



# The Influence of Convenience and Security on Brand Loyalty among DANA Syariah Users: The Mediating Role of Brand Trust

Naufal Luthfi Alifa<sup>1\*</sup>, Diana Djuwita<sup>2</sup>, Abdul Fatakh<sup>3</sup>, Syed Muhammad Abdul Rehman Shah<sup>4</sup> <sup>1,2,3</sup>UIN Cyber Syekh Nurjati Cirebon, 45132, Indonesia

ABSTRACT ARTICLE INFO

This study examines the influence of convenience and security on brand loyalty, mediated by brand trust, among Muslim college students using the DANA digital wallet. In the Islamic fintech context, where ethical values intersect with technological adoption, trust and loyalty are key to user retention. Although DANA offers strong usability and security, it trails competitors in loyalty, raising the question: how do convenience and security affect brand loyalty through brand trust among users familiar with Islamic economic principles? This research is significant as it connects conventional consumer behavior with Islamic economic perspectives, focusing on a demographic familiar with sharia-based financial principles. Using a quantitative approach, the study analyzed survey data from 100 purposively sampled students at the Faculty of Sharia and Islamic Economics, IAIN Syekh Nurjati Cirebon. All of them are DANA users for over three months. Findings revealed that convenience and security significantly influence brand trust. Brand trust fully mediates the impact of convenience and partially mediates the impact of security on brand loyalty. These results highlight that while functionality is important, trust, especially when aligned with Islamic ethical values, is crucial in fostering loyalty. To improve user retention, digital wallet providers should enhance not only technical performance, but also ethical guarantees rooted in transparency and fairness, as emphasized in Islamic economics.

Keywords: Brand Trust Convenience Digital Wallet Security

Dates:

Received 17 June 2025 Revised 20 June 2025 Accepted 30 July 2025 Published 21 August 2025

Copyright: © 2025. Author/s: This work is licensed under Attribution-ShareAlike 4.0 International



\* Corresponding Author at UIN Cyber Syekh Nurjati Cirebon, 45132, Indonesia E-mail address: alifanaufaal@email.com

<sup>&</sup>lt;sup>4</sup>Departmen of Islamic Economics, Allama Igbal Open University (AIOU), Islamabad, Pakistan

#### **INTRODUCTION**

The internet has transformed from a tertiary into a primary necessity across almost every country, including Indonesia (Prasetya & Shuhidan, 2023). According to data from Internet World Stats, Indonesia ranked fourth among the top 20 countries with the highest number of internet users, following China, India, and the United States. The number of Indonesian internet users reached approximately 171 million. Furthermore, a survey by the Indonesian Internet Service Providers Association (APJII) reported that 64.8% of the population (roughly 171 million out of 264 million) were internet users.

Internet usage was dominated by messaging services (24.7%), while online money transfers and bill payments recorded the lowest usage at just 0.1% (APJII, 2023). Digitalization has expanded into almost every aspect of life, including the payment system (Hassan *et al.*, 2021). In Indonesia, the evolution of payment methods began with barter, progressed to the use of physical money, and now includes both cash-based and non-cash systems. Non-cash payment instruments include paper-based methods and paperless methods such as card-based and electronic transfer systems (Bank Indonesia, 2018). According to Bank Indonesia Regulation No. 20/6/PBI/2018 on Electronic Money, e-money is a payment instrument that meets three conditions. First, it is issued based on the value of funds deposited in advance to the issuer. Second, the value is stored electronically in a server or chip. Third, the value is not considered a bank deposit. Based on its storage medium, e-money can be categorized into chip-based (e.g., Flazz BCA, TapCash BNI, Brizzi BRI, and E-money Mandiri) and server-based systems (e.g., GO-PAY, OVO, LinkAja, and DANA). According to Bank Indonesia's Payment System Statistics (2019), the number of electronic money instruments reached 278 million as of November 2019, almost double the 152 million recorded a year earlier.

The growth of mobile payment usage in Indonesia is driven by increasing smartphone penetration and the availability of various cardless e-wallet applications (Putri et al., 2022). As of October 24, 2019, 38 e-wallet providers had received official licenses from Bank Indonesia. A study by iPrice Group and App Annie ranked the top 10 most popular e-wallet apps in Indonesia in terms of monthly active users: GO-PAY, OVO, DANA, LinkAja, Jenius, Go Mobile by CIMB, iSaku, Sakuku, DOKU, and PayTren. Among these e-wallet apps, DANA launched as a joint venture between Emtek Group and Ant Financial, quickly gained traction and positioned itself as a strong contender in the market.

In the face of growing competition and rising consumer expectations, companies must focus on retaining existing customers. Customer retention through brand loyalty has become a strategic goal to sustain business and profitability (Zhang et al., 2019). Brand loyalty refers to customers' consistent preference and positive behavior toward a brand, including repeat purchases and favorable recommendations (Siddiqui et al., 2019). However, this kind of loyalty is strongly influenced by brand trust. Brand trust is defined as a consumer's belief that a brand is reliable and has good intentions (Putra et al., 2020). It consists of two key dimensions, namely brand reliability and brand intention. Brand reliability means the belief that the brand delivers on its promises. Brand intention means the belief that the brand prioritizes customer interests. In the digital context, trust is closely tied to users' perception of convenience (Lisikmiko & Nurbaiti, 2024) and security (Masrek et al., 2018). Kurnia Pradana et al., (2024) the former refers to the degree to which a person believes that using a system would enhance performance and reduce effort. The latter relates to protection against data misuse and financial fraud. In the Islamic perspective, these aspects of trust resonate with ethical principles outlined in DSN-MUI Fatwa No. 116/DSN-MUI/IX/2017 on electronic transactions, particularly the requirement of mutual consent (an-taradlin) and avoidance of uncertainty (gharar).

Since its launch in 2018, DANA has promoted itself as an open-platform e-wallet, claiming usability across various platforms. From a security standpoint, it uses advanced authentication systems and is integrated with Indonesia's Population and Civil Registry Office (DUKCAPIL), ensuring personal data protection. However, despite offering both ease and security, DANA had only 15 million active users as of April 2019, which is far behind competitors like GO-PAY and OVO, which had 115 million users each. This discrepancy indicates a challenge in building brand loyalty, even with technological advantages. One of the primary target markets for e-wallet services like DANA is the productive-age population, especially millennials. A survey by Jakpat and DailySocial found that 74.6% of e-wallet users in Indonesia are aged between 20 and 35. The Central Statistics Agency, (2017) reported that millennials, the generation born between 1980 and 2000, comprise 88 million individuals or 33.75% of Indonesia's total population.

IAIN Syekh Nurjati Cirebon, a state Islamic university in West Java, serves a significant number of students in this age group. Most of its students, particularly those in the Faculty of

Sharia and Islamic Economics (FSEI), are not only part of the target demographic but also well-exposed to Islamic finance, technology, and digital lifestyles. A preliminary survey involving 90 students across three faculties revealed that the majority of DANA users were concentrated in FSEI. This aligns with their academic exposure to Islamic economic principles and digital financial services. The social facts revealed a paradox where young digital-native consumers adopt e-wallet platforms but do not exhibit high brand loyalty. Despite growing trust in digital systems, loyalty is shaped by deeper variables such as perceived integrity and ethical alignment, especially in an Islamic financial context. This indicates that while digital innovation is widespread, behavioral loyalty requires more than functional satisfaction. From a literature standpoint, previous studies such as those by Masrek et al. (2018) and Putra et al. (2020) have emphasized the critical role of brand trust as a mediating factor in determining user loyalty in digital platforms. However, few studies have deeply explored this within the context of Islamic economic principles and younger users in developing countries.

The objective of this study is to examine the effect of convenience and security on brand loyalty through the mediating role of brand trust among users of the DANA e-wallet application, particularly focusing on Muslim college students with Islamic economics exposure. Specifically, the study aims to analyze the direct effects of convenience and security on brand trust, assess the direct effect of brand trust on brand loyalty, and evaluate the indirect effects of convenience and security on brand loyalty through brand trust. The central argument or proposition of this study is that brand trust significantly mediates the relationship between perceived convenience or security and user loyalty in digital wallets. It is posited that in the context of Islamic financial ethics, trust is not merely a functional or emotional factor, but also an ethical imperative that bridges system performance with user commitment. Thus, the proposition to be tested is: Brand trust fully or partially mediates the relationship between convenience, security, and brand loyalty among millennial Muslim users of digital wallets in Indonesia (Widayanti et al., 2025).

Based on this context, the present study aims to explore brand trust as a key determinant of brand loyalty, identify convenience and security as antecedents of brand trust, and examine the interrelationship among these variables in the context of a digital payment system used by undergraduate Muslim consumers. Given their background in Islamic economics and finance, the selected student respondents are considered highly relevant for

this study. Their familiarity with digital platforms and Islamic financial ethics allows them to provide informed responses (Yuspita *et al.*, 2019; Kismawadi *et al.*, 2023), making them an appropriate sample for analyzing consumer perceptions of trust and loyalty in Islamic fintech.

# METHOD, DATA, AND ANALYSIS

This research adopted a quantitative approach to examine how convenience and security affect brand loyalty through the mediating role of brand trust among users of the DANA digital wallet. The study used both primary and secondary data, with primary data collected via an online questionnaire and secondary data obtained from relevant scholarly literature.

A preliminary survey of 90 students from three faculties; FITK, FUAD, and FSEI, identified FSEI students as the dominant DANA users, thus narrowing the study population to 2,536 active students in the Faculty of Sharia and Islamic Economics (FSEI) at IAIN Syekh Nurjati Cirebon in the 2019 to 2020 academic year. Purposive sampling was used to select 100 respondents who met specific criteria: active FSEI students who had used the DANA application for more than three months, which aligns with the minimum requirements for path analysis (Kock, 2016; Shah et al., 2020). The analytical methods employed include validity and reliability testing, assumption testing (normality, linearity, multicollinearity, and heteroscedasticity), followed by path analysis and mediation testing using SPSS software. The analysis focused on testing hypotheses related to the direct impact of convenience and security on brand trust, the indirect effects of these variables on brand loyalty via brand trust, and the direct relationship between brand trust and brand loyalty.

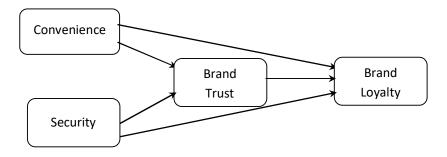


Figure 1. Conceptual Framework

The path analysis model consists of two sub-structural equations (I and II), which were tested separately. First, sub-structural equation I shows that the variables Convenience and

Security influence Brand Trust, both partially and simultaneously. Second, sub-structural equation II indicates that the variables Convenience, Security, and Brand Trust influence Brand Loyalty, also both partially and simultaneously.

#### **RESULT AND DISCUSSION**

### **Research Results**

# **Descriptive Test Results**

This study involved 100 students from the Faculty of Sharia and Islamic Economics (FSEI) at IAIN Syekh Nurjati Cirebon. Among the respondents, 77% were female and 23% were male. In terms of academic majors, 64% were students of Islamic Banking, 18% of Sharia Economic Law, 10% of Family Law, 5% of Islamic Economics, 2% of State Administrative Law, and 1% of Sharia Accounting. Regarding academic standing, 56% were eighth-semester students, 22% sixth-semester, 9% fourth-semester, 7% beyond eighth semester, and 6% second-semester students. In terms of digital wallet usage, 78% had used the DANA application for less than six months, 15% had used it for 6–12 months, and 7% for more than 12 months. The following table presents the frequency of responses from 100 participants for each item of the research variables. Each item was measured using a Likert scale ranging from Strongly Disagree (SD) to Strongly Agree (SA).

Table 1. Respondent Responses Frequency on Each Research Variable

Statement	SD	D	N	Α	SA
Convenience					
DANA provides practical usage instructions	1	0	18	53	28
It is effortless for me to understand DANA quickly	1	0	19	46	34
The usage steps of the DANA are simple	0	1	16	49	34
Making transactions with DANA helps me save time	0	1	18	44	37
DANA facilitates my daily transaction needs	0	4	15	48	33
DANA is flexible to use anytime and anywhere	0	3	12	44	41
Convenient transactions are made with frequent use of DANA	0	3	23	47	27
Security					
DANA displays its privacy policy	0	1	20	58	21
DANA will not share my data with unauthorized third parties	0	1	33	45	21
All transaction options in DANA are secured with passwords	0	1	15	56	28
The funds I deposit in DANA are securely protected	0	0	22	52	26

DANA offers money-back guarantees for problematic	0	2	40	38	20
transactions	0	2	40	30	20
DANA works quickly, accurately and meets my needs	0	1	14	55	30
DANA has good quality	0	2	16	56	26
Transactions through DANA do not pose high risks	0	5	32	44	19
Brand Loyalty					
I consistently use DANA	2	20	37	30	11
DANA is my first choice for cashless and cardless transactions	5	21	35	26	13
All transaction service options within DANA are worth trying	0	3	29	45	23
Attractive offers from other e-wallets do not tempt me to switch	0	12	39	37	12
I gained positive experiences and recommend DANA to others	1	2	30	47	20

## **Instrument Test Results**

High-quality data must be both valid and reliable. Data is considered valid if the calculated r value exceeds the critical r value from the table, and it is considered reliable if the Cronbach's Alpha coefficient is greater than the reliability threshold. In this study, the r table value is 0.1966, and the reliability threshold is set at 0.6. Based on the instrument testing, the results of the validity and reliability tests for each variable are presented in the following table:

**Table 2. Validity and Reliability Test Results** 

Variable	Item	Val	idity	Reliability	1
variable	No.	r-value	Result	Cronbach's Alpha	Result
	1	0.756	Valid		
	2	0.765	Valid		
Canvanianas	3	0.746	Valid		
Convenience	4	0.761	Valid	0.785	Reliable
(X1)	5	0.740	Valid		
	6	0.789	Valid		
	7	0.711	Valid		
	1	0.801	Valid		
	2	0.791	Valid		
Security	3	0.702	Valid	0.706	Daliabla
(X2)	4	0.823	Valid	0.796	Reliable
	5	0.832	Valid		
	6	0.749	Valid		
Brand Trust	1	0.826	Valid		
	2	0.870	Valid	0.845	Reliable
(M)	3	0.850	Valid		

-	1	0.822	Valid		
Brand Loyalty (Y)	2	0.841	Valid		
	3	0.801	Valid	0.810	Reliable
	4	0.843	Valid		
	5	0.786	Valid		

## **Basic Assumption Test Results**

Good data must exhibit both normality and linearity. In this study, tests were conducted on both sub-structural equations I and II. The normality test was carried out using the Kolmogorov-Smirnov analysis technique, where the decision rule is if the Asymp. Sig. Value is greater than 0.05, the data is considered normally distributed. Then, the linearity test follows the rule that if the Sig. Deviation from the Linearity value is greater than 0.05, the data is considered linear. Results of normality and linearity tests are presented as follows:

**Table 3. Normality and Linearity Test Results** 

Equations	Variable	Norma	ality	Linearity		
Equations	variable	Asymp Sig.	Results	Sig. Dev	Results	
Sub-	Convenience*Brand Trust	0.221	Normal	0.077	Linear	
structural I	Security*Brand Trust	0,231 Normal		0.973	Linear	
Sub-	Convenience*Brand Loyalty			0.950	Linear	
structural II	Security*Brand Loyalty	0,770	Normal	0.945	Linear	
	Brand Trust*Brand Loyalty			0.706	Linear	

Source: Processed Primary Data (2025)

#### **Classical Assumption Test Results**

Good data is characterized by the absence of both multicollinearity and heteroscedasticity. Data is considered free from multicollinearity if the tolerance value is greater than 0.10 and the Variance Inflation Factor (VIF) value is less than 10. Likewise, data is considered free from heteroscedasticity if the significance value is greater than 0.05. After conducting the tests, the results of the multicollinearity and heteroscedasticity tests in model I and model II are as follows:

**Table 4. Multicollinearity and Heteroscedasticity Test Results** 

Equations	Variable	Multi	collinear	Heteroscedasticity		
Equations	variable	Tolerance	VIF	Results	Sig.	Results
Sub-	Convenience*Brand Trust	0.407	2.455	Free	0.824	Free
structural I	Security*Brand Trust	0.407	2.455	Free	0.472	Free
Sub- structural II	Convenience*Brand Loyalty	0.265	3.775	Free	0.938	Free
	Security*Brand Loyalty	0.373	2.680	Free	0.405	Free
	Brand Trust*Brand Loyalty	0.296	3.383	Free	0.897	Free

# **Hypothesis Test Results**

A hypothesis test was conducted through t-test (partial test), F-test (simultaneous test), and the coefficient of determination (R<sup>2</sup>) test. The t-table values in both models I and II are 1.985. Then, the F-table value in model I is 3.09 and in model II is 2.70. The results of the partial test, simultaneous test, and coefficient of determination test on each model are presented in the following table:

**Table 5. Partial, Simultaneous, and Coefficient of Determination Test Results** 

Faustions	Variable		Partial Test		Simultaneous Test			CD Test	
Equations	Variable	t	Sig	Result	F	Sig.	Result	Adj R Sq	
Sub-	X <sub>1</sub> * M	0.000	0.000	Affect	115,596	115 506	0,000	Affect	0.698
structural I	X <sub>2</sub> * M	0.004	0.004	Affect		0,000	Allect	0.038	
C. I.	X <sub>1</sub> * Y	0.088	0.088	No Affect					
Sub- structural II	X <sub>2</sub> * Y	0.026	0.026	Affect	37,880	0,000	Affect	0.528	
	M * Y	0.016	0.016	Affect					

Source: Processed Primary Data (2025)

# **Path Analysis Test Results**

The path analysis model was evaluated using the coefficients test to obtain the standardized beta coefficients and the model summary test to determine the adjusted R-squared value. The results of these tests are presented as follows:

**Table 6. Coefficients and Model Summary Test Results** 

		Coefficients	<b>Model Summary</b>	
Equations	Variable	Standardized Coefficients Beta	Sig.	Adjusted R <sup>2</sup>
Sub-	Convenience	0.625	0.000	0.500
structural I	Security	0.258	0.004	0.698
6.1	Convenience	0.231	0.088	
Sub- structural II	Security	0.256	0.026	0.528
Structurarii	Brand Trust	0.311	0.016	

Table 6 the regression equations for sub-structural models I and II follow the form Y =  $b_1X_1 + ... + e$ . The residual value (e) can be calculated using the formula  $e = V(1 - R^2)$ . Based on the data presented, the empirical causal relationship between Convenience (X1) and Security (X2) on Brand Trust (M) is represented by the sub-structural equation as Brand Trust = 0.625 (Convenience) + 0.258 (Security) + 0.550. Meanwhile, the empirical causal relationship among Convenience (X1), Security (X2), and Brand Trust (M) on Brand Loyalty (Y) is expressed in substructural model II as Brand Loyalty = 0.231 (Convenience) + 0.256 (Security) + 0.311 (Brand Trust) + 0.687.

Moreover, correlation test results between variables Convenience and Security show a Pearson correlation value of 0.770 with a significance level of 0.000. According to Sarwono (2012), a correlation coefficient within the range of 0.75 to 0.99 is interpreted as a very strong correlation. Therefore, the correlation value of 0.770 indicates a very strong and positive relationship between the two variables, meaning that when the convenience is rated highly, security also tends to be rated highly, and vice versa. The relationship is also considered statistically significant, as the significance value is below the 0.05 threshold. The interpretation of this correlation, along with the results of the path analysis for sub-structural equations I and II, is visually presented in the figure below:

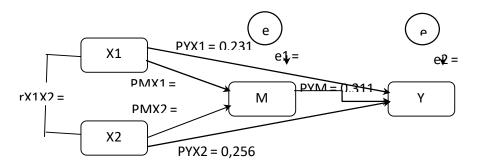


Figure 2. Path Diagram of Convenience, Security, and Brand Trust towards Brand Loyalty

Furthermore, effect calculations were conducted to assess the magnitude of the relationships between variables in this study. Direct, indirect, and total effects were analyzed using the standardized beta coefficients obtained from sub-structural equations I and II in Table 6. By examining these values, along with the total effects, a clearer understanding of the causal pathways in the model can be established.

Table 7. The Values of Direct Effects, Indirect Effects, and Total Effects

Equations	Variable		Effects	
Equations	Direct		Indirect	Total
Sub-	Convenience*Brand Trust	0.625		
structural I	Security*Brand Trust	0.258		
Cul	Convenience*Brand Loyalty	0.231	(0.625 x 0.311) = 0.194	(0.625 + 0.311) = 0.936
Sub- structural II	Security*Brand Loyalty	0.256	(0.258 x 0.311) = 0.080	(0.258 + 0.311) = 0.569
	Brand Trust*Brand Loyalty	0.311		

Source: Processed Primary Data (2025)

### **Mediation Test Results**

The mediating role of Brand Trust (M) in the relationship between Convenience (X1) and Brand Loyalty (Y) is assessed based on the framework proposed by Baron and Kenny. Table 5 indicates that the significance value of convenience (X1) on brand loyalty (Y) is 0.088, which exceeds the threshold of 0.05, suggesting that convenience does not significantly affect brand loyalty. However, the significance value of convenience (X1) on brand trust (M) is 0.000, which is below 0.05, indicating a significant influence. Additionally, the significance value of brand

trust (M) on brand loyalty (Y) is 0.016, confirming a significant effect. Table 7 revealed that the indirect effect of convenience on brand loyalty through brand trust is 0.194, which is smaller than the direct effect of 0.231. These results indicate that brand trust fully mediates the relationship between convenience and brand loyalty.

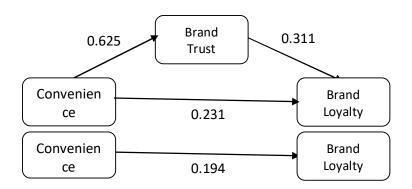


Figure 3. Effect of Convenience on Brand Loyalty Mediated by Brand Trust

As for the mediating role of Brand Trust (M) in the relationship between Security (X2) and Brand Loyalty (Y), Table 5 showed that the significance value of security (X2) on brand loyalty (Y) is 0.026, which is below the 0.05 threshold, indicating a significant direct effect. The significance value of security (X2) on brand trust (M) is 0.004, also indicating a significant relationship. Furthermore, brand trust (M) significantly affects brand loyalty (Y), with a significance value of 0.016. Table 7 showed that the indirect effect of security on brand loyalty through brand trust is 0.194, which is smaller than the direct effect of 0.231. These findings indicate that brand trust acts as a partial mediator in the relationship between security and brand loyalty.

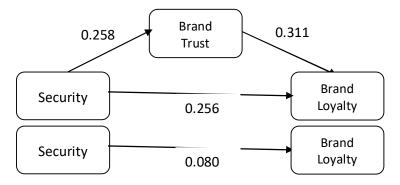


Figure 4. Effect of Security on Brand Loyalty Mediated by Brand Trust

#### **Discussions**

#### **Effect of Convenience on Brand Trust**

Empirical findings showed that Convenience (X1) has a statistically significant effect on Brand Trust (M), with a t-value of 7.222 (above the critical value of 1.985) and a p-value of 0.000 < 0.05. The standardized coefficient of 0.625 indicates that the more convenient the DANA application is perceived to be, the more it strengthens users' trust in the brand.

From the lens of the Technology Acceptance Model (TAM) and consumer behavior theory, perceived ease of use is a critical antecedent to trust. TAM suggests that the easier a system is to use, the more it fosters favorable attitudes and trust by reducing user uncertainty. In digital financial services, convenience reduces perceived risk and boosts confidence in a platform's competence and reliability. This is supported by research such as Gupta et al. (2023), which finds that ease of use significantly impacts user trust in mobile health applications, an insight that is also transferable to fintech platforms. Several studies reinforce this link between convenience and brand trust. Kiew et al. (2022) found that convenience and trust together significantly influence the adoption of e-wallets in Malaysia, suggesting that ease of use signals reliability to users. A study by Rahmawati & Anwar (2023) showed that brand trust mediates the relationship between perceived convenience and reuse intention in Islamic e-money platforms. Maulidiya & Khusnudin (2023) observed similar patterns among Indonesian university students, where convenience was a major factor in continued use of digital wallets. These findings align closely with the current study, confirming that convenience is not just a functional benefit but a cognitive trust-builder in fintech services.

From an economic standpoint, convenience reduces friction costs, time, effort, and cognitive load involved in transactions. For digitally literate college students, especially those with busy academic lives, a user-friendly app reflects transactional efficiency, a key indicator of a brand's reliability. According to behavior-based trust theory, when a platform demonstrates consistent functional performance, it fosters trust by signaling competence. Among students familiar with Islamic economic values, convenience also aligns with the principle of maslahah (public benefit). A digital wallet that facilitates seamless, time-saving transactions without unnecessary barriers is viewed not only as efficient but also ethically sound. Research on GoPay users in Islamic campuses also indicates that when ease of use is

present, it positively influences trust, sometimes even before users fully understand technical security features (Ritonga et al., 2025).

For college students, especially those already familiar with digital technologies, such convenience reduces friction in daily transactions and reinforces the perception that the brand understands and supports their lifestyle needs (Garad et al., 2025). This trust becomes especially important among digitally savvy students who expect seamless interactions. Therefore, improving user-friendly features directly contributes to strengthening trust in the brand.

## **Effect of Security on Brand Trust**

The results showed that Security (X2) has a significant partial effect on Brand Trust (M), with a t-value of 2.980 (greater than the critical value of 1.985) and p = 0.004 < 0.05. With a direct standardized coefficient of 0.258, this indicates that higher perceived security enhances users' trust in the DANA brand.

From a theoretical standpoint, trust theory in digital finance posits that perceived security and privacy protection are foundational to build cognitive trust, a rational belief in a platform's competence and integrity. This is supported by classic e-commerce research showing that strong security equals stronger trust and ultimately greater user adoption intentions (Almaiah et al., 2022). This also aligns with the theoretical framework of trust in digital financial services, wherein perceived security and privacy safeguards are essential components of cognitive trust, users' rational belief in a platform's competence, integrity, and reliability. When users believe that their personal data and financial transactions are well-protected, they are more likely to associate the brand with safety, thus reinforcing trust.

Previous studies support this conclusion. For instance, a Kuwait-based study found that data security significantly influences trust in digital financial services and thus adoption, especially when combined with digital literacy and brand image (Ahmad & Hassan, 2025). Similarly, a study conducted by Cong et al. (2024) in Hanoi found that safety and security features were strong predictors of trust and user intention to adopt e-wallets. In the Indonesian context, Prawira et al. (2024) show that trust, shaped by information security, plays a key role in continued e-wallet use.

From an economic perspective, strong security measures reduce perceived risk and lower transaction-related uncertainty, which in turn lowers the user's cognitive cost in engaging with the platform. Users who feel secure tend to view the platform as trustworthy (AlHassan et al., 2025), which is essential for engaging college students to share sensitive information and rely on the service. For Muslim students in particular, who are educated in Islamic economic principles, perceived security also intersects with religious values such as *amanah* (trustworthiness), transparency, and ethical responsibility in managing financial information. As highlighted by Mailangkay & Juwono (2023), the assurance of ethical and secure handling of financial transactions significantly increases the trust of Muslim users toward digital platforms. Thus, for users in Sharia and Islamic economics faculties, security is not merely a functional expectation but a reflection of moral legitimacy and compliance with Islamic ethical norms.

## **Effect of Convenience on Brand Loyalty**

The t-test results revealed that Convenience (X1) does not exert a significant direct effect on Brand Loyalty (Y) (t = 1.721 < 1.985, p = 0.088 > 0.05), suggesting that among college students using DANA, ease of use alone does not translate into long-term loyalty. The analysis shows a direct effect of 0.231, an indirect effect of 0.194 via Brand Trust, and a total effect of 0.936, indicating full mediation by Brand Trust, which convenience builds loyalty only when it first engenders trust.

This finding aligns with economic logic, which, in a digitally literate cohort like university students, perceived ease is a baseline expectation rather than a differentiator, and any usability advantage offers limited incremental value unless tied to deeper trust-based mechanisms. The lack of direct influence of convenience on loyalty suggests that while convenience may encourage adoption, it does not necessarily lead to long-term commitment to the brand. Prior research echoes this research by Tawil et al. (2023) found that convenience drives usage intention but weakly predicts actual loyalty, especially when trust is missing. Similarly, e-service quality studies in Indonesian e-wallet users showed that convenience had no direct impact on e-loyalty, but significantly influenced trust, which then drove loyalty (Pratiwi et al., 2021). A broader meta-study in mobile wallets further emphasized that trust

and service quality, rather than convenience, are primary predictors of customer loyalty (Singh & Sinha, 2020).

From a theoretical perspective grounded in the Technology Acceptance Model and trust-based consumer theory, convenience may reduce friction costs and enhance perceived usefulness, but it is brand trust, rooted in both affective and cognitive evaluations, that ultimately anchors loyalty. Trust acts as the cognitive bridge whereby functional ease translates into emotional commitment and repeat usage. In contexts where users expect high baseline functionality, the marginal benefits of convenience become visible through their impact on trust levels. This could be because college students, who are typically tech-savvy, perceive convenience as a standard expectation rather than a differentiating factor. They are more likely to remain loyal when deeper emotional or cognitive factors, such as trust or satisfaction, are present, because financial app users tend to prioritize trust over functionality when deciding to remain loyal (Nangin et al., 2020).

Hence, simply improving usability without reinforcing trust may not yield sustained loyalty. Therefore, digital wallets must go beyond functionality and invest in emotional value creation to maintain loyalty. Fintech brands targeting savvy Muslim students steeped in Islamic economic values, usability enhancements must be coupled with trust-building efforts such as transparent policies, ethical communication, and reliable performance, to convert convenience into long-term loyalty.

## **Effect of Security on Brand Loyalty**

The study's findings demonstrate that perceived security ( $X_2$ ) significantly affects brand loyalty (Y), with a t-value of 2.263 (above the critical 1.985) and p = 0.026, indicating that students who feel secure using DANA show stronger loyalty. The standardized direct effect is 0.256, complemented by an indirect effect of 0.080 via brand trust, for a total effect of 0.569, which confirms that brand trust partially mediates the relationship. Although the indirect effect is smaller than the direct effect, it remains significant.

This finding echo research by Utomo & Yasirandi (2024) in Indonesia, which found that security significantly predicts digital wallet loyalty alongside service quality and privacy (Utomo & Yasirandi, 2024). A broader SEM investigation in North India confirms perceived security directly impacts user behavioral intentions and satisfaction in mobile wallets (Chand

et al., 2025). Additionally, Al-Hattami's, (2023) study establishes privacy and security as key loyalty determinants in post-COVID mobile wallet use, mediated by trust and satisfaction. Economically, robust security reduces users' perceived risk and uncertainty. It is lowering cognitive transaction costs and raising switching costs, thus strengthening retention as shown in neobank studies that link financial security to lower switching propensity (Puente-Cavazos et al., 2025). For Muslim college students grounded in Islamic economic values like *amanah* (trustworthiness) and transparency, perceived security also resonates as an ethical imperative.

When the platform reliably protects data and financial flows, it not only minimizes risk but also reinforces moral legitimacy by Sharia principles (Muhammad & Sari, 2024). For users engaging in financial transactions, especially within a Sharia-compliant framework, consistent protection of personal data and transaction integrity fosters a sense of attachment and reliability (Apaua & Lallie, 2022). This suggests that the significant effect of security on loyalty, both directly and through trust, underscores its critical role. Feeling safe strengthens attachment and continued usage, even if indirect influence via trust is moderate (Rusdianti & Fajar, 2023). While trust contributes, perceived security itself is a potent loyalty driver. Security, therefore, is not merely a feature but a strategic differentiator for loyalty retention; users remain loyal primarily because they feel safe, which is particularly crucial in the competitive fintech space. The direct influence of security highlights that safety directly anchors loyalty, even if trust enhances this effect further.

#### **Effect of Brand Trust on Brand Loyalty**

The study demonstrates that Brand Trust (M) significantly and directly influences Brand Loyalty (Y) among college students using the DANA application, with a t-value of 2.447 (above the critical threshold of 1.985) and p = 0.016, and a standardized coefficient of 0.311. This confirms that greater trust in DANA, rooted in consistent performance, reliability, and integrity, strongly predicts users' loyalty. Theoretically, this aligns with well-established models in marketing and service research, which position trust as a central emotional driver bridging satisfaction and loyalty.

For instance, studies in mobile operator and smartphone markets demonstrate that brand trust significantly enhances both attitudinal and behavioral loyalty across consumer

segments (Hill & Yoeung, 2024). In Indonesian mobile banking, trust mediates the influence of customer experience on loyalty intentions, reinforcing trust as pivotal in user retention even when functional features are robust (Yuspita et al., 2019). From an economic perspective, trust lowers psychological and switching costs by reducing perceived uncertainty and increasing perceived value over time, especially in digital financial ecosystems where repeated use and recurring transactions matter. Among Muslim university students educated in Islamic economic principles, brand trust also resonates with ethical values such as *amanah* (faithfulness) and transparency when a fintech platform consistently meets the expectations and respects user rights, it achieves moral legitimacy that strengthens long-term allegiance.

The strong, significant relationship between brand trust and brand loyalty shows that trust is a pivotal emotional driver behind sustained user engagement. When college students feel that DANA consistently delivers on its promises, meets the expectations, and provides dependable service, they are more inclined to develop a sense of allegiance to the platform. Trust acts as the bridge between satisfaction and loyalty, as trust is essential for fostering loyalty beyond mere functionality (Kurniawan & Tankoma, 2023). The strong direct effect of brand trust on loyalty implies that trust acts as a vital emotional anchor. Trust predicts loyalty intentions, as when users perceive the platform as reliable and consistent, they feel secure and confident, thus by extension, they are more likely to recommend and continue using the app even in the presence of alternatives (Dhaigude et al., 2023). Thus, enhancing trust-building measures is key to fostering enduring loyalty.

This indicates that Brand Trust is a key driver of Brand Loyalty, as it helps maintain a positive and consistent user-brand relationship. The more confident users are in the reliability and performance of the DANA application, the more likely they are to stay loyal to it. College students believe that DANA consistently meets or exceeds their expectations, delivers reliable quality, and has become a brand they identify with. This trust ultimately strengthens their loyalty.

#### **CONCLUSION AND SUGGESTION**

This study concludes that both convenience and security significantly and directly influence brand trust among students of the Faculty of Sharia and Islamic Economics who use the DANA digital wallet application, with effect sizes of 0.625 and 0.258, respectively. These findings

suggest that when users find the application intuitive, simple to operate, and secure in handling transactions, it enhances their trust in the brand. Furthermore, both variables also exhibit indirect effects on brand loyalty through brand trust, with convenience contributing an indirect effect of 0.194 and security contributing 0.080. This implies that while convenience and security alone may not directly foster loyalty, they play a critical role in shaping trust, which in turn drives long-term user commitment. In addition, brand trust was found to have a significant direct influence on brand loyalty, with an effect size of 0.311, reinforcing the notion that building a trustworthy brand is key to cultivating loyal users.

Given these findings, it is recommended that digital wallet providers, particularly DANA, prioritize the continuous improvement of both functional convenience and system security. This includes ensuring smooth and transparent user experiences, clear instructional interfaces, and the implementation of strong data protection measures. By doing so, companies can effectively strengthen user trust, which serves as a strategic pathway toward achieving greater customer retention and brand advocacy. For users in academic environments who tend to be digital natives, such as college students, the seamless integration of ease and security is not only expected but is also a determinant of long-term brand attachment. Future research could further explore how emotional and social factors interact with trust to influence brand loyalty in the digital financial ecosystem.

This study has several limitations. It was limited to students of one faculty at IAIN Syekh Nurjati Cirebon, which may reduce the generalizability of the findings. The use of a cross-sectional design also limits the ability to infer causality. Additionally, the reliance on self-reported data may introduce bias, and the mediation analysis was based on the Baron and Kenny method, which has lower statistical power than more recent techniques. These limitations stem not from methodological errors but from practical and contextual constraints.

#### **ACKNOWLEDGEMENT**

Sincere gratitude is expressed to all parties who have supported the completion of this research. Special thanks are extended to the Faculty of Sharia and Islamic Economics, IAIN Syekh Nurjati Cirebon, for providing the academic environment and respondent access necessary for this study. Valuable input and guidance were also gratefully acknowledged from

supervising lecturers throughout the research process. Lastly, appreciation is given to the students who participated in the survey, whose honest responses made this study possible.

#### **REFERENCES**

- Ahmad, S., & Hassan, R. (2025). Decoding fintech uptake: The interplay of digital literacy, brand image, data security, and trust. *Cureus J Bus Econ*, 2. <a href="https://doi.org/10.7759/s44404-025-03865-3">https://doi.org/10.7759/s44404-025-03865-3</a>
- AlHassan, H. A., Papastathopoulos, A., & Nobanee, H. (2025). Measuring perceived security in fintech services: Developing a dynamic scale. *European Journal of Information Systems*, 1, 21. https://doi.org/10.1080/0960085X.2025.2491449
- Al-Hattami, H. M., Al-Adwan, A. S., Abdullah, A. A. H., & Al-Hakimi, M. A. (2023). Determinants of customer loyalty toward mobile wallet services in post-COVID-19: The moderating role of trust. *Human Behavior and Emerging Technologies*, 1. <a href="https://doi.org/10.1155/2023/9984246">https://doi.org/10.1155/2023/9984246</a>
- Almaiah, M. A., Al-Rahmi, A., Alturise, F., Hassan, L., Lutfi, A., Alrawad, M., Alkhalaf, S., Al-Rahmi, W. M., Al-Sharaieh, S., & Aldhyani, T. H. H. (2022). Investigating the effect of perceived security, perceived trust, and information quality on mobile payment usage through near-field communication (NFC) in Saudi Arabia. *Electronics*, 11(23). https://doi.org/10.3390/electronics11233926
- Apaua, R., & Lallie, H. S. (2022). Measuring User Perceived Security of Mobile Banking Applications. *arXiv*. <a href="https://doi.org/10.48550/arXiv.2201.03052">https://doi.org/10.48550/arXiv.2201.03052</a>
- Chand, K., Tiwari, R., Gupta, A., Taneja, S., & Özen, E. (2025). How does perceived security influence mobile wallet users' behavior? A SEM investigation. *Managerial Finance*, *51*(1), 146-165. https://doi.org/10.1108/MF-05-2024-0414
- Cong, M. V. H., Nguyen, C. H., Nhu, L. T., & Tran, T. T. (2024). A study on the impacts of safety and security on consumers' intention to use electronic wallets in Hanoi. *Innovative Marketing*, 20(4), 85-99. https://doi.org/10.21511/im.20(4).2024.08
- DANA. (2020). About DANA. https://dana.id
- Dhaigude, A. S., Tapar, A. V., Jaweed, M. S., & Kamath, G. B. (2023). Is perceived value enough to create loyalty for M-Wallets? Exploring the role of trust and satisfaction. *Cogent Business & Management*, 10(3). https://doi.org/10.1080/23311975.2023.2281050
- Garad, A., Surwanti, A., Al-Ansi, A. M., Riyadh, H. A., Alfaiza, S. A., & Al Iman, B. (2025). Users' intentions of adopting fintech services: Analysis of trust and attitude elements. In *From Digital Disruption to Dominance: Leveraging FinTech Applications for Sustainable Growth* (pp. 103-119). Emerald Publishing Limited. <a href="https://doi.org/10.1108/978-1-83549-608-420251004">https://doi.org/10.1108/978-1-83549-608-420251004</a>
- Gupta, K., Wajid, A., & Gaur, D. (2023). Determinants of continuous intention to use fintech services: The moderating role of COVID-19. *J Financ Serv Mark*, 28(1), 17. https://doi.org/10.1057/s41264-023-00221-z

- Hassan, M. K., Shah, M. A. R., Alazhari, M. A., & Selim, M. (2021). Towards the implementation of monetary management in Islamic economic system based on recent developments. *International Journal of Islamic Economics and Finance (IJIEF)*, 4(2), 177-206. https://doi.org/10.18196/ijief.v4i2.11777
- Hill, S., & Yoeung, S. (2024). Connecting perceived brand quality to loyalty: The satisfaction acts as mediator of smartphone brand. *Open Journal of Business and Management*, 12, 4036-4054. https://doi.org/10.4236/ojbm.2024.126202
- Internet Service Providers Association (APJII). (2023). Survei Penetrasi & Profil Pengguna Internet Indonesia. https://apjii.or.id
- Internet World Stats. (2024). *Top 20 countries by Internet Users*. <a href="https://www.internetworldstats.com">https://www.internetworldstats.com</a>
- iPrice & App Annie. (2019). Most Popular E-Wallet Apps in Indonesia. https://iprice.co.id
- Jakpat & DailySocial. (2020). Survey Gen Z E-Wallet Users. https://dailysocial.id
- Kiew, J. P., Toh, E. T. L., Ngian, E. T., & Law, S. H. C. (2022). Perceived trust, convenience, and promotion for the adoption of E-Wallet. *International Journal of Academic Research in Business and Social Sciences*, 12(9), 374-385. <a href="http://doi.org/10.6007/IJARBSS/v12-i9/14591">http://doi.org/10.6007/IJARBSS/v12-i9/14591</a>
- Kismawadi, E. R., Irfan, M., & Shah, S. M. A. R. (2023). Revolutionizing islamic finance: Artificial intelligence's role in the future of industry. In *The Impact of AI Innovation on Financial Sectors in the Era of Industry 5.0* (pp. 184-207). IGI Global. <a href="https://doi.org/10.4018/979-8-3693-0082-4.ch011">https://doi.org/10.4018/979-8-3693-0082-4.ch011</a>
- Kock, N. (2016). Minimum sample size estimation in PLS-SEM: An application of inverse square root and gamma-exponential methods. *Information Systems Journal*, *26*(3), 327-376. <a href="https://doi.org/10.1111/isj.12061">https://doi.org/10.1111/isj.12061</a>
- Kurniawan, S., & Tankoma, A. (2023). The effect of perceived ease of use and perceived enjoyment on customer trust and loyalty in online food delivery service. *Binus Business Review*, *14*(2), 163-170. https://doi.org/10.21512/bbr.v14i2.8874
- Kurnia Pradana, A. F., Muhammad Yunan Hidayat, Sugiyat, S., & Nafi' Hasbi, M. Z. (2024). Legal Protection for Muslim Consumers Regarding Halal Food Certification in Law Number 33 of 2014 (Gazetted). *Al-Amwal : Journal of Islamic Economic Law*, *9*(1), 91–109. https://doi.org/10.24256/alw.v9i1.4959
- Lisikmiko, L., & Nurbaiti, N. (2024). Analysis that influences perceptions of benefit, convenience and trust in Islamic preferences for E-wallet use. *Dinar: Jurnal Ekonomi dan Keuangan Islam*, 11(1). <a href="https://doi.org/10.21107/dinar.v11i1.29417">https://doi.org/10.21107/dinar.v11i1.29417</a>
- Mailangkay, A., & Juwono, E. (2023). Determinants of customer trust in fintech as a means of Papyment through an approach technology acceptance model. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 9(3), 1222-1231. https://doi.org/10.29210/020232237
- Masrek, M. N., Halim, M. S. A., Khan, A., & Ramli, I. (2018). The impact of perceived credibility and perceived quality on trust and satisfaction in mobile banking context. *Asian Economic*

- and Financial Review, 8(7), 1013-1025. https://doi.org/10.18488/journal.aefr.2018.87.1013.1025
- Maulidiya, Z., & Khusnudin. (2025). E-wallet adoption in digital payment services: The impact of convenience, trust, and lifestyle. *Formosa Journal of Multidisciplinary Research (FJMR)*, 4(4). https://doi.org/10.55927/fjmr.v4i4.137
- Muhammad, H., & Sari, N. P. (2024). Customer loyalty in Indonesian Sharia banks: Integrating financial aspects, fintech applications, and the carter model. *El Dinar: Jurnal Keuangan dan Perbankan Syariah*, 12(1). https://doi.org/10.18860/ed.v12i1.23687
- Nangin, M. A., Barus, I. R. G., & Wahyoedi, S. (2020). The effects of perceived ease of use, security, and promotion on trust and its implications on fintech adoption. *Journal of Consumer Sciences*, 5(2), 124-138. https://doi.org/10.29244/JCS.5.2.124-138
- Prasetya, M. E., & Shuhidan, S. M. (2023). Security, risk and trust in E-wallet payment systems: Empirical evidence from Indonesia. *Management and Accounting Review (MAR)*, 22(1), 358-378. <a href="https://doi.org/10.24191/MAR.V22i01-14">https://doi.org/10.24191/MAR.V22i01-14</a>
- Pratiwi, L., Sunaryo, S., & Mugiono, M. (2021). The effect of E-service quality on E-loyalty mediated by E-trust and brand image variables: A study on OVO E-wallet application users in Malang City. *International Journal of Research in Business and Social Science*, 10(6), 56-62. https://doi.org/10.20525/ijrbs.v10i6.1364
- Prawira, F. R., Prakoso, N. T., Handayani, P. W., & Harahap, N. C. (2024). The influence of information security factors on the continuance use of electronic wallet. *Procedia Computer Science*, 23(4), 1467-1475. <a href="https://doi.org/10.1016/j.procs.2024.03.147">https://doi.org/10.1016/j.procs.2024.03.147</a>
- Puente-Cavazos, C. D., Cavazos-Arroyo, J., & Puente-Díaz, R. (2025). The impact of perceived financial security in Neobanks on customer retention and the cost of switching to a traditional bank: The mediating role of trust in Neobanks. *Revista Brasileira de Gestão de Negócios*, 27(1). https://doi.org/10.7819/rbgn.v27i01.4287
- Putra, H. D., Astuti, E. S., Kusumawati, A., & Abdillah, Y. (2020). Effect of brand trust and commitment of a mobile wallet in Indonesia. *Utopía y Praxis Latinoamericana: Revista Internacional de Filosofía Iberoamericana y Teoría Social*, 2, 397-405. https://doi.org/10.5281/zenodo.3815290
- Putri, D. E., Sinaga, O. S., Sudirman, A., Augustinah, F., & Dharma, E. (2022). Analysis of the effect of perceived ease of use, perceived usefulness, trust, and cashback promotion on intention to use E-wallet. *International Journal of Economics, Business and Management Research*, 6(11), 63-75. <a href="https://doi.org/10.51505/IJEBMR.2022.61105">https://doi.org/10.51505/IJEBMR.2022.61105</a>
- Rahmawati, P., & Anwar, M. (2023). Trust mediates the effect of perceived benefits and perceived convenience on the interest in reusing electronic money. *Jurnal Ekonomi dan Bisnis Digital*, *2*(3), 855-870. <a href="https://doi.org/10.55927/ministal.v2i3.4889">https://doi.org/10.55927/ministal.v2i3.4889</a>
- Ritonga, M. H., Harahap, M. I., & Santri, N. (2025). Convenience, trust, *Sharia* literacy, and features in gopay usage decisions. *Academia Open*, 10(1). <a href="https://doi.org/10.21070/acopen.10.2025.10962">https://doi.org/10.21070/acopen.10.2025.10962</a>
- Rusdianti, D., & Fajar, A. N. (2023). Unraveling the impact of brand awareness, promotion,

- security, and service quality on customer satisfaction and loyalty in E-wallet OVO: An Analytical study. *Journal of System and Management Sciences*, *13*(6), 523-535. <a href="https://doi.org/10.33168/JSMS.2023.0630">https://doi.org/10.33168/JSMS.2023.0630</a>
- Shah, M. A. R., & Bano, M. (2020). The Impact of Learning Organization Practices on Subjective Performance of Employees: The Case of Islamic Financial Institutions (IFIs) of Developing Countries. *Islamic Banking and Finance Review*, 7, 38-59. https://doi.org/10.32350/ibfr/2020/0700/525
- Siddiqui, K. I., Imam, M. A., & Mullick, N. H. (2019). Customer satisfaction in achieving customer loyalty through mediation of trust: An empirical study on mobile payment users. *Ramanujan International Journal of Business and Research*, 4(1), 209-222. <a href="https://doi.org/10.51245/rijbr.v4i1.2019.158">https://doi.org/10.51245/rijbr.v4i1.2019.158</a>
- Singh, N., & Sinha, N. (2020). How perceived trust mediates merchants' intention to use a mobile wallet technology. *Journal of Retailing and Consumer Services*, *5*(2). https://doi.org/10.1016/j.jretconser.2019.101894
- Tawil, M. R., Subandi, M., Hernawan, M. A., Diawati, P., & Kraugusteeliana, K. (2023). The role of perceived ease of use, trust, product knowledge, and perceived convenience on intention to use of *Sharia* banking card. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi)*, 9(2), 260-265. <a href="https://doi.org/10.35870/jemsi.v9i2.1014">https://doi.org/10.35870/jemsi.v9i2.1014</a>
- The Bank Indonesia. (2018). PBI No. 20/6/PBI/2018 tentang Uang Elektronik. https://bi.go.id/
- The Bank Indonesia. (2019). Indonesia's Payment System Statistics. <a href="https://bi.go.id/">https://bi.go.id/</a>
- The Central Statistics Agency (BPS). (2017). Sosial Ekonomi Nasional. https://bps.go.id
- Utomo, R. G., & Yasirandi, R. (2024). Securing digital wallet loyalty: Unveiling the impact of privacy and security. *Scientific Journal of Informatics*, 11(2), 287-302. <a href="https://doi.org/10.15294/sji.v11i2.2423">https://doi.org/10.15294/sji.v11i2.2423</a>
- Widayanti, I., Hasbi, M. Z. N., Ratnawati, S., Giovanni, A., & Atmaja, H. E. (2025). Management Of Financial Institutions: Efforts To Improve Sustainable Development And The National Economy. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 13(3), 2505–2514. https://doi.org/10.37676/ekombis.v13i3.8044
- Yusiana, R., Hurriyati, R., & Dirgantari, P. D. (2023). Unveiling the link between customer experience and customer loyalty on Blibli: The mediating role of trust. *Journal of Business Management and Economic Development*, 2(1), 258-271. <a href="https://doi.org/10.59653/jbmed.v2i01.411">https://doi.org/10.59653/jbmed.v2i01.411</a>
- Yuspita, R., Pebruary, S., & Kamala, A. Z. H. (2019). The society's perceptions on the use of fintech services in *Sharia* financial institutions. *Jurnal Ekonomi & Keuangan Islam*, 5(2), 87-92. <a href="https://doi.org/10.20885/jeki.vol5.iss2.art6">https://doi.org/10.20885/jeki.vol5.iss2.art6</a>
- Zhang, J., Luximon, Y., & Song, Y. (2019). The role of consumers' perceived security, perceived control, interface design features, and conscientiousness in continuous use of mobile payment services. *Sustainability*, *11*(23), 6843. <a href="https://doi.org/10.3390/su11236843">https://doi.org/10.3390/su11236843</a>