial information system and ease of use on the interest of Generation Z transactions in Islamic banks. The research uses a quantitative approach with a survey method on generation Z in Medan City. Data analysis was carried out using Partial Least Squares– Structural Equation Modeling (PLS-SEM) through the SmartPLS application. The results of the study show

Abstract: Transformasi digital sistem informasi keuangan syariah menjadi kebutuhan strategis di tengah pesatnya perkembangan teknologi dan perubahan perilaku konsumen, khususnya generasi Z. Bank syariah menghadapi tantangan rendahnya minat generasi Z dalam melakukan transaksi, yang salah satunya disebabkan oleh keterbatasan kemudahan penggunaan dan optimalisasi sistem informasi digital. Penelitian ini bertujuan untuk menganalisis pengaruh transformasi digital sistem informasi keuangan syariah dan ease of use terhadap minat transaksi generasi Z di bank syariah. Penelitian menggunakan pendekatan kuantitatif dengan metode survei terhadap generasi Z di Kota Medan. Analisis data dilakukan menggunakan Partial Least Squares– Structural Equation Modeling (PLS-SEM) melalui aplikasi SmartPLS. Hasil penelitian

that ease of use has a positive and significant effect on the interest of Generation Z transactions, while the quality of digital financial information does not have a significant effect. However, simultaneously the two variables are able to explain most of the variation in transaction interests. These findings confirm that the success of Islamic bank digital transformation in attracting the interest of generation Z is determined more by the ease of use of the system than the quality of information alone. This research is expected to be a strategic reference for the development of an Islamic financial information system that is more adaptive to the needs of the younger generation.

Keywords: Digital Financial Information; Ease of Use; Transaction Interests.

menunjukkan bahwa ease of use berpengaruh positif dan signifikan terhadap minat transaksi generasi Z, sedangkan kualitas informasi keuangan digital tidak berpengaruh signifikan. Namun, secara simultan kedua variabel mampu menjelaskan sebagian besar variasi minat transaksi. Temuan ini menegaskan bahwa keberhasilan transformasi digital bank syariah dalam menarik minat generasi Z lebih ditentukan oleh kemudahan penggunaan sistem dibandingkan kualitas informasi semata. Penelitian ini diharapkan dapat menjadi rujukan strategis bagi pengembangan sistem informasi keuangan syariah yang lebih adaptif terhadap kebutuhan generasi muda.

Kata Kunci: Informasi Keuangan Digital; Kemudahan Penggunaan; Minat Transaksi.

A. Introduction

Digitalization has become a major driving force in the transformation of the global financial services sector. Advances in information technology have encouraged banking institutions, including Islamic banks, to adapt to increasingly dynamic and digitally oriented customer needs. Amid these changes, Generation Z—individuals born between 1997 and the early 2010s—has become a strategic segment because they grew up in the digital era and have a high dependence on technology in their daily lives, including in accessing financial services (Alzakwani, 2025).

Despite the large market potential of Generation Z, the penetration of Islamic banking within this segment remains relatively low. Many members of Generation Z prefer to use conventional financial service applications or fintech platforms because they are perceived as more practical, innovative, and capable of providing a more attractive user experience (Nurhayati, 2025). The relatively slow adoption of

comprehensive digital strategies by Islamic banks has become one of the main factors contributing to Generation Z's low interest in conducting transactions through Islamic financial institutions.

One significant challenge is the limited development of Islamic financial information systems that align with the digital expectations of Generation Z. Existing services tend to be less interactive, administratively oriented, and insufficiently integrated with Islamic principles within a flexible digital ecosystem. Furthermore, interfaces that are less user-friendly and not fully responsive to the digital habits of younger users further exacerbate this condition (Kurniati & Febrianti, 2024). User experience (*UX*), which is a primary concern for Generation Z, has not yet become a major priority in the design of existing Islamic financial information systems.

Another issue contributing to this condition is the relatively low level of understanding among younger generations regarding the concepts and advantages of Islamic economics. Many young people still lack adequate Islamic financial literacy and therefore do not perceive significant added value in conducting transactions through Islamic banks (Alali, 2024). In this context, digital systems should not only function as transaction platforms but also serve as media for delivering education and Islamic values that can be understood and accepted contextually by younger generations.

To date, there is still no digital transformation model specifically designed based on the characteristics of Generation Z within the context of Islamic finance. The absence of such a model has hindered the adoption of digital Islamic banking services and reduced the competitiveness of Islamic banking institutions compared to conventional financial institutions that are more aggressive in technological innovation (Asmawi & Rahmawati, 2025). If this issue is not addressed promptly, it may widen the gap between the potential of Islamic economics and the actual participation of younger generations in the Islamic financial system.

Based on these conditions, the development of a digital transformation model for Islamic financial information systems that is responsive to the needs of Generation Z has become increasingly important. This model is expected to bridge Islamic principles with digital expectations while simultaneously addressing the low participation of Generation Z in Islamic financial services. Through an integrative approach based on the digital behavior of younger generations, it is expected that their interest in Islamic banking can be significantly improved.

To achieve the research objectives, the researchers conducted a literature mapping process using Publish or Perish (PoP), which identified 57 Scopus-indexed articles and 190 Google Scholar-indexed articles. Subsequently, the studies were mapped using VOSviewer through a clustering method to group articles relevant to the research direction. The results of the mapping are presented as follows:



Figure 1. Mapping Study Scopus and Google Scholar Index 2020-2025

The mapping of previous studies indicates that there is still limited research examining the relationship between the digital transformation of Islamic financial information systems and Generation Z's interest in conducting transactions at Islamic banks. Most previous studies have primarily discussed digital transformation in the context of the Indonesian Islamic banking industry (Masrina & Lestari, 2025; Wahyudi et al., 2024), the digital era (Lestari, 2025; Abrar & Ihza, 2025), digital transformation processes (Kismawadi, 2025; Siswanti, 2024), digital banking services (Azizah, 2023; Hasanah et al., 2024), Islamic banking systems (Azizah, 2023), and issues related to digital transactions (Lestari & Fasa, 2025).

In addition, several studies closely related to digital transformation, such as those conducted by Shehadeh (2024) and Alzakwani (2025), examined digital transformation within Islamic financial institutions. Their findings indicate that the Islamic finance sector must adopt customer-oriented and innovation-based digital transformation strategies to remain globally competitive and maximize the benefits of digitalization. However, these studies mainly employed qualitative approaches, whereas the present study adopts a quantitative approach.

This study offers novelty by focusing on Generation Z, a group that has received limited attention in the context of Islamic banking research. By analyzing the influence of information system quality, ease of use, digital innovation, and Sharia compliance on transaction interest, this study provides new and relevant insights into the factors influencing Generation Z's engagement with Islamic banking services.

Furthermore, the technology-based approach applied in this study reflects the evolving needs of modern consumers within the Islamic banking sector. By understanding these dynamics, this research not only contributes to the enrichment of academic literature but also provides practical recommendations for developing more effective marketing strategies aimed at attracting younger generations to participate in the Islamic banking ecosystem.

B. Research Method

This study was designed using a quantitative approach with the primary objective of developing and testing a digital transformation model of Islamic financial information systems relevant to increasing Generation Z's interest in conducting transactions at Islamic banks. A quantitative approach was selected because it provides an objective basis for analyzing relationships among variables in a measurable and systematic manner. Through this approach, causal relationships among constructs can

be empirically analyzed using data obtained directly from respondents representing the target population.

In this study, data processing and analysis were conducted using SmartPLS (Partial Least Squares–Structural Equation Modeling / PLS-SEM) software. The use of SmartPLS was considered appropriate because this method is effective for testing complex structural models, including models involving moderating variables (19,20). SmartPLS is also capable of accommodating both reflective and formative latent variables and does not strongly depend on the normal distribution of data, making it suitable for medium-sized samples.

The analysis was conducted through two main stages: evaluation of the measurement model (outer model) to test construct validity and reliability, and evaluation of the structural model (inner model) to examine the relationships among variables and the moderating effects.

The variables used in this study include:

1. X1 – Digital Transformation of Islamic Financial Information Systems: This variable measures respondents' perceptions regarding the quality of digitalization in Islamic financial services, including interface design, accessibility, ease of use, and system integration with Islamic principles.
2. X2 – Ease of Use: This variable reflects operational convenience and navigation simplicity in using Islamic digital banking applications.
3. Y – Transaction Interest in Islamic Banks: As the dependent variable, this construct represents Generation Z's intention or tendency to conduct financial transactions at Islamic banks through digital channels.

This research model not only examines the direct relationships between the independent and dependent variables but also investigates the moderating effect of Sharia compliance understanding on the relationships between digital transformation, ease of use, trust, and transaction interest. Thus, the model enables an examination of

how the level of understanding of Sharia principles strengthens the relationship between digital innovation and Generation Z's decisions to utilize Islamic banking services.

Through this methodological design, the study is expected to produce a digital transformation model of Islamic financial information systems that is adaptive to the needs of Generation Z and aligned with Islamic principles, while also providing strategic implications for the development of policies in Islamic financial institutions in the digital era.

C. Results and Discussion

The results of the data analysis concern the Digital Transformation Model of Islamic Financial Information Systems in Increasing Generation Z's Interest in Conducting Transactions at Islamic Banks. Data analysis was conducted using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) approach with the assistance of SmartPLS software.

The variables analyzed in this study consisted of Digital Financial Information Quality (X1) and Ease of Use (X2) as the independent variables, while Transaction Interest (Y) served as the dependent variable. In the initial stage, each variable was measured using 10 statement indicators.

Furthermore, the measurement model (outer model) and the structural model (inner model) were evaluated to ensure the validity and reliability of the constructs, as well as to examine the relationships among variables within the proposed research model.

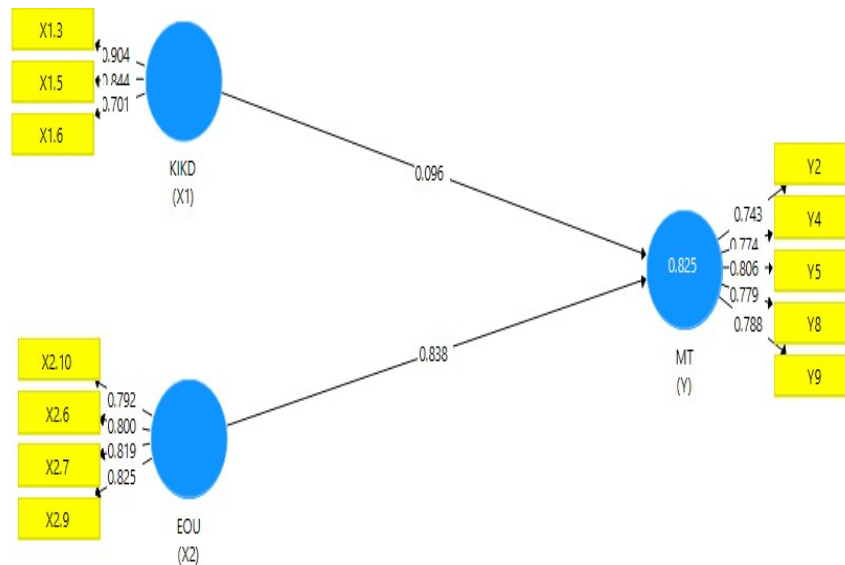


Figure 2. Outer Loading Test Results

Figure 1 presents the results of the outer model testing, which illustrates the relationship between each indicator and the latent constructs in this study, namely Digital Financial Information Quality (X1), Ease of Use (X2), and Transaction Interest (Y). The figure displays the outer loading values of each indicator corresponding to their respective variables.

The indicators presented in Figure 1 have outer loading values ≥ 0.70 , indicating that they meet the criteria for convergent validity. The Digital Financial Information Quality (X1) variable is represented by indicators X1.3, X1.5, and X1.6. The Ease of Use (X2) variable is represented by indicators X2.6, X2.7, X2.9, and X2.10. Meanwhile, the Transaction Interest (Y) variable is represented by indicators Y2, Y4, Y5, Y8, and Y9.

Therefore, Figure 1 demonstrates that each indicator used in the research model has an adequate contribution in reflecting the latent construct it is intended to measure.

Table.1. Outer Loading Test Results

	ID_(X2)	KIKD_(X1)	MT_(Y)
X1.3		0.904	
X1.5		0.844	

X1.6		0.701	
X2.10	0.792		
X2.6	0.800		
X2.7	0.819		
X2.9	0.825		
Y2			0.743
Y4			0.774
Y5			0.806
Y8			0.779
Y9			0.788

The results of the measurement model evaluation indicate that not all initial indicators could be retained for further analysis. Of the total 10 indicators for each variable, only indicators with outer loading values ≥ 0.70 were retained in the model.

For the Digital Financial Information Quality (X1) variable, the indicators that met the convergent validity criteria were X1.3 with an outer loading value of 0.904, X1.5 with 0.844, and X1.6 with 0.701. These three indicators were considered adequate in representing the Digital Financial Information Quality construct.

The Ease of Use (X2) variable was represented by four indicators, namely X2.6 with an outer loading value of 0.800, X2.7 with 0.819, X2.9 with 0.825, and X2.10 with 0.792. All of these indicators demonstrated outer loading values above the established threshold, indicating that they were valid.

Meanwhile, the Transaction Interest (Y) variable was represented by five indicators, namely Y2 (0.743), Y4 (0.774), Y5 (0.806), Y8 (0.779), and Y9 (0.788). The obtained outer loading values indicate that these indicators adequately explain the Transaction Interest construct.

Table.2. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)

ID_(X2)	0.825	0.829	0.884	0.655
KIKD_(X1)	0.754	0.775	0.859	0.673
MT_(Y)	0.838	0.840	0.885	0.606

The results of the construct reliability testing indicate that all variables in this study demonstrate a good level of internal consistency. The Cronbach’s Alpha values for the variables Digital Financial Information Quality, Ease of Use, and Transaction Interest were all above 0.70. In addition, the Composite Reliability values for all three variables also exceeded the minimum threshold of 0.70, indicating that the constructs used in this study are reliable.

Furthermore, the results of the convergent validity testing, measured through the Average Variance Extracted (AVE) values, show that all variables have AVE values above 0.50. The Digital Financial Information Quality variable obtained an AVE value of 0.673, Ease of Use obtained 0.655, and Transaction Interest obtained 0.606.

These findings indicate that each construct is capable of explaining more than half of the variance of its corresponding indicators.

Table.3. Fornell-Larcker Criterion

	ID_(X2)	KIKD_(X1)	MT_(Y)
ID_(X2)	0.809		
KIKD_(X1)	0.700	0.821	
MT_(Y)	0.906	0.684	0.778

Testing multicollinearity done with see Variance Inflation Factor (VIF) value for each indicators. Analysis results show that all over indicator own VIF value is below 5. This is signify that No there is symptom multicollinearity in the research model, so that connection inter-indicator and inter-variable free No each other influence in a way excessive.

Table.4. Collinearity Statistics (VIF)

	VIF
X1.3	2,368
X1.5	1,849

X1.6	1,423
X2.10	1,554
X2.6	1,870
X2.7	1,979
X2.9	1,780
Y2	1,716
Y4	1,656
Y5	1,887
Y8	1,916
Y9	1,936

The results of the structural model evaluation indicate that the variables Digital Financial Information Quality and Ease of Use collectively demonstrate a strong ability to explain the Transaction Interest variable. The coefficient of determination (R-Square) value for the Transaction Interest variable was 0.825, indicating that 82.5% of the variation in Transaction Interest can be explained by the two independent variables included in this study.

Meanwhile, the remaining 17.5% of the variation is explained by other factors outside the research model. These findings indicate that the proposed model has strong explanatory power in predicting Generation Z's transaction interest in Islamic banks.

Table 5. R square

	R Square	R Square Adjusted
MT_(Y)	0.825	0.818

Structural model test results show that variables Quality Information Digital Finance and Ease of Use together own strong ability in explain Transaction Interest variable. Coefficient value determination (R-Square) on the Transaction Interest variable of 0.825, which means that 82.5% of the variation in Transaction Interest can explained by both variables independent in study this. Meanwhile that, the rest explained by other factors outside the research model.

Table 6. Statistical Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
ID_(X2) -> MT (Y)	0.838	0.865	0.086	9,729	0,000
KIKD_(X1) -> MT (Y)	0.096	0.072	0.107	0.896	0.370

The results of the intervariable relationship testing indicate that Ease of Use has a path coefficient of 0.838, with a T-statistic value of 9.729 and a significance value below 0.05. Meanwhile, Digital Financial Information Quality has a path coefficient of 0.096, with a T-statistic value of 0.896 and a significance value above 0.05.

These findings indicate differences in the strength of the relationships between each independent variable and Transaction Interest, as illustrated in the structural model of this study. Furthermore, the results suggest that Ease of Use has a stronger influence on Transaction Interest compared to Digital Financial Information Quality.

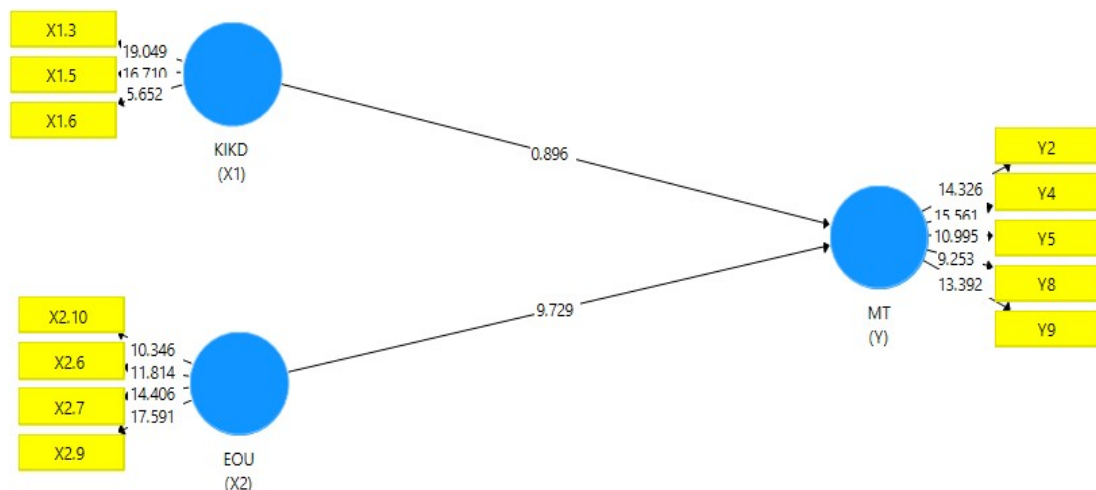


Figure 3. Inner Model

Figure 2 illustrates the structural model (*inner model*) used in this study, which describes the relationships among the latent variables, namely Digital Financial Information Quality (X1) and Ease of Use (X2) toward Transaction Interest (Y). The

figure presents the direction of the relationships among variables along with the path coefficients generated from the data processing using the PLS-SEM method.

In addition to the path coefficients, Figure 2 also presents the R-Square value for the Transaction Interest (Y) variable, which indicates the level of the independent variables' ability to explain the dependent variable. The relationships among variables in this model were further analyzed through statistical tests presented in the results section.

The presence of Figure 2 provides a visual and systematic representation of the relationships among variables in this study, thereby facilitating a better understanding of the direction and strength of the relationships tested in the research model.

D. Conclusion

Based on the results of the analysis and discussion regarding the Digital Transformation Model of the Islamic Financial Information System in Increasing Generation Z's Interest in Conducting Transactions at Islamic Banks, it can be concluded that the research model developed has fulfilled the criteria for testing both the measurement model and the structural model. The indicators used in this study were declared valid and reliable in measuring each variable.

The results of the study indicate that Ease of Use has a positive and significant effect on Generation Z's Transaction Interest in Islamic Banks. These findings confirm that the ease of using Islamic financial information systems is a major driving factor influencing Generation Z's interest in conducting transactions. The easier the system is to use, the higher Generation Z's interest in transacting with Islamic banks.

On the other hand, Digital Financial Information Quality does not have a significant effect on transaction interest. This indicates that the quality of information presented in digital systems has not become the main determining factor in shaping Generation Z's transaction interest, although it still plays a supporting role in Islamic financial information systems.

Simultaneously, the variables of Digital Financial Information Quality and Ease of Use are able to explain a substantial proportion of the variation in Generation Z's transaction interest. Therefore, the digital transformation of Islamic financial information systems plays an important role in increasing transaction interest, particularly through improving the ease-of-use aspect of the system.

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