Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Analysis Of Factors Influencing The Adoption Of Sharia-Based Non-Cash Payments In Medan City

Abdul Hadi Ismail[1*], Asmawarna Sinaga[2], Sariyanto[3]

Universitas Muhammadiyah Sumatera Utara*[1]
Institut Jam'iyah Mahmudiyah Langkat[2]
Universitas Amir Hamzah[3]
*[1]email: abdulhadi@umsu.ac.id
[2]email: asmawarnasinaga1991@gmail.com
[3]email: keluarga3366@gmail.com

Info Articles			
Received:	***Revised:***	***Accepted:***	***Published:***
March 27, 2026	April 19, 2026	May 26, 2026	June 10, 2026

Abstract: This study aims to analyze the influence of technology, trust and risk, and Sharia compliance on the adoption of Sharia-based cashless payment systems among the people of Medan City. A quantitative approach was employed using a survey method through questionnaires distributed to respondents who were familiar with or had experience using Sharia-based cashless payment services. The data were analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) with SmartPLS software. The results indicate that technology has a significant effect on the adoption of Sharia-based cashless payments, with a *p-value* of 0.027. Meanwhile, trust and risk (*p-value* = 0.462) and Sharia compliance (*p-value* = 0.166) do not have a significant effect on adoption. The R-Square value of 0.143 indicates that the independent variables explain 14.3% of the variance in Sharia-based cashless payment adoption, while the remaining variance is influenced by other

Abstract: Penelitian ini bertujuan untuk menganalisis pengaruh teknologi, kepercayaan dan risiko, serta kepatuhan syariah terhadap adopsi pembayaran non tunai berbasis syariah pada masyarakat Kota Medan. Penelitian menggunakan pendekatan kuantitatif dengan metode survei melalui penyebaran kuesioner kepada responden yang mengetahui atau pernah menggunakan layanan pembayaran non tunai syariah. Data dianalisis menggunakan metode Structural Equation Modeling-Partial Least Square (SEM-PLS) dengan bantuan perangkat lunak SmartPLS. Hasil penelitian menunjukkan bahwa variabel teknologi berpengaruh signifikan terhadap adopsi pembayaran non tunai berbasis syariah dengan nilai *p-value* sebesar 0,027. Sementara itu, variabel kepercayaan dan risiko (*p-value* = 0,462) serta kepatuhan syariah (*p-value* = 0,166) tidak berpengaruh signifikan terhadap adopsi pembayaran

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

factors outside the research model. These findings suggest that technology is the primary factor influencing users' decisions to adopt Sharia-based digital payment services. The study provides practical insights for Islamic banks, digital payment providers, and regulators in developing a more effective, inclusive, and sustainable Islamic digital payment ecosystem.

Keywords: Technology; Trust And Risk; Sharia Compliance; Sharia Cashless Payment; Technology Adoption.

non tunai berbasis syariah. Nilai R-Square sebesar 0,143 menunjukkan bahwa ketiga variabel independen mampu menjelaskan 14,3% variasi adopsi pembayaran non tunai berbasis syariah, sedangkan sisanya dipengaruhi oleh faktor lain di luar model penelitian. Temuan ini menunjukkan bahwa aspek teknologi menjadi faktor utama yang memengaruhi keputusan masyarakat dalam menggunakan layanan pembayaran digital syariah. Penelitian ini diharapkan dapat menjadi masukan bagi perbankan syariah, penyedia layanan pembayaran digital, dan regulator dalam mengembangkan ekosistem pembayaran non tunai berbasis syariah yang lebih efektif, inklusif, dan sesuai dengan kebutuhan masyarakat.

Kata Kunci: Teknologi; Kepercayaan dan Risiko; Kepatuhan Syariah; Pembayaran Non Tunai Syariah; Adopsi Teknologi.

A. Introduction

Digital transformation has brought significant changes in various aspects of society, including in payment systems. The development of information and communication technology has driven the emergence of various non-cash payment innovations offering convenience, speed, efficiency, and security in transactions. In Indonesia, the use of non-cash payments has experienced a very rapid increase along with increasing internet penetration, smartphone usage, financial technology (fintech) development, and government support through national economic digitalization programs (Pradesyah et al., 2024). The presence of various digital payment instruments such as mobile banking, internet banking, digital wallets, and the Quick Response Code

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Indonesian Standard (QRIS) has changed public behavior from cash-based transactions to digital transactions.

This development has also occurred in the Islamic finance sector. As a country with the largest Muslim population in the world, Indonesia has enormous potential in the development of sharia-based non-cash payment systems. Sharia-based payment systems not only aim to provide convenience and efficiency in transactions but also ensure that every financial activity is conducted in accordance with Islamic principles that avoid elements of *riba*, *gharar*, and *maysir*, while upholding the values of justice and welfare (Wahyuni et al., 2023). Therefore, the development of sharia-based non-cash payment systems has become an important part of efforts to strengthen the national Islamic economic and financial ecosystem.

Although the potential of the Islamic digital payment market is very large, the adoption rate has not yet been fully optimal. This phenomenon shows that the public's decision to use sharia-based non-cash payment services is not only influenced by service availability but also by various factors related to users' perceptions of technology, trust levels, perceived risks, and beliefs that the services comply with Islamic principles. Therefore, it is important to understand the factors influencing the adoption of sharia-based non-cash payments so that service development can be carried out more effectively and appropriately according to public needs (Sihotang et al., 2022).

One factor believed to have an important influence on the adoption of sharia-based non-cash payments is technology. From the perspective of the Technology Acceptance Model (TAM), acceptance of a technology is greatly influenced by perceived ease of use and perceived usefulness (Syafaastuti, 2024). People tend to adopt digital payment systems when the technology is considered easy to use, able to increase transaction effectiveness, and able to provide a better user experience compared to conventional payment methods. In the context of sharia-based non-cash payments, technology quality, including ease of access, transaction speed, system compatibility, and service innovation, becomes a factor that can determine public interest in using such

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

services. If the technology offered is not yet able to provide adequate convenience and comfort, then user adoption levels tend to be low (Ismail, 2022).

Apart from technology factors, trust and risk are also very determining factors in the use of digital payment services. Trust is the users' belief that the payment system used is capable of safeguarding personal data security, guaranteeing financial information confidentiality, and carrying out transactions accurately and reliably (Fatimah, 2024). In digital transactions, users do not interact directly with service providers, making trust a very important factor. The higher the level of public trust in sharia payment service providers, the greater the possibility that they will adopt and continuously use the service.

Conversely, risk perception can become an obstacle in the adoption process. Users' perceived risks may include data security risks, misuse of personal information, system failure risks, loss of funds, or transaction uncertainty. The high incidence of digital fraud, data breaches, and cybercrime in recent years has caused some members of the public to remain hesitant about using digital payment services. In the context of sharia-based non-cash payments, high perceived risk can reduce public intention to use the service even though the service offers various conveniences. Therefore, improving system security and consumer protection becomes a very important aspect in increasing the adoption level of sharia digital payments (Sodawan, 2022).

The next factor that becomes a distinctive characteristic in the study of sharia-based non-cash payments is sharia compliance. Unlike conventional digital payment systems, sharia-based payment services must be able to guarantee that all transaction mechanisms comply with Islamic principles. Sharia compliance includes transparency of contracts, avoidance of *riba*, *gharar*, and *maysir*, as well as supervision from authorized institutions such as the Sharia Supervisory Board (Ningrum, 2025). For Muslim communities, the belief that a financial product has fulfilled Islamic principles can become an important factor in determining usage decisions. The higher the public

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

perception of the sharia compliance level of a digital payment service, the greater the possibility that they will adopt the service.

The importance of sharia compliance becomes increasingly relevant when the level of Islamic financial literacy among Indonesian society is still relatively low compared to its market potential. Many people use digital payment services without knowing the fundamental differences between conventional and sharia services. As a result, the added value possessed by sharia payment systems is not yet fully understood by the public. This condition demonstrates the need for research capable of explaining the extent to which sharia compliance is a determining factor in the adoption of sharia-based non-cash payments in Indonesia.

Based on theoretical perspectives and existing empirical phenomena, technology, trust, risk, and sharia compliance are suspected to play important roles in influencing public decisions to use sharia-based non-cash payments. However, previous research results still show diverse findings. Some studies find that technology is the dominant factor in digital payment adoption, while others show that trust and risk perceptions have a stronger influence. On the other hand, research on the influence of sharia compliance on non-cash payment adoption is still relatively limited, especially in the Indonesian context, which has unique social, cultural, and religious characteristics. These findings indicate the existence of a research gap that needs to be further examined.

Therefore, research entitled "Analysis of Factors Influencing the Adoption of Sharia-Based Non-Cash Payments in Indonesia" becomes important to conduct. This study focuses on testing the influence of technology, trust and risk, as well as sharia compliance on the adoption of sharia-based non-cash payments. The research results are expected to contribute to the development of technology adoption theory in the context of the sharia economy while simultaneously serving as a basis for regulators, Islamic banking institutions, Islamic fintech companies, and digital payment service providers in formulating appropriate strategies to increase the use of sharia-based non-cash

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

payments in Indonesia. In addition, this research aligns with the national digital transformation agenda, strengthening the national sharia economy, as well as Indonesia's vision as a global center for Islamic economics and finance.

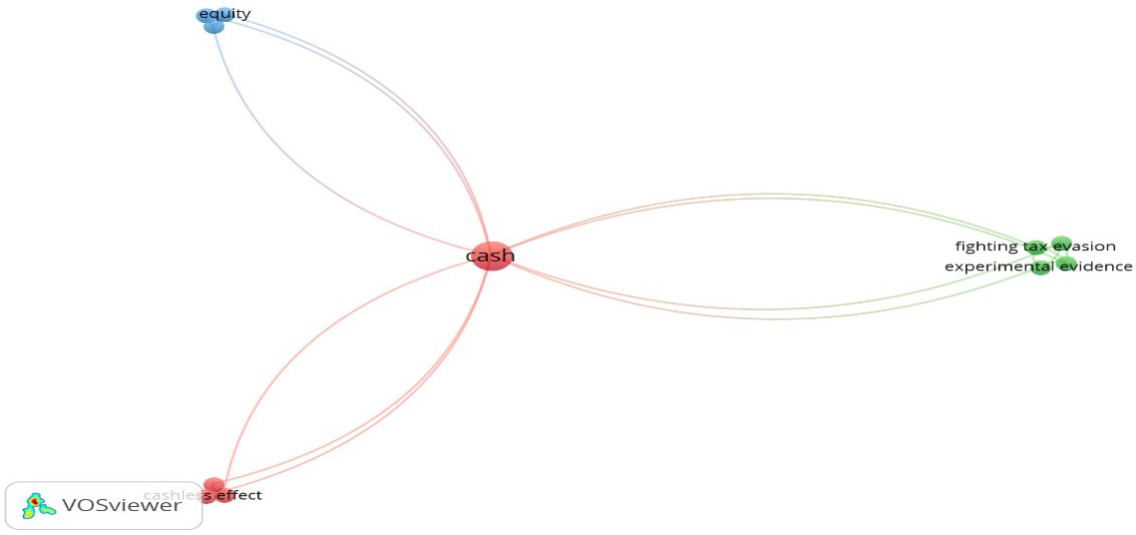

Figure 1. Vosviewer results with index Scopus 2021-2026

Analysis bibliometrics using VOSviewer software, as shown in Figure 1, indicates that research on non-cash payment systems is still dominated by themes such as cash (Rösl, 2022; Riyazahmed, 2024; Monye, 2024), cashless effect (Świecka, 2021; Kovski, 2023), equity (Sung, 2023; Fergusson, 2023), fighting tax evasion (Chan, 2023; Agrawal, 2021), and experimental evidence (Chan, 2023). The visualization shows that the keyword *cash* becomes the central connectivity node that links various research topics related to the transition from cash-based payment systems to digital payment systems. The first cluster connects non-cash payment issues with aspects of economic justice and equity (Sung, 2023; Fergusson, 2023), while another cluster links the use of non-cash payments with efforts to increase transaction transparency and reduce tax avoidance practices (Chan, 2023). These findings indicate that previous studies have

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

largely focused on the macroeconomic impacts, policy effectiveness, and social consequences of decreasing cash usage.

However, the bibliometric mapping results also reveal that studies on the adoption of sharia-based non-cash payments have not yet emerged as a major theme within the existing research network. Likewise, variables that are highly relevant in the context of Islamic economics, such as technology, trust and risk, and sharia compliance, have not appeared as dominant focuses in the research map. This condition demonstrates the existence of a significant research gap. In fact, the successful implementation of sharia-based non-cash payments is not only determined by economic benefits and transaction efficiency but also by the quality of the technology used, users' trust in system security, perceived risk, and confidence that the service complies with sharia principles.

Therefore, this study is conducted to fill the existing gap in the literature by empirically analyzing the influence of technology, trust and risk, and sharia compliance on the adoption of sharia-based non-cash payments in Indonesia.

B. Research Method

This study employs a quantitative approach with an explanatory research design. The quantitative approach was selected because the study aims to measure and analyze the influence of technology, trust and risk, and sharia compliance on the adoption of sharia-based non-cash payments among the people of Medan City. Meanwhile, explanatory research is used to explain the causal relationships among variables through hypothesis testing formulated based on theories and findings from previous studies.

The research was conducted in Medan City, North Sumatra Province, which is one of the largest metropolitan cities in Indonesia and serves as a center of economic growth, trade, and services in the Sumatra region. The selection of Medan City was based on several considerations. First, Medan has a high level of economic activity, resulting in the rapid development of digital financial services. Second, Medan City possesses a heterogeneous population in terms of age, education, occupation, and

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

income level, allowing a more diverse understanding of sharia-based non-cash payment usage behavior. Third, the presence of Islamic banking institutions, Islamic financial institutions, QRIS implementation, and increasingly widespread sharia digital payment services makes Medan City a relevant location for studying factors influencing the adoption of sharia-based non-cash payments.

The population of this study consists of all residents of Medan City who have access to digital payment services and are aware of or have previously used sharia-based non-cash payment services. Considering that the exact population size is unknown, the sampling technique employed is purposive sampling, whereby respondents are selected based on specific criteria. These criteria include: (1) being at least 17 years old, (2) residing in Medan City, (3) having access to digital payment services such as mobile banking, internet banking, or QRIS, and (4) being aware of or having used sharia-based non-cash payment services. The sample size was determined based on the requirements of Structural Equation Modeling–Partial Least Squares (SEM-PLS), which recommends a minimum sample size of five to ten times the number of indicators used in the study. With an estimated 20–25 indicators, this study targets at least 200 respondents to ensure adequate validity and reliability of the analysis (Mart & Mart, 2021).

The data utilized in this study consist of primary and secondary data. Primary data were collected directly from respondents through questionnaires. The questionnaire was designed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Secondary data were obtained through a literature review involving scientific journals, books, reports from Bank Indonesia, the Financial Services Authority (OJK), the National Committee for Islamic Economy and Finance (KNEKS), the Central Statistics Agency (BPS), and other relevant documents related to digital payments and Islamic economics.

The study includes three independent variables and one dependent variable. The first independent variable is technology (X1), which reflects users' perceptions

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

regarding ease of use, usefulness, speed, efficiency, and reliability of sharia-based non-cash payment systems. The second independent variable is trust and risk (X2), which represents users' confidence in system security, personal data protection, service provider credibility, and perceptions of risks associated with digital payment services. The third independent variable is sharia compliance (X3), which measures users' perceptions regarding the conformity of non-cash payment services with Islamic principles, including freedom from riba, gharar, and maysir, as well as the existence of clear sharia supervision. The dependent variable is the adoption of sharia-based non-cash payments (Y), measured through acceptance, usage, intention for continued use, and willingness to recommend the service to others.

The data analysis technique used in this study is Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the assistance of SmartPLS software. The selection of SEM-PLS is based on its ability to analyze complex relationships among latent variables simultaneously, its suitability for relatively moderate sample sizes, and its flexibility in handling data without strict normality assumptions. Furthermore, this method is highly appropriate for studies aiming to develop and test conceptual models in consumer behavior and technology adoption research.

Data analysis was conducted through several stages. The first stage involved descriptive statistical analysis to describe respondent characteristics and the distribution of responses to each research indicator. The second stage consisted of evaluating the measurement model (outer model), which aimed to assess the validity and reliability of the research instruments. Validity was evaluated through factor loadings, Average Variance Extracted (AVE), and discriminant validity, while reliability was assessed using Cronbach's Alpha and Composite Reliability. The third stage involved evaluating the structural model (inner model) to determine the model's capability in explaining relationships among variables through the measurement of R-Square (R^2), Predictive Relevance (Q^2), and Effect Size (f^2) (Jain & Raman, 2022).

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

The final stage consisted of hypothesis testing using the bootstrapping procedure in SmartPLS. This testing aimed to determine the significance of the effects of technology, trust and risk, and sharia compliance on the adoption of sharia-based non-cash payments among the people of Medan City. Research hypotheses were considered supported if the t-statistic value exceeded 1.96 and the p-value was less than 0.05 at a significance level of 5 percent.

Through the research methodology described above, it is expected that an empirical model capable of explaining the factors influencing the adoption of sharia-based non-cash payments among the people of Medan City can be developed. The findings are expected not only to contribute to the advancement of technology adoption literature from the perspective of Islamic economics but also to provide valuable input for Islamic banking institutions, digital payment service providers, and regulators in formulating effective strategies to increase the utilization of sharia-based non-cash payments in Indonesia.

C. Results and Discussion

The adoption of sharia-based non-cash payments in Medan was analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method with the assistance of SmartPLS software. This method was selected because it is capable of simultaneously analyzing relationships among latent variables and testing research models involving multiple constructs at the same time.

The analysis process begins with the evaluation of the measurement model (outer model) to ensure that all indicators used meet the required validity and reliability criteria. Once the measurement model is confirmed to satisfy these requirements, the analysis proceeds to the evaluation of the structural model (inner model) to determine the strength of the relationships among variables and to test the proposed hypotheses.

The results of the analysis are presented systematically, beginning with validity and reliability testing of the research instruments, followed by multicollinearity testing,

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

structural model evaluation, and hypothesis testing, as described in the following section.

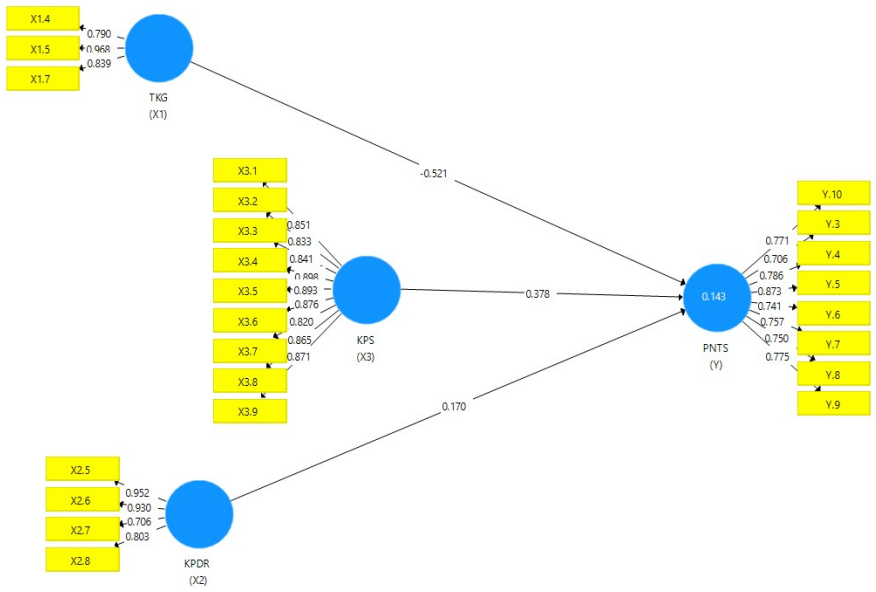

Figure. Outer Loading Test Results

Based on Figure 1, the results of the outer loading test indicate that all indicators used in this study have met the convergent validity criteria. The loading factor value of each indicator is above the minimum threshold of 0.70. This finding demonstrates that each indicator is capable of adequately explaining the latent construct being measured and has a strong correlation with its respective variable.

Therefore, all indicators used in this study are considered valid and can be retained for further analysis in the subsequent testing stages.

Table.1. Outer Loading Test Results

	KPDR_(X2)	KPS_ (X3)	PNTS_(Y)	TKG_(X1)
X1.4				0.790
X1.5				0.968
X1.7				0.839
X2.5	0.952			
X2.6	0.930			
X2.7	0.706			
X2.8	0.803			

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

X3.1		0.851		
X3.2		0.833		
X3.3		0.841		
X3.4		0.898		
X3.5		0.893		
X3.6		0.876		
X3.7		0.820		
X3.8		0.865		
X3.9		0.871		
Y.10			0.771	
Y.3			0.706	
Y.4			0.786	
Y.5			0.873	
Y.6			0.741	
Y.7			0.757	
Y.8			0.750	
Y.9			0.775	

Based on Table 1, the Technology variable (X1) has outer loading values ranging from 0.790 to 0.968. The highest loading value is found in indicator X1.5, with a value of 0.968, indicating that this indicator is the strongest in representing the Technology construct.

For the Trust and Risk variable (X2), the outer loading values range from 0.706 to 0.952, while the Sharia Compliance variable (X3) has outer loading values ranging from 0.820 to 0.898. Furthermore, the Sharia Non-Cash Payment Adoption variable (Y) has outer loading values ranging from 0.706 to 0.873.

All of these loading values meet the convergent validity criterion, as they exceed the recommended threshold value of 0.70. Therefore, all indicators can be considered valid in measuring their respective research constructs.

Table.2. Construct Reliability and Validity

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

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

KPDR_(X2)	0.912	0.891	0.914	0.728
KPS_ (X3)	0.959	0.994	0.963	0.742
PNTS_(Y)	0.904	0.931	0.921	0.595
TKG_(X1)	0.866	1,658	0.902	0.755

After convergent validity has been established, the next step is to conduct reliability and construct validity testing. Based on Table 2, all research variables have Cronbach's Alpha and Composite Reliability values greater than the recommended threshold of 0.70. The Trust and Risk variable has a Composite Reliability value of 0.914, Sharia Compliance has a value of 0.963, Sharia Non-Cash Payment Adoption has a value of 0.921, and Technology has a value of 0.902. These results indicate that all constructs demonstrate excellent internal consistency.

In addition, the Average Variance Extracted (AVE) values for all variables exceed the minimum threshold of 0.50. The Trust and Risk variable has an AVE value of 0.728, Sharia Compliance has a value of 0.742, Sharia Non-Cash Payment Adoption has a value of 0.595, and Technology has a value of 0.755. These values indicate that more than 50 percent of the variance in the indicators can be explained by their respective constructs.

Therefore, all variables in this study are considered both valid and reliable, making them suitable for further structural model analysis.

Table.3. Collinearity Statistics (VIF)

	VIF
X1.4	2,098
X1.5	2,278
X1.7	2,440
X2.5	2,994
X2.6	3,215
X2.7	2,471
X2.8	2,905
X3.1	3,154
X3.2	2,844
X3.3	2,962

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

X3.4	4,705
X3.5	3,448
X3.6	4,399
X3.7	4,518
X3.8	4,600
X3.9	3,431
Y.10	**2,145**
Y.3	**2,125**
Y.4	**2,362**
Y.5	3,781
Y.6	**2,447**
Y.7	**2,500**
Y.8	**2,495**
Y.9	**2,929**

The next stage of analysis is the multicollinearity test, which aims to determine whether there is an excessively high correlation among the indicators in the research model. Based on Table 3, all indicators have Variance Inflation Factor (VIF) values below the recommended threshold of 5. The highest VIF value is found in indicator X3.4, with a value of 4.705, while the lowest VIF value is found in indicator X1.4, with a value of 2.098.

Since all VIF values are below the maximum allowable limit, it can be concluded that there is no multicollinearity problem in the research model. Therefore, the relationships among variables can be further analyzed without any significant interference caused by excessive correlations between indicators.

Table 4. R square

	R Square	R Square Adjusted
PNTS_(Y)	0.143	0.116

Based on the results of the structural model testing presented in Table 4, the R-Square value for the Sharia Non-Cash Payment Adoption variable (Y) is 0.143, with an Adjusted R-Square value of 0.116. These values indicate that the variables Technology,

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Trust and Risk, and Sharia Compliance collectively explain 14.3 percent of the variance in Sharia Non-Cash Payment Adoption.

Meanwhile, the remaining 85.7 percent of the variance is influenced by other factors outside the research model.

These findings suggest that the predictive ability of the model is relatively low. Therefore, it is possible that other factors, such as digital financial literacy, perceived usefulness, ease of use, social influence, religiosity, and demographic characteristics, contribute more substantially to the adoption of sharia-based non-cash payments among the people of Medan City.

Table 5. Statistical Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
KPDR_(X2) -> PNTS_(Y)	0.170	0.102	0.231	0.736	**0.462**
KPS_ (X3) -> PNTS_(Y)	0.378	0.317	0.273	1,386	**0.166**
TKG_(X1) -> PNTS_(Y)	-0.521	-0.380	0.235	2,216	**0.027**

Hypothesis testing was conducted using the bootstrapping method in SmartPLS to determine the effect of each independent variable on the dependent variable. The results indicate that the Trust and Risk variable (X2) has a path coefficient of 0.170, with a t-statistic value of 0.736 and a p-value of 0.462. These values indicate that Trust and Risk do not have a significant effect on Sharia Non-Cash Payment Adoption because the p-value is greater than 0.05. Therefore, the first hypothesis is rejected. This finding suggests that the level of trust and risk perception has not yet become a primary factor influencing the decision of Medan City residents to use sharia-based non-cash payment services.

Furthermore, the Sharia Compliance variable (X3) has a path coefficient of 0.378, a t-statistic value of 1.386, and a p-value of 0.166. Although the relationship is positive, the result does not meet the required significance level. Therefore, the second hypothesis, which states that sharia compliance influences Sharia Non-Cash Payment

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Adoption, cannot be accepted. This finding indicates that sharia compliance has not yet become a dominant consideration for the public when deciding to use sharia digital payment services.

In contrast to the previous two variables, the Technology variable (X1) demonstrates a significant effect on Sharia Non-Cash Payment Adoption. The analysis results show a path coefficient of -0.521, a t-statistic value of 2.216, and a p-value of 0.027. Since the p-value is less than 0.05, the third hypothesis is accepted. These results indicate that technology significantly influences the adoption of sharia-based non-cash payments among the people of Medan City.

However, the negative direction of the relationship suggests a phenomenon that requires further investigation. This condition indicates that an increase in positive perceptions of technology is not necessarily followed by an increase in the adoption of sharia-based non-cash payments. It is possible that other factors, such as technological complexity, limited technological understanding, or users' experiences, influence the direction of this relationship.

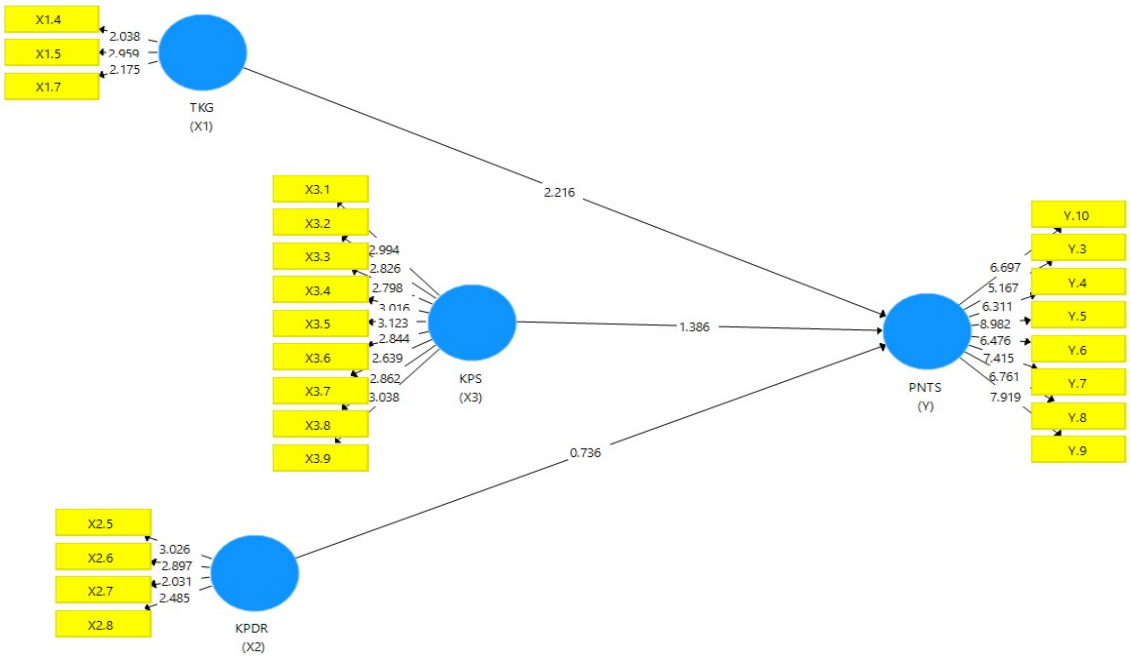

Figure 3. Inner Model

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Based on Figure 3, the structural relationships among the variables Technology, Trust and Risk, Sharia Compliance, and Sharia Non-Cash Payment Adoption can be observed. The results of the model indicate that only the Technology variable has a significant effect on Sharia Non-Cash Payment Adoption, whereas Trust and Risk and Sharia Compliance do not demonstrate significant effects.

These findings suggest that technological aspects remain the primary consideration for the public in using sharia-based non-cash payment services compared to factors related to trust, perceived risk, and sharia compliance.

Discussion

1. Influence Technology to Adoption Sharia Non-Cash Payments

The research findings indicate that the Technology variable has a significant influence on the adoption of sharia-based non-cash payments among the people of Medan City. This is evidenced by a t-statistic value of 2.216 and a p-value of 0.027, which is lower than the significance threshold of 0.05. These findings suggest that technology is one of the key factors influencing public decisions to use sharia-based non-cash payment services.

Theoretically, these results are consistent with the Technology Acceptance Model (TAM) developed by Davis (1989), which explains that the acceptance of a technology is influenced by perceived ease of use and perceived usefulness. In the context of sharia-based non-cash payments, people tend to use services that are considered easy to access, simple to operate, and capable of improving the efficiency of daily transactions. The convenience of making payments through QRIS, Islamic mobile banking, and other digital payment applications becomes a major factor encouraging the transition from cash transactions to digital transactions.

However, this study found that the path coefficient of the Technology variable is negative (-0.521). This finding indicates an inverse relationship between technology and the adoption of sharia-based non-cash payments. Several factors may explain this

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

condition. First, some respondents may still experience difficulties in understanding the available technological features, causing more sophisticated technology to become a barrier rather than a facilitator of use. Second, differences in digital literacy levels among the people of Medan City may result in unequal abilities to utilize digital payment technologies effectively. Third, some respondents may prioritize practical convenience over technological innovations that are perceived as overly complex.

These findings differ from most previous studies, which generally report a positive relationship between technology and digital payment adoption. Nevertheless, the results provide important insights that the development of sharia payment technologies should not only focus on innovation but must also pay close attention to ease of use and user experience. Therefore, sharia payment service providers need to ensure that the technologies they develop are simple, user-friendly, and easily understood by all segments of society.

2. Influence Trust and Risk to Adoption Sharia Non-Cash Payments

The research findings indicate that the Trust and Risk variable does not have a significant influence on the adoption of sharia-based non-cash payments. This is evidenced by a t-statistic value of 0.736 and a p-value of 0.462, which is greater than the significance threshold of 0.05. Therefore, the hypothesis stating that Trust and Risk influence the adoption of sharia-based non-cash payments cannot be accepted.

From a theoretical perspective, trust is considered an important factor in digital transactions because users do not interact directly with service providers. The higher the level of user trust in system security, the greater the likelihood that they will use the service. Conversely, the higher the perceived risk, the lower the tendency to adopt a particular technology. Therefore, many previous studies have identified trust and risk as important determinants in the adoption of digital financial services.

However, the findings of this study reveal a different condition. The insignificant effect of Trust and Risk may be attributed to the increasing acceptance of digital

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

payment technologies among the public. Today, people have become accustomed to using various electronic payment services, causing security and risk aspects to be perceived as inherent features of digital payment systems. Furthermore, supervision by Bank Indonesia, the Financial Services Authority (OJK), and the implementation of various transaction security systems have strengthened public confidence in digital payment services.

This condition suggests that respondents no longer consider security and risk factors as primary considerations when deciding to use sharia-based non-cash payment services. In other words, the people of Medan City appear to have a relatively high level of trust in digital payment services, making the Trust and Risk variable less influential as a differentiating factor in determining usage decisions.

3. Influence Sharia Compliance with Adoption Sharia Non-Cash Payments

The research findings indicate that Sharia Compliance has a positive but not statistically significant influence on the adoption of sharia-based non-cash payments. The hypothesis testing results show a t-statistic value of 1.386 and a p-value of 0.166, which is greater than the significance threshold of 0.05. Therefore, the hypothesis stating that Sharia Compliance influences the adoption of sharia-based non-cash payments cannot be accepted.

Conceptually, sharia compliance is the primary characteristic that distinguishes Islamic financial services from conventional financial services. Principles such as the prohibition of *riba* (interest), *gharar* (uncertainty), and *maysir* (gambling) serve as added values that should attract Muslim consumers to utilize sharia-based payment services. Therefore, theoretically, the higher the public perception of a service's compliance with sharia principles, the greater the likelihood of adopting that service.

However, the findings of this study suggest that sharia compliance has not yet become a primary consideration in the use of sharia-based non-cash payments in Medan City. This finding may be explained by the relatively low level of Islamic financial

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

literacy among the community. Most users tend to focus more on practical benefits such as convenience, speed, and transaction efficiency rather than on aspects of sharia compliance. In addition, some members of the public perceive digital payment systems merely as transaction tools and therefore do not view significant differences between sharia and conventional payment services.

These results indicate that although the public generally holds positive perceptions regarding sharia compliance, this factor is not yet strong enough to encourage greater adoption of sharia-based non-cash payment services. Therefore, more intensive educational efforts are needed to increase public awareness of the added value and advantages offered by sharia payment systems. Such efforts are expected to improve public understanding of the importance of sharia compliance in digital financial transactions.

The study also reveals that the R-Square value is 0.143, indicating that the variables Technology, Trust and Risk, and Sharia Compliance collectively explain only 14.3 percent of the variation in the adoption of sharia-based non-cash payments among the people of Medan City. The remaining 85.7 percent is influenced by other factors that were not included in the research model.

This finding demonstrates that the adoption of sharia-based non-cash payments is a complex phenomenon influenced by numerous factors. In addition to technology, trust and risk, and sharia compliance, other factors may exert a greater influence, including perceived usefulness, ease of use, social influence, promotional activities, digital financial literacy, religiosity, technology usage habits, and digital infrastructure support.

Overall, this study finds that technology is the most dominant factor influencing the adoption of sharia-based non-cash payments in Medan City. These findings indicate that people tend to place greater emphasis on the functional and practical aspects of technology than on security and sharia compliance considerations when deciding to use digital payment services. Therefore, future efforts to develop the sharia-based non-cash payment ecosystem should focus on improving technological quality, usability, and

accessibility, while simultaneously strengthening Islamic financial literacy programs. Such initiatives will enable the public not only to utilize digital payment services because of their convenience but also to understand the sharia values underlying their development.

The findings of this study provide important practical implications for Islamic banking institutions, digital payment service providers, and regulators. Islamic banks should continue to improve the quality of their digital services by making them more user-friendly, efficient, and accessible. At the same time, education regarding transaction security and sharia principles should be continuously enhanced to ensure that the public gains a more comprehensive understanding of the benefits of using sharia-based non-cash payment services. For regulators, these findings may serve as a valuable reference in formulating policies aimed at strengthening the sharia digital economic ecosystem, particularly in urban areas such as Medan City.

D. Conclusion

Based on the results of the study entitled *Analysis of Factors Influencing the Adoption of Sharia-Based Non-Cash Payments in Medan City*, it can be concluded that the Technology variable has a significant influence on the adoption of sharia-based non-cash payments. These findings indicate that technological aspects remain the primary consideration for the public in utilizing sharia digital payment services. Ease of use, transaction speed, service accessibility, and system quality are important factors that encourage people to adopt sharia-based non-cash payment services.

Meanwhile, the Trust and Risk variable was not found to have a significant influence on the adoption of sharia-based non-cash payments. This finding suggests that the people of Medan City generally possess a relatively high level of trust in existing digital payment systems. As a result, security and risk considerations are no longer the primary determinants in decisions to use sharia-based non-cash payment services.

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Furthermore, the Sharia Compliance variable was also found to have no significant influence on the adoption of sharia-based non-cash payments. Although the public generally has a positive perception of the importance of compliance with Islamic principles, this factor has not yet become a major driver in the utilization of sharia digital payment services. This finding indicates that most users continue to prioritize practical and functional aspects over sharia considerations in their daily transaction activities.

Simultaneously, the variables Technology, Trust and Risk, and Sharia Compliance collectively explain only 14.3 percent of the variation in the adoption of sharia-based non-cash payments in Medan City, while the remaining 85.7 percent is influenced by other factors outside the research model. These findings demonstrate that the adoption of sharia-based non-cash payments is a complex phenomenon influenced by various additional factors, such as perceived usefulness, ease of use, digital financial literacy, social influence, religiosity, promotional activities, and technological infrastructure support.

Therefore, this study concludes that Technology is the most influential factor in the adoption of sharia-based non-cash payments in Medan City, whereas Trust and Risk and Sharia Compliance have not yet emerged as significant determinants. Consequently, efforts to increase the utilization of sharia-based non-cash payments should focus on developing technologies that are more user-friendly, efficient, secure, and accessible. These efforts should be accompanied by enhanced Islamic financial literacy programs so that the public not only understands the technological benefits of digital payment services but also appreciates the sharia values that underpin their development.

E. Bibliography

Agrawal, A. (2021). Impact of elimination of dividend distribution tax on Indian corporate firms amid COVID disruptions. *Journal of Risk and Financial Management, 14*(9), Article 413. https://doi.org/10.3390/jrfm14090413

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Chan, H. F. (2023). Cash and the hidden economy: Experimental evidence on fighting tax evasion in small business transactions. *Journal of Business Ethics, 185*(1), 89–114. https://doi.org/10.1007/s10551-022-05186-y

Fatimah, S. (2024). Pengaruh service quality, e-trust dan transformasi digital terhadap loyalitas nasabah pengguna produk BSI Mobile. *Reslaj: Religion Education Social Laa Roiba*. https://journal.laaroiba.com/index.php/reslaj/article/view/3952

Fergusson, K. (2023). Less-expensive long-term annuities linked to mortality, cash and equity. *Annals of Actuarial Science, 17*(1), 170–207. https://doi.org/10.1017/S1748499522000112

Ismail, A. H. (2022). The concept of online buying in shariah economy, *3*(1), 924–928.

Jain, N., & Raman, T. V. (2022). A partial least squares approach to digital finance adoption. *Journal of Financial Services Marketing, 27*(4), 308–321. https://doi.org/10.1057/s41264-021-00127-8

Kovski, N. (2023). Unconditional cash transfers and mental health symptoms among parents with low incomes: Evidence from the 2021 child tax credit. *SSM - Population Health, 22*, Article 101420. https://doi.org/10.1016/j.ssmph.2023.101420

Mart, C. V., & Mart, P. A. (2021). *Partial least squares structural equation modeling (PLS-SEM) applications in economics and finance*. MDPI. https://doi.org/10.3390/books978-3-0365-2621-8

Monye, O. (2024). Cashless policy initiative in Nigeria: Outline of crucial socio-economic and regulatory considerations. *Journal of Money Laundering Control, 27*(3), 445–458. https://doi.org/10.1108/JMLC-05-2023-0098

Ningrum, W. R. (2025). Digital payment adoption among Generation Z: The roles of trust, ease of use, and financial literacy in QRIS usage in Indonesia. *Scientific Culture, 11*(3), 845–853. https://doi.org/10.5281/zenodo.11322566

Pradesyah, R., Ismail, A. H., & Adawiyah, R. (2024). Planned behavior in supporting cashless society in sharia financial institutions. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE), 7*(2), 1–23. https://doi.org/10.31538/iijse.v7i2.4943

Al-Sharf
Jurnal Ekonomi Islam
Vol. 7, No. 2 (2026) || *ISSN 2723-5440 (Online)*

Riyazahmed, K. (2024). Do cash holdings impact the financials of companies? Evidence from India. *Indian Journal of Finance, 18*(3), 8–24. https://doi.org/10.17010/ijf/2024/v18i3/173614

Rösl, G. (2022). Cash demand in times of crisis. *Journal of Payments Strategy and Systems, 16*(2), 107–119.

Sihotang, M. K., Hasanah, U., & Hayati, I. (2022). Model of sharia bank profitability determination factors by measuring internal and external variables. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE), 5*(1), 235–251.

Sodawan, A. (2022). Halal-friendly attributes and Muslims' visit intention: Exploring the roles of perceived value and destination trust. *Sustainability, 14*(19), Article 12002. https://doi.org/10.3390/su141912002

Sung, C. T. (2023). A systematic review: Landscape of private equity in dermatology from past to present. *Journal of Drugs in Dermatology, 22*(4), 404–408. https://doi.org/10.36849/JDD.6892

Świecka, B. (2021). Consumer financial knowledge and cashless payment behavior for sustainable development in Poland. *Sustainability, 13*(11), Article 6401. https://doi.org/10.3390/su13116401

Syafaastuti, S. (2024). The use of the Technology Acceptance Model (TAM) to analyze the effects of social influence on the interest in implementing cashless payment (QRIS). In *Proceedings of the 2024 International Conference of Computer and Informatics Engineering (IC2IE 2024): Generative AI in democratizing access to knowledge and skills* (pp. xx–xx). IEEE. https://doi.org/10.1109/IC2IE63342.2024.10748219

Wahyuni, S. F., Hafiz, M. S., & Pradesyah, R. (2023). MSME development model in conventional banks in Medan. *12*(02), 755–761.