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The Role of Fintech in Improving Financial Literacy in the Use of E-Wallets of UGJ Management Students in Circbon City, 2025

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Abstract: The rapid development of information and communication technology has brought significant changes in the financial sector, especially through Financial Technology (Fintech). One of the most popular fintech innovations in Indonesia is E-Wallet or digital wallet, such as DANA, GoPay, and ShopeePay. This study aims to analyse the effect of fintech and E-Wallet on students' financial literacy. Using quantitative methods and a comparative causal approach, this study involved 342 UGJ management students in Cirebon City as respondents selected based on the Slovin formula. Data processing was carried out using the SEM-PLS method to test the causal relationship between variables. The results showed that fintech has a significant effect on students' financial literacy, although with a relatively weak effect size (0.074). Meanwhile, the use of E-Wallets has a greater influence on financial literacy with an effect size of 0.240. However, the moderation of E-Wallet in the relationship between fintech and financial literacy does not prove significant. This indicates that E-Wallet directly contributes to improving students' financial literacy, while the role of fintech in general is still less strong. These findings provide important implications for academics, financial practitioners, and educational institutions to improve financial literacy through the use of E-Wallets and digital education. Campuses are advised to hold seminars and workshops related to more effective digital financial management. Future research is recommended to expand the scope of the study area, consider more E-Wallet platforms, and analyse the security and risk aspects of using E-Wallets.

Keyword: Fintech, Financial Literacy, E-Wallet, Management Students.

INTRODUCTION

The rapid development of information and communication technology in recent years has had a major impact on various sectors of life, including the financial sector. One of the most significant forms of innovation in this sector is the emergence of Financial Technology (Fintech), which refers to the use of technology to provide financial services digitally. Fintech offers various solutions that make it easier for people to carry out daily financial transactions, including payments, money transfers, investments, and loans. In Indonesia, fintech applications

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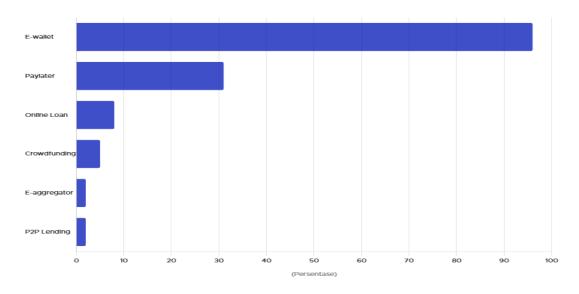
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such as OVO, DANA, GoPay, and Shopee Pay, have become very popular, especially among the younger generation, including students.

A recent report from Worldpay revealed that the use of digital wallets has experienced a rapid surge, making it the fastest growing payment method in the world. Globally, digital wallets account for 50 percent of e-commerce transactions and 30 percent of in-store transactions in 2023, with a total transaction value reaching IDR 226,800 trillion. This figure is expected to increase to IDR 405,000 trillion in 2027.(Partogi Situmorang, 2024).

In the Asia-Pacific region, digital wallet usage is much higher, with 70 percent of online payments and 50 percent of in-store transactions made using digital wallets last year. China tops the list in terms of digital wallet adoption. By 2023, 82 percent of e-commerce spending and 66 percent of physical purchases in China will be made via digital wallets, with total transactions reaching around IDR 123,120 trillion. Alipay, WeChat Pay, and UnionPay are the main forces dominating this sector.(Partogi Situmorang, 2024).

Overall, the Asia-Pacific region is leading the way in digital wallet adoption, far ahead of other regions. In developed countries such as Japan, South Korea, and Singapore, credit cards are still very dominant. However, in developing countries such as Indonesia, the Philippines, and Vietnam, digital wallets have become the primary choice, with convenience and increasingly sophisticated biometric technology influencing consumer decisions. This innovation in financial services offers a number of conveniences for the community, especially in terms of financial transactions. One of the most popular and widely used fintech products among the Indonesian people is E-Wallet or digital wallet.



Source: Poll, processed by GoodStats (accessed December 12, 2024)

The use of E-Wallets in Indonesia has shown a significant increase, especially among the younger generation. Based on the Indonesia Fintech Trends 2024 survey from Jajak Pendapat (JakPat), 96% of respondents admitted to having or using E-Wallets. The increase in the use of E-Wallets cannot be separated from various driving factors, both from the government and the private sector. The reason is, many merchants and online stores now offer payment options via E-Wallets(Reynaldy, 2024).

In addition to E-Wallets, the JakPat survey also stated that other fintech services that have experienced a significant increase in popularity in Indonesia are paylater or payment services at a later date. This feature provides financial flexibility for consumers, especially for those who need products or services immediately but do not have sufficient funds. Furthermore, only a

small portion of respondents use other fintechs such as online loans, crowdfunding, eaggregators, and P2P lending.

The existence of fintech among students can have a positive impact on financial literacy and financial inclusion. With the ease of access offered by fintech applications, students who previously may not have had knowledge or access to formal financial services can now easily participate in the digital financial ecosystem. This can also open up opportunities for students to learn to manage their finances more wisely, from saving, investing, to understanding digital financial concepts such as digital wallets, online loans, and so on.

Students as a productive age group who are in a transitional stage of life often face challenges in managing finances efficiently. The cost of education, daily needs, and social activities often burden students in terms of financial management. However, with the presence of fintech, students now have various options to better manage and control their expenses, such as using digital payment applications for daily transactions, managing funds through investments, and utilizing more efficient payment services.

However, although fintech offers various conveniences, there are several challenges that need to be considered in its use among students. One of them is the level of understanding of the security of digital transactions and the potential risks that can arise, such as fraud or personal data leakage. In addition, there is also the problem of addiction or dependence on digital payment applications that can have an impact on student consumption habits. Therefore, it is important to conduct research on the extent to which fintech affects students' financial management patterns, as well as what factors influence the adoption and use of fintech among them.

Research conducted by(Marpaung, 2021)identified that knowledge about using fintech applications, such as OVO and GoPay, has a significant influence on financial literacy. However, this study is limited to two specific fintech platforms and only focuses on the user knowledge aspect. Then the research conducted by(Nenden Irawan & Matoati, 2021)focused on students in the Jabodetabek area, which is a metropolitan area with higher levels of technology adoption and socio-economic dynamics. The research conducted by(Riska Hidayati & Santyo Nugroho, 2023)more focused on financial management behavior in general, without specializing in students as the research population.

From the gap mentioned above, this study aims to explore how fintech affects the way students at regional universities manage their finances, especially in the management study program itself, as well as to see the potential positive and negative impacts that can arise from the use of fintech services. In addition, this study will also identify the factors that encourage students to use fintech and how they view the benefits and risks associated with using digital financial applications. The results of this study are expected to provide a deeper understanding of the role of fintech in students' financial lives and provide recommendations that can help students manage their finances more wisely and safely.

METHOD

This study uses a quantitative method with a comparative causal research type with a population of UGJ management students in Cirebon City 2024/2025 of 2,396 students. The calculation for the sample uses the Slovin formula so that a total of 342 respondents are obtained. Data acquisition was obtained from a questionnaire in the form of a Google Form distributed online, which contains several statements related to this study. The analysis method in this study uses the SEM-PLS method to analyze the causal relationship between variables.

RESULTS AND DISCUSSION

Based on the guide (Haryono, 2016), the stages in SEM-PLS analysis start from testing the measurement model (outer model), structural model (inner model), to testing the significance of the relationship path between variables.

Measurement Model Evaluation Results (Outer Model)

1. Convergent Validity

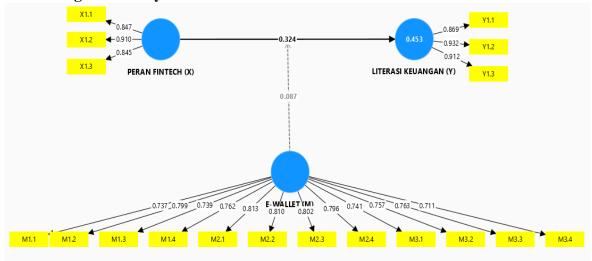


Table1. Convergent Validity Test Results

Table1. Convergent validity 1 est Results				
	E-WALLET	FINANCIAL	ROLE OF	
	(M)	LITERACY (Y)	FINTECH (X)	
M1.1	0.737			
M1.2	0.799			
M1.3	0.739			
M1.4	0.762			
M2.1	0.813			
M2.2	0.810			
M2.3	0.802			
M2.4	0.796			
M3.1	0.741			
M3.2	0.757			
M3.3	0.763			
M3.4	0.711			
X1.1			0.847	
X1.2			0.910	
X1.3			0.845	
Y1.1		0.869		
Y1.2		0.932		
Y1.3		0.912		

Source: Processed Data 2025

Based on the table above, it can be seen that the loading factor value of all statement items is > 0.50. So it can be concluded that all statement items are convergently valid.

2. Discriminant Validity

Table2. Discriminant Validity Test

	E-WALLET (M)	FINANCIAL LITERACY (Y)	ROLE OF FINTECH (X)
E-WALLET (M)	0.770		
FINANCIAL LITERACY (Y)	0.642	0.905	
ROLE OF FINTECH (X)	0.688	0.558	0.868

Source: Processed Data 2025

Based on the table above, it can be seen that the AVE root value of each variable > correlation between constructs with other constructs, so it can be concluded that all variables are declared valid discriminants.

3. Reliability Test

Table3. Reliability Test

	Cronbach's alpha	Composite reliability (rho_c)
E-WALLET (M)	0.937	0.946
FINANCIAL LITERACY (Y)	0.889	0.931
ROLE OF FINTECH (X)	0.836	0.902

Source: Processed Data 2025

Cronbach's Alpha and Composite Reliability values of all variables > 0.70, then all variables are reliable.

Measurement Model Evaluation Results (Inner Model)

1. R Square Test

Table4. R Square

	R-square
FINANCIAL LITERACY (Y)	0.453

Source: Processed Data 2025

The R Square value of Financial Literacy is 0.542, which indicates that the Role of Fintech and E-Wallet variables are able to explain the Financial Literacy variable by 45.3%.

2. Effect Size

Table5. Effect Size

Tubics: Effect Size		
	FINANCIAL LITERACY (Y)	
E-WALLET (M)	0.240	
FINANCIAL LITERACY (Y)		
ROLE OF FINTECH (X)	0.074	
E-WALLET (M) x ROLE OF FINTECH (X)	0.029	

Source: Processed Data 2025

The explanation is as follows:

- a. The influence of E-Wallet on Financial Literacy is 0.240, so the influence of E-Wallet on Financial Literacy is considered moderate.
- b. The influence of the role of Fintech on financial literacy is 0.074, so the influence of the role of Fintech on financial literacy is considered weak.
- c. The influence of the role of Fintech on financial literacy moderated by E-Wallet of 0.029 is considered weak.

3. Hypothesis Testing

Table6. Hypothesis Testing

	Path Koefisien (O)	T statistics (O/STDEV)	P values
PERAN FINTECH (X) -> LITERASI KEUANGAN			
(Y)	0,324	3,422	0,000
E-WALLET (M) x PERAN FINTECH (X) ->			
LITERASI KEUANGAN (Y)	0,087	1,877	0,030

Source: Processed Data 2025

The explanation is as follows:

- a. The path of Fintech Role -> Financial Literacy obtained a p value of 0.000 < 0.05, so H1 is accepted, namely that the Role of Fintech has an effect on financial literacy.
- b. The E-Wallet Path*The Role of Fintech -> Financial Literacy obtained a p value of 0.030 > 0.05, so H2 is rejected, namelythat the existence of E-Wallet does not significantly strengthen the relationship between the Role of Fintech and Financial Literacy.

Based on the results of the evaluation of the measurement model (outer model), this study shows that all statement items used in the analysis have met the validity and reliability criteria. The results of the convergent validity test show that all loading factor values are above 0.50, which indicates that all statement items are convergently valid. In addition, the results of the discriminant validity test show that the AVE root value of each variable is greater than the correlation between constructs, so it can be concluded that each variable in the study has good discriminant validity. In terms of reliability, the Cronbach's Alpha and Composite Reliability values for all variables are greater than 0.70, which indicates that all variables have good reliability and can be used in this study.

Furthermore, in the evaluation of the structural model (inner model), the R-Square value for the Financial Literacy variable of 0.453 indicates that the Role of Fintech and E-Wallet variables are able to explain 45.3% of the variability of Financial Literacy, while the other 54.7% is explained by other factors outside the research model. In addition, the effect size test shows that the influence of E-Wallet on Financial Literacy is 0.240 which is categorized as a moderate influence. Meanwhile, the influence of the Role of Fintech on Financial Literacy is only 0.074 and is considered weak, as is the interaction effect between the Role of Fintech and E-Wallet on Financial Literacy which is only 0.029 and is also classified as weak.

In the hypothesis test, the results of the study showed that the Role of Fintech has a significant influence on Financial Literacy with a p-value of 0.000, which is smaller than the significance limit of 0.05. This means that the first hypothesis (H1) is accepted, which indicates that the higher the role of fintech, the better a person's level of financial literacy. However, when looking at the moderation path between the Role of Fintech and E-Wallet on Financial Literacy, the p-value of 0.030 which is greater than 0.05 causes the second hypothesis (H2) to be rejected. This means that the existence of E-Wallet does not significantly strengthen the relationship between the Role of Fintech and Financial Literacy.

Based on the results of the analysis, it can be concluded that in this study, E-Wallet has a stronger influence on Financial Literacy compared to the Role of Fintech. This shows that the use of E-Wallet as a form of digital financial service contributes more to increasing financial literacy than just the role of fintech in general. Although fintech has an influence on financial literacy, its role is not strong enough when mediated by the use of E-Wallet. Therefore, this study provides insight that to increase financial literacy, strengthening the E-Wallet ecosystem can be a more effective strategy than just relying on the existence of fintech in general.

CONCLUSION

This study highlights the positive impact of fintech on students' financial literacy, though its influence remains relatively weak (effect size 0.074) due to other dominant factors. E-Wallets, however, show a stronger effect (effect size 0.240), helping students better manage digital finances. Despite this, E-Wallets do not significantly moderate the relationship between fintech use and financial literacy. Recommendations include organizing digital education programs to enhance financial literacy and encouraging responsible E-Wallet use. Academically, this research enriches financial management literature and suggests further exploration of policy impacts and fintech innovations.

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