



The Role of Mediation and Multigroups Investigation in Analyzing Islamic Fintech Users Behaviour

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This study aims to analyze the influence of financial incentives and digital literacy on user loyalty, with satisfaction as a mediating variable, and to test the differences in influence between variables through multigroup analysis based on gender and region. The study used a quantitative approach with primary data obtained through questionnaires. The sample was determined by purposive sampling technique and included 140 respondents. The data was analyzed using the PLS-SEM method through the WarpPLS version 8 application. The results showed that financial incentives and digital literacy had a significant positive effect on loyalty, with satisfaction as a mediator. However, the influence of digital literacy on loyalty becomes weaker when mediated by satisfaction. Multigroup analysis showed no differences by gender, but there were differences in the effect of financial incentives on loyalty between urban and rural areas.

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INTRODUCTION

Technological developments have encouraged the birth of various digital service innovations, one of which is Financial Technology (Fintech) which is now growing rapidly in the financial sector (Alshater et al., 2022). Fintech is a technological innovation in the financial sector that can increase efficiency in the financial services industry (Hasan et al., 2020). With this growth, there is also adaptation Islamic Fintech which began to attract the interest of the Muslim community (Dawood et al., 2022). Attendance Islamic Fintech This is based on Islamic Financial Services Board (IFSB) in 2019, which applies the principle of proportionality, which is a balance between benefits and risks, ensuring compliance with sharia principles and strengthening consumer protection. In addition, based on fatwa No. 117/DSN-MUI/II/2018 concerning Information Technology-Based Financing Services Based on Sharia Principles. In the fatwa, it is emphasized that every implementation of Fintech Sharia is obligatory to avoid the practice usury, Gharar, Shirley, and must be based on a valid contract in accordance with sharia.

Based on Global Islamic Fintech Report 2024/25, market size Islamic Fintech in 2023/24 it has reached USD 161 billion and is projected to grow to USD 306 billion by 2028. State of the Global Islamic Economy Report (SGIE) 2024/2025 released by Standard Dinar, (2024), mentioning that Indonesia managed to maintain its position as the third rank after Malaysia and Saudi Arabia in the industry Fintech Global Sharia with a score Global Islamic Economy Indicator (GIEI) of 99.9. This shows the development of Islamic Fintech in Indonesia has enormous potential.

Progress Fintech has driven a shift in society in the era of digital payments (Chen & Jiang, 2022). Digital payments are a form of innovation in financial services that is increasingly in demand by the public because it offers convenience, efficiency, and speed in transactions (Jannah et al., 2025). Payment service innovations are also increasingly diverse, ranging from digital wallets (E-wallet), QR code-based payments, to other digital payment platforms that are integrated with banking services (Kaur et al., 2020). The provisions related to electronic money are regulated in Fatwa No. 116/DSN-MUI/IX/2017. The fatwa explained that there are several contracts used in the implementation of sharia electronic money, namely Wadi'ah, Qardh, Ijarah, Ju'alah and Wakalah bi al-ujrah. The contract between the issuer and the electronic money holder is based on the contract wadi'ah and qardh. Meanwhile, the contract used between the issuer and the organizer or electronic

money partner such as Merchant i.e. the contract Ijarah, Ju'alah and Wakalah bi al-Ujrah.

The increase in the adoption of digital payment systems has also been responded to by Islamic financial service providers, through the development of various platforms based on Islamic principles (Hamsin et al., 2023). Based on data on Information Technology-Based Joint Funding Services for the 2023–2025 period (OJK, 2025), showing a significant increase in total assets. In 2023, total assets Fintech sharia reached IDR 139 billion, then increased to IDR 166 billion in 2024, and again increased to IDR 179 billion in 2025. The increase in assets indicates the increasing acceptance and trust of the public in sharia-based digital financial services.

This research focuses on user behavior, specifically related to loyalty. Loyalty is a strong commitment from customers to continue to reuse a product or service despite certain conditions that have the potential to encourage them to switch to another brand (Kotler & Keller, 2016). In an effort to increase user loyalty, service providers generally offer financial incentives such as Cashback, discounts, up to points (Mpofu & Mhlanga, 2022). Provisions related to financial incentives are regulated in DSN-MUI Fatwa No. 86/DSN-MUI/XII/2012 concerning Prizes in the Collection of Islamic Financial Institutions. Explaining that the giving of gifts (grants) is allowed as long as the funds do not come from the customer and do not lead to practice usury. Research conducted by (Putri et al., 2022) mentioned that financial incentives are able to increase reuse intention, especially in the early stages of the service adoption process.

The ability of users to understand, respond, and utilize digital technology also plays an important role in determining how effectively services can encourage loyalty to digital payments (Ullah et al., 2022). A good level of digital literacy not only makes it easier for users to access and operate services, but also allows them to evaluate the benefits, security, and suitability of services to personal preferences (Kamenga Mapurita & Mayoukou, 2024). A user's loyalty to a product or service will be reflected if the user feels satisfaction with the benefits he or she receives (Khairawati, 2020). With a high level of customer satisfaction, it allows customers to commit to continue using a service (Sharma et al., 2020).

Several demographic factors have a role in influencing users in service adoption, especially in digital-based services (Tan et al., 2019). In addition, the level of digitalization, availability of infrastructure and mindset between individuals can vary (Tojiqulova et al.,

2025). Therefore, this study conducted multigroup analysis, to test whether there are significant differences, especially based on gender and regional categories.

LITERATURE REVIEW

Development of digital payment services Islamic fintech Driving the need for a deeper understanding of user behavior, especially in forming long-term loyalty. A number of studies show that user loyalty is not only determined by the technical aspects of the service, but also by the economic benefits and the ability of users to make optimal use of technology. In this context, financial incentives and digital literacy are important factors that have the potential to affect the satisfaction and loyalty of users of Islamic digital payment services.

Theoretically, Expectancy Theory introduced by Vroom (1964) explains that individuals will be motivated to do an action if they believe that the action will produce the expected benefit (Talwar et al., 2021). In digital payment services, these benefits are realized through various forms of financial incentives, such as cashback, discounts, and loyalty points, which are widely used to attract and retain users (Mpofu & Mhlanga, 2022); Putri et al., 2022).

An individual's ability to use digital technology also plays an important role in determining the experience of using services. Digital literacy reflects the ability of users to manage, analyze, and understand digital information, thereby supporting effective decision-making and technology utilization (Vijayakumar & Chandrasekar, 2024). Based on Technology Acceptance Model (TAM) developed by Davis (1986), the intention and behavior of using technology are influenced by two main beliefs, namely perceived usefulness and perceived ease of use. When users feel that a system is useful and easy to use, they tend to have a positive attitude that leads to satisfaction and continued use (Davis et al., 1989).

Customer satisfaction loyalty theory is a theory that explains how user loyalty was initially formed. Consumers who are satisfied with a service tend to show a positive attitude, intention to reuse, and attachment to the service. However, satisfaction does not always automatically lead to loyalty, as loyalty is a more complex construct and is influenced by a variety of additional factors (Oliver, 1999).

In the context of Islamic digital financial services, user behavior is not only driven by considerations of economic utility and technological convenience, but also by Islamic values. Based on

Islamic Consumer Behavior Theory, Muslim consumption decisions are influenced by ethical aspects, benefits, and compliance with sharia principles (Chapra, 1992). Therefore, this study integrates financial incentives and digital literacy in analyzing user loyalty and satisfaction as a mediating variable, as well as conducting a multigroup analysis to test differences in influence based on gender and region.

Hypothesis Development

The Effect of Financial Incentives on User Satisfaction

Financial incentives such as Cashback and discounts are widely used to attract and retain users of digital payment services. User satisfaction arises when the benefits received meet or exceed their expectations (Dam & Dam, 2021). Several studies show that financial incentives are able to increase user satisfaction through increased perceived value from services (Putri et al., 2022; Kadek et al., 2025)

H1: Financial incentives have a positive effect on user satisfaction.

The Influence of Financial Incentives on User Loyalty

Financial incentives provide economic benefits that encourage users to continue using digital payment services. In line with Expectancy Theory, users are likely to maintain their use of the service when they believe there is a benefit to be gained (Talwar et al., 2021). Previous research has proven that financial incentives, in particular Cashback, has a positive effect on user loyalty (Zhao et al., 2019; Kadek et al., 2025).

H2: Financial incentives have a positive effect on user loyalty.

The Influence of Digital Literacy on User Satisfaction

Digital literacy allows users to understand and operate digital services more effectively, thus creating a more convenient user experience. This ability creates a positive perception and increases user satisfaction with the services used (Kamenga Mapurita & Mayoukou, 2024); Gunawan et al., 2024).

H3: Digital literacy has a positive effect on user satisfaction.

The Influence of Digital Literacy on User Loyalty

Users with a good level of digital literacy tend to be more confident in using technology and able to

maximize the benefits of services. Based on Technology Acceptance Model (TAM), the perception of the ease and usability of technology encourages positive attitudes and sustainable use (Davis et al., 1989). Studies show that digital literacy is an important factor in building the loyalty of digital service users (Kizi & Du, 2025).

H4: Digital literacy has a positive effect on user loyalty.

The Effect of Satisfaction on User Loyalty

Customer Satisfaction-Loyalty Theory explained that satisfaction is the main prerequisite for the formation of user loyalty (Oliver, 1999). Satisfied users are more likely to show reuse intentions, provide recommendations, and stick with the services used. Empirical findings show that satisfaction has a positive and significant effect on the loyalty of digital service users (Dam & Dam, 2021).

H5: User satisfaction has a positive effect on user loyalty.

The Role of Satisfaction Mediation in the Influence of Financial Incentives on Loyalty

Financial incentives provide added value that increases users' positive perception of services. Based on Customer Satisfaction-Loyalty Theory, satisfaction serves as an important mechanism that bridges perceived benefits with user loyalty (Oliver, 1999). Previous findings suggest that the influence of incentives on loyalty becomes stronger when mediated by satisfaction (Kadek et al., 2025).

H6: User satisfaction mediates the influence of financial incentives on user loyalty.

The Role of Satisfaction Mediation in the Influence of Digital Literacy on Loyalty

Digital literacy increases the ease and effectiveness of using services, thus shaping a positive experience for users. Referring to TAM, the perception of ease of use supported by digital literacy drives satisfaction, which further strengthens user loyalty (Davis et al., 1989; Gunawan et al., 2024).

H7: User satisfaction mediates the influence of digital literacy on user loyalty.

Gender Differences Analysis

Gender differences affect how individuals evaluate services and form loyalty in use Fintech. Previous studies have shown significant differences in behavior and use intent between male and female users (Liana et al., 2023; Setiawan, 2024).

H8: There is a difference in influence between variables between male and female users.

Analysis of Differences by Region

Regional characteristics affect the level of adoption and utilization of fintech services, especially related to technology access and digital literacy. Previous research has shown that there is a difference in user behavior between urban and suburban areas in the use of digital financial services (Zhao, 2024; Setiawan et al., 2025).

H9: There is a difference in the influence between variables between users in urban and suburban areas.

METHOD

This study uses a quantitative approach, which is a data collection method that is objective, measurable, and statistically analyzable, using samples that reflect the characteristics of the population as a whole (Scott, 2013). The data source used in this study comes from primary data, namely data collected directly from respondents as the main party providing information (Abdullah, 2015).

The population in this study is all individuals who use sharia digital payment services. With the determination of samples based on purposive sampling, that is, the sample selection technique based on certain criteria or considerations (Makwana et al., 2023). The sample in this study is those who have used sharia digital payment services for at least the last six months and the age group of 17-40 years. Determination of the minimum number of samples according to Hair et al. (2014), which is 5 to 10 times the number of indicators used in the study. The total indicators in this study are 14 indicators, so the number of samples needed is 70 to 140 respondents.

Data collection was carried out through the distribution of questionnaires that contained questions according to the research topic to individuals who met the predetermined criteria (Scott, 2012).

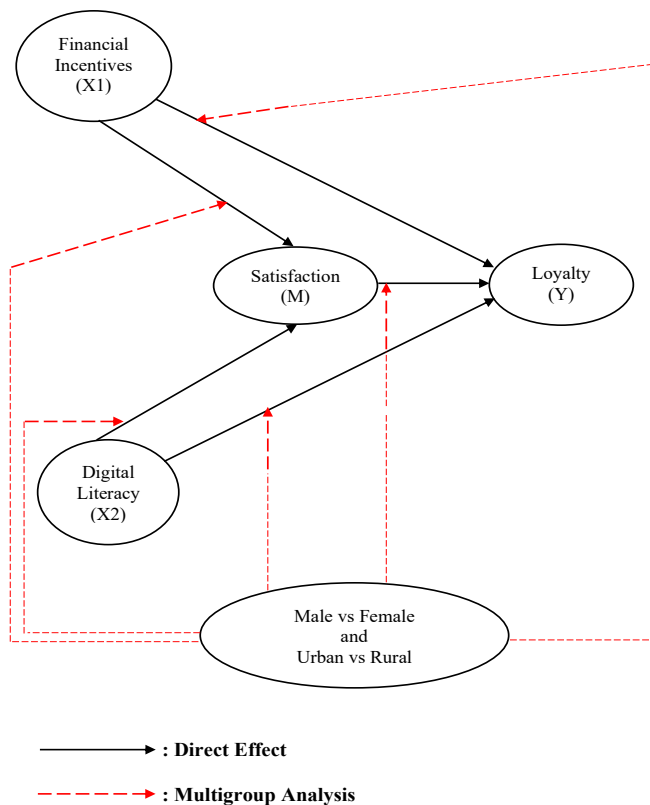


Figure 1. Theoretical Framework

In data collection, the Likert Scale was used, which is each question was given a score consisting of five levels, ranging from strongly agree to strongly disagree. The data obtained from the respondents were analyzed using the Structural Equation Modeling -

Partial Least Square (SEM-PLS). The software used in this study is WarpPLS version 8.0.

RESULT AND DISCUSSION

Table 1 Respondent Profile

Demographics	Frequency	%
Gender	-	-
● Male	40	28,57%
● Women	100	71,43%
Age	-	-
● 17-22 Years	93	66,4%
● 23-28 Years	40	28,6%
● 29-34 Years	6	4,3%
● 35-40 Years	1	0,7%
Region	-	-
● Urban	99	70,71%
● Rural	41	29,29%
User Frequency	-	-
● < 3 times/week	41	29,29%
● 3-6 times/week	58	41,42%
● >7 times/week	41	29,29%

This study involved 140 respondents. Based on gender, female respondents dominated with 100 people (71.43%), while men numbered 40 people (28.57%). In terms of age, the majority of respondents were in the range of 17-22 years as many as 93 people (66.4%), followed by 23-28 years old as many as 40 people (28.6%). Meanwhile, respondents aged 29–34 years amounted to 6 people (4.3%) and 35–40 years old as 1

person (0.7%). Based on region, most of the respondents came from urban areas, 99 people (70.71%), while 41 people (29.29%) lived in rural areas. Furthermore, based on the frequency of service use, the majority of respondents used the service 3–6 times per week (69 respondents), while respondents with a frequency of less than 3 times per week and more than 7 times per week amounted to 45 respondents each.

Table 2 Convergent Validity

Variable	Item	Factor Loading	AVE
Financial Incentives	IF1	0,776	0,541
	IF2	0,736	
	IF3	0,691	
	IF4	0,734	
Digital Literacy	LD1	0,784	0,637
	LD2	0,816	
	LD3	0,794	
Satisfaction	SATIS1	0,789	0,589
	SATIS 2	0,751	
	SATIS 3	0,736	
	SATIS 4	0,792	
Loyalty	LOYAL1	0,843	0,639
	LOYAL2	0,816	
	LOYAL3	0,733	

Based on Table 2, the validity test results converge with Loading Factor and AVE, it can be seen that all indicators in the research variables, namely financial incentives (IF), digital literacy (LD), satisfaction

(PUAS), and loyalty (LOYAL), have values Loading Factor and AVE is above 0.5. This means that each construct has a good ability to explain the variance of its indicators (Fornell & Larcker, 1981; Hair et al., 2014)

Table 3 Discriminatory Validity

	IF	LD	SATIS	LOYAL
IF	(0.735)	-	-	-
LD	0.252	(0.798)	-	-
SATIS	0.541	0.316	(0.768)	-
LOYAL	0.319	0.454	0.525	(0.799)

Discriminant validity with the approach Fornell-Larcker Criterion indicates that the value of the square root average variance extracted (AVE) in each construct, namely financial incentives (0.735), digital literacy (0.798), satisfaction (0.768), and loyalty (0.799),

were greater than the correlation values between other constructs. This shows that each variable has a clear difference from the other constructs in the model (Hair et al., 2017).

Table 4 Reliability

Variable	Composite Reliability	Cronbach Alpha
Financial Incentives	0,824	0,716
Digital Literacy	0,840	0,715
Satisfaction	0,851	0,767
Loyalty	0,841	0,715

The reliability test showed that all variables in this study had a value of Composite Reliability and Cronbach's Alpha that is more than 0.7. This shows that

each construct has a level of consistency so that the measuring tool is declared reliable and trustworthy (Kock, 2024).

Table 5 R-Square

Variable	R-Square	%
Loyalty	0,396	39.6%
Satisfaction	0,414	41,4%

The R-Square value for the Loyalty variable was 0.396, which means that 39.6% of the variation in the loyalty variable could be explained by the independent variables in the study, while the remaining 60.4% was explained by other factors outside the model. Meanwhile, the R² value for the Satisfaction variable was

0.414, explaining that 41.4% of the variation in satisfaction was influenced by the independent variables tested, and the remaining 58.6% was due to other variables that were not included in the research model (Kock, 2024).

Table 6 Q-Square

Variable	Q-Square	%
Loyalty	0,398	39.8%
Satisfaction	0,419	41,9%

The Q-Square test showed a value of > 0, which signifies that the research model has predictive relevance. Therefore, the test results show that the

model is able to provide accurate predictions of the analyzed data (Kock, 2024).

Table 7 Full Collinearity VIF

Variable	Full Collinearity VIF
Financial Incentives	1,430
Digital Literacy	1,284
Satisfaction	1,762
Loyalty	1,582

Table 6 shows the results of the Full Collinearity VIF test, which has a \leq value of 3.3, meaning that this research model does not experience multicollinearity problems. This shows that each construct in the model

is independent and does not have too strong a relationship with each other, either between the free variable and between the free variable and the bound variable (Kock, 2024).

Table 8. Model Fit and Quality Indices

Indicator	Value	P-value
Average Path Coefficient (APC)	0,314	<0.001
Average R-squared (ARS)	0,405	<0.001
Average adjusted R-squared (AARS)	0,394	<0.001
Average block VIF (AVIF)	1,272	-
Average full collinearity VIF (AFVIF)	1,514	-

Based on the Model Fit and Quality Indices test, it shows that all indicators meet the model feasibility criteria. The values of APC (0.314), ARS (0.405), and AARS (0.394)

were significant at $p < 0.01$, indicating a relationship between constructs and the ability to have strong predictive capabilities. In addition, the values of AVIF

(1,272) and AFVIF (1,514) < 3.3, indicating that the model is free from multicollinearity problems (Kock,

2024). Thus, the research model is declared feasible and has good quality.

Table 9. Direct Effect Coefficients

Variable Relationships	Path Coefficients	P-value	Result
Financial Incentives-Satisfaction	0.562	<0.001	Significant
Financial Incentives-Loyalty	0.108**	0,095	Significant
Digital Literacy-Satisfaction	0.203	0,006	Significant
Digital Literacy-Loyalty	0.314	<0.001	Significant
Satisfaction-Loyalty	0.380	<0.001	Significant

Note: Significance level at p-value <0.01; **Significance level at p-value <0.1

Test results Direct effect coefficients, showing that the variables of financial incentives and digital literacy have a significant effect on satisfaction. The variables of financial incentives, digital literacy, and satisfaction also have a significant effect on loyalty. This

is reflected in the p-value that are still at the level of significance level <0.01 and <0.1 (Hair et al., 2017). Therefore, all hypotheses on the relationship between variables are directly accepted.

Table 10. Direct Effect Coefficients

Variable Relationships	Path Coefficients	P-value	Total Effect	Result
Financial Incentives-Satisfaction-Loyalty	0.214	<0.001	0,322	Significant
Digital Literacy-Satisfaction-Loyalty	0.077**	0,095	0,391	Significant

Note: Significance level at p-value <0.01; **Significance level at p-value <0.1

Indirect Effect = $\rho_{XM} \cdot \rho_{MY}$ Total Effect = $\rho_{XY} + (\rho_{XM} \cdot \rho_{MY})$

Based on test results Indirect effect coefficients, it is known that the variables of financial incentives and digital literacy have a significant influence on loyalty through the satisfaction variable. This is indicated by the

value p-value which are below 0.01 and 0.1, so that the hypothesis on the influence relationship is not directly accepted (Hair et al., 2017).

Table 11. Multigroup Gender Analysis

Variable Relationships	Male Path Coefficients.	Female Path Coefficients.	P-value	Result
Financial Incentives-Satisfaction	0,466	0,572	0,459	Insignificant
Financial Incentives-Loyalty	0,112	0,118	0,149	Insignificant
Digital Literacy-Satisfaction	0,311	0,166	0,832	Insignificant
Digital Literacy-Loyalty	0,296	0,255	0,579	Insignificant
Satisfaction-Loyalty	0,450	0,370	0,224	Insignificant

Source: WarpPLS data processing output, 2025

Note: Significance level at p-value <0.01; **Significance level at p-value <0.1

Test results Multigroup Analysis based on Gender, indicating that the entire relationship between variables did not show significant differences between

male and female respondents. This is evidenced by the p-value which is above the significance levels of 1%, 5%, or 10% (Hair et al., 2017).

Table 12. Multigroup Analysis Region

Variable Relationships	Urban Path Coefficients	Rural Path Coefficients	P-value	Result
Financial Incentives-Satisfaction	0,602	0,480	0,190	Insignificant
Financial Incentives-Loyalty	-0.100	0.214	0,009	Significant
Digital Literacy-Satisfaction	0,147	0,343	0,319	Insignificant
Digital Literacy-Loyalty	0,354	0,301	0,458	Insignificant
Satisfaction-Loyalty	0,279	0,442	0,115	Insignificant

Source: WarpPLS data processing output, 2025

Note: Significance level at p-value <0.01; **Significance level at p-value <0,

Multigroup Based on region, it shows a difference in the influence of financial incentives on loyalty between respondents in urban and rural areas. However, the relationship between the other variables did not show significant differences.

Discussion

Based on the results of the study, it is shown that financial incentives have a significant effect on user satisfaction. Providing incentives is able to increase the perception of value and benefits of services, thereby encouraging user satisfaction. These findings are in line with [Kadek et al., \(2025\)](#) which confirms that incentives such as Cashback contribute positively to user satisfaction. In addition, incentives also have a direct effect on user loyalty. This shows that incentives are an important factor in encouraging user loyalty, especially in sharia digital payments. These findings are in line with research [Zhao et al., \(2019\)](#) and [Putri et al., \(2022\)](#), explaining that incentives are strategies that can be implemented to retain service users. This means that services that provide incentives will be seen as attractive to users so that they can encourage sustainable relationships.

Digital literacy has been proven to have a significant effect on user satisfaction. The user's ability to understand and utilize technology makes it easier to use the service, thereby increasing service satisfaction. Good digital literacy also forms a positive attitude towards services, which ultimately contributes to increased user satisfaction ([Gunawan et al., 2024](#)). In addition, the relationship of digital literacy has a significant influence on loyalty. Good literacy increases trust, understanding, and a sense of security in transactions, which ultimately strengthens the long-term relationship between users and services. These findings are reinforced by [Kizi & Du, \(2025\)](#), which states that digital literacy is an important factor in shaping customer loyalty, especially in the context of using digital-based services. The results of this study can expand the results

of research conducted by [Ahmad & Hassan, \(2025\)](#), which states that digital literacy only affects the intention of reuse.

User satisfaction has a positive and significant influence on the loyalty of users of Islamic digital payment services. These results reflect that the higher the level of satisfaction that users feel with the service, the more it will be a factor in forming loyalty. These results are relevant to the study conducted by [Albaity & Rahman, \(2021\)](#), which explains that satisfaction has a positive and significant effect on customer loyalty. The results of the study also showed significant satisfaction in being a partial mediator on the relationship between financial incentives and user loyalty. This means that incentives first increase user satisfaction, then feeling that satisfaction becomes a driver for someone to remain committed to a service. Research [Kadek et al., \(2025\)](#), also strengthening the findings, explained that satisfaction can act as a mediator between financial incentives and customer loyalty, thus strengthening the view that satisfaction is a factor that can link financial benefits with user commitment and loyalty to a service.

The role of digital literacy in the relationship between digital literacy and user loyalty, namely as a partial mediator, but the role of mediation is relatively weak. The results of the analysis show that the indirect influence of digital literacy on loyalty through satisfaction is smaller than the direct influence. This indicates that satisfaction is not the main line in the relationship. These findings are in line with the view [Oliver, \(1999\)](#), that satisfaction does not always lead to loyalty, and shows that users with high digital literacy tend to form loyalty directly, with satisfaction acting as a supporting factor.

Results Multigroup Analysis Based on gender, there is no significant difference in influence between variables. This means that men and women show relatively similar behavior patterns in responding to incentives, utilizing digital literacy, forming satisfaction and loyalty to sharia digital payment services. [Daniali et](#)

al., (2022), explaining that Gender It is not always a factor that distinguishes user behavior in the context of digital technology. Thus, both men and women tend to show similar patterns of adoption and use of digital payment services. However, the results Multigroup Analysis Based on region, there are differences in responses between urban and rural groups on the relationship between financial incentives and loyalty. In the urban group, it reflects a negative influence, while the rural group has a positive influence.

The difference in the direction of influence shows that users in urban areas are less likely to maintain loyalty when Islamic digital payment services offer financial incentives. The high level of digitalization and the many alternative services in urban areas make it easier for users to switch platforms, so incentives play a more role as a driver of temporary use (Tojiqulova et al., 2025; Nishio & Hoshino, 2024). This pattern reflects the phenomenon Hunter Promo, i.e. user behavior that takes advantage of promotions without building a long-term commitment. On the other hand, in rural areas, financial incentives actually have a positive effect on loyalty, because they are seen as an added value that encourages users to stay. Meanwhile, the relationship between other variables showed the consistency of responses, particularly on the role of digital literacy and satisfaction in the formation of loyalty.

CONCLUSION

Based on the results of the discussion, this study shows that financial incentives and digital literacy have a significant effect on the satisfaction and loyalty of users of Islamic digital payment services. Increased financial incentives and users' ability to understand and utilize digital services have been proven to encourage the formation of satisfaction and loyalty. In addition, user satisfaction also plays an important role in increasing loyalty, which confirms that positive experiences are a key factor in retaining users.

The results of the mediation analysis showed that satisfaction plays a role as a partial mediator in the relationship between financial incentives and user loyalty, indicating that incentives can affect loyalty both directly and through increased satisfaction. However, in the relationship between digital literacy and loyalty, direct influence is more dominant than indirect influence through satisfaction, so digital literacy can form loyalty directly, with satisfaction acting as a supporting factor.

Results Multigroup Analysis showed no difference in influence between variables based on gender, which indicates a similarity in behavioral

patterns between male and female users. In contrast, differences were found by region, specifically in the relationship between financial incentives and loyalty, where the effect was negative on urban users and positive on rural users. These findings suggest that the response to financial incentives is influenced by regional characteristics, while the relationships between other variables are relatively consistent.

This study contributes to the development of literature in the field of Islamic digital finance, especially in understanding the influence of financial incentives, digital literacy, and satisfaction on the loyalty of digital payment service users. In addition, the use of the Multigroup Analysis based Gender and regions provide theoretical insights into how differences in demographic and geographic characteristics affect the relationships between the variables studied.

In increasing user loyalty, sharia digital payment service providers can maximize financial incentive programs that are in accordance with sharia principles. In addition, it is necessary to develop educational features in the application, such as user guides, security information, and transaction tutorials. Service providers also need to maintain the quality of service so that users have a satisfying experience. Finally, marketing and education strategies should be adjusted to the characteristics of each group, both based on Gender as well as differences in areas such as urban and rural.

The limitations of this study include the imbalance in the number of respondents between men and women, as well as between urban and rural respondents. Furthermore, it does not explain the specification of the area in detail, so there are no clear restrictions on the location of the respondents. Other limitations, results Multigroup Analysis indicates the presence of insignificant variables in differentiating groups, indicating that there may be other factors outside of the study variables that can provide stronger differences between groups.

Based on some limitations of this study, therefore the researcher suggests for further research. First, in data collection, it is recommended to regulate the proportion of respondents in each group so that there is no too large imbalance in the Multigroup Analysis. Second, further research is recommended to include the specification of the respondents' area in more detail so that the results of the study can illustrate differences in user behavior based on location. In addition, the next researcher may consider the addition of other variables that could potentially result in more significant differences in the analysis Multigroup.

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