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The Role of Financial Literacy in Mediating Financial Technology on Financial Inclusion

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Abstract

This study aims to determine the influence of financial technology on financial inclusion with financial literacy as a mediating variable. The data were collected through an online questionnaire distributed to 200 respondents who use financial technology services and reside in Jakarta. The sampling technique used was non-probability sampling with a purposive sampling approach. Data were analyzed using SEM-PLS with the SmartPLS software version 4.1.1.5. The results of this study show that: 1) financial technology has a positive and significant effect on financial literacy; 2) financial technology has a positive and significant effect on financial inclusion; 3) financial literacy has a positive and significant effect on financial inclusion; and 4) financial literacy is able to mediate the effect of financial technology on financial inclusion.

Keywords: *Financial Technology, Financial Literacy, Financial Inclusion*

Introduction

The development of financial technology (fintech) in Indonesia has grown rapidly since 2015, and by 2022 more than 20 types of digital financial services were available (Kompas.id, 2024). This growth is supported by the acceleration of digitalization in the financial sector as well as government initiatives aimed at expanding the adoption of financial technology (Farhansyah & Amna, 2025). Fintech has expanded access to financial services that are easier, faster, and more affordable, which contributes to the broader progress of financial inclusion (Vijayakumar et al., 2023).

Financial inclusion plays an essential role in national economic development because it increases access to formal financial services, reduces poverty levels, and supports economic stability (Geriadi, 2023). Other research has found that stronger financial inclusion can enhance employment opportunities and workforce quality (Song et al., 2024). However, the success of fintech in supporting financial inclusion is significantly influenced by society's level of financial literacy. A lack of financial knowledge may increase vulnerability to digital financial risks, such as fraud and illegal online lending, which continue to occur widely (Kompas.id, 2025).

Meanwhile, data from the Financial Services Authority (OJK) through the 2025 SLINK survey indicates that national financial literacy increased to 66.46%, while financial inclusion reached 80.51%. However, this improvement has not entirely matched the rapid adoption of fintech especially in Jakarta, where fintech usage is high but the level of financial literacy varies across users.

Previous studies have shown mixed results on how fintech influences financial inclusion. Dewi (2020) found that fintech negatively affects financial inclusion, while Kamara and Yu (2024) stated that fintech has not yet contributed to improving financial inclusion. In contrast, a study by Amnas et al. (2024) found that fintech has a positive influence on financial inclusion, with financial literacy acting as a key mediating factor.

These varying findings indicate the need for further research, especially within the Indonesian context. Additionally, studies that position financial literacy as a mediating variable between fintech and financial inclusion are still limited. Considering Jakarta's high fintech adoption rate and varied levels of financial literacy, it is necessary to reassess how fintech contributes to financial inclusion with financial literacy as a mediator.

Based on these considerations, this research aims to analyze the effect of financial technology on financial inclusion in Jakarta, as well as evaluate the role of financial literacy as a mediating variable.

Literature Review

Financial Technology

According to Marginingsih (2021), financial technology (fintech) is an innovation in financial services that utilizes technology to simplify transactions. Farhansyah and Amna (2025) state that fintech integrates financial services with technology, transforming traditional financial practices into more modern, faster, and efficient systems. Rusnawati et al. (2024) describe fintech as an application that combines information technology and financial services to provide simple and effective financial access. Demetrius and Yusbardini (2025) further emphasize that fintech plays a role in offering fast, efficient, and inclusive financial solutions while supporting various economic activities through technological advancements and regulatory development.

Financial Literacy

The Financial Services Authority Regulation No. 3 of 2023 defines financial literacy as an ability that includes an individual's knowledge, skills, and confidence in making appropriate financial decisions to achieve financial well-being. Geriadi et al. (2023) state that financial literacy involves understanding financial concepts and the ability to manage personal finances. Anastasya and Pamungkas (2023) define financial literacy as the individual's capability to make financial decisions, plan for the future, manage budgets, save, and handle assets and debt for both short- and long-term needs.

Financial Inclusion

The Financial Services Authority Regulation No. 3 of 2023 defines financial inclusion as the ease of access and usage of affordable, quality, and sustainable financial products and services. Nguyen and Luong (2023) emphasize that financial inclusion plays an important role in poverty reduction and economic growth. Dewi (2020) describes financial inclusion as efforts to eliminate both cost- and non-cost barriers that hinder access to formal financial services. Marginingsih (2021) highlights that financial inclusion enables individuals to access financial services based on their needs.

Financial Technology and Financial Inclusion

Dewi (2020) states that fintech provides financial service solutions for communities previously underserved by formal financial institutions, helping improve financial well-being through product and service innovation. Asif et al. (2023) add that fintech collaborates with governments on financial inclusion initiatives, such as more efficient distribution of subsidies and social assistance. The findings of Farhansyah and Amna (2025), Amnas et al. (2024), and Alkhawaldeh et al. (2023) consistently show that fintech has a positive and significant influence on financial inclusion by reducing barriers such as physical access limitations and high costs of traditional financial services.

Financial Technology and Financial Literacy

According to Lai and Langley (2023), fintech applications can make learning about finance more engaging through gamification elements. Ravikumar et al. (2022) add that fintech platforms foster community interactions where users can exchange experiences and knowledge. Mulasiwi and Julialevi (2020) found that fintech improves financial literacy by providing convenient and practical access to financial services. Similar findings from Amnas et al. (2024) and Lontchi et al. (2022) reveal that fintech positively affects financial literacy because innovative financial features encourage users to understand and adopt digital financial services.

Financial Literacy and Financial Inclusion

Goenadi et al. (2022) argue that financial literacy helps individuals understand formal financial services and avoid harmful financial practices. Financial literacy also assists individuals in evaluating financial products before making decisions. Amnas et al. (2024) found that digital financial literacy significantly influences financial inclusion because individuals with better understanding can reduce risks and make more accurate financial decisions. This finding aligns with Geriadi et al. (2023) and Alqam and Hamshari (2024), who state that higher financial knowledge encourages more active use of formal financial services.

Financial Literacy as a Mediator

Amnas et al. (2024) explain that the relationship between fintech usage and financial inclusion is mediated by digital financial literacy. Fintech not only provides access to financial services but also enhances literacy through education-based features and digital transaction experience. As financial literacy improves, individuals can better understand, select, and utilize financial services, thus supporting stronger financial inclusion outcomes.

Hypotheses

The hypotheses of this study are as follows:

H1: Financial technology positively influences financial inclusion.
H2: Financial technology positively influences financial literacy.
H3: Financial literacy positively influences financial inclusion.
H4: Financial literacy mediates the relationship between financial technology and financial inclusion.

Research Method

This research uses a quantitative approach with a cross-sectional design. The sample consists of 200 Jakarta-based fintech users recruited through purposive sampling. Data collection was conducted via Google Forms. SEM-PLS analysis was performed using SmartPLS 4.1.1.5.

Result and Discussion

Result

Table 1. Coefficient of Determination (R^2) Results

Variable	*R-square*
Financial Inclusion	0.416
Financial Literacy	0.256

The R^2 value for financial inclusion is 0.416, meaning that 41.6% of its variation is explained by the independent variables. The remaining 58.4% is influenced by other factors outside the research framework.

For financial literacy, the R^2 score is 0.256, meaning that financial technology explains 25.6% of its variation.

Table 2. Predictive Relevance (Q^2) Results

Variable	*Q-square*
Financial Inclusion	0.288
Financial Literacy	0.245

Table 2 shows that Q^2 values for both constructs are above 0, demonstrating that the model has predictive relevance and can adequately predict endogenous variables.

Table 3. Effect Size (f^2) Result

Variable	*F-square*
Financial Technology → Financial Inclusion	0.157
Financial Technology → Financial Literacy	0.343
Financial Literacy → Financial Inclusion	0.195

Table 3, the f^2 values indicate that all relationships in the model fall into the medium effect category. Financial technology has an effect size of 0.157 on financial inclusion and 0.343 on financial literacy. Meanwhile, financial literacy shows an effect size of 0.195 on financial inclusion.

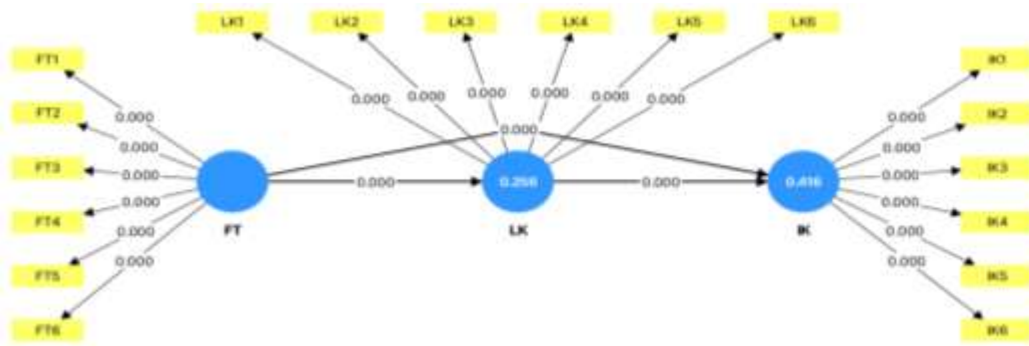
Table 4. Goodness of Fit (GoF) Model Analysis Results

	***Goodness of Fit Model* (GoF)**
SRMR	0.056

The SRMR value of 0.056 indicates an acceptable level of model fit based on SEM-PLS standards.

Table 5. Hypothesis Testing Results

Variable	Path Coefficient	*T statistic*	*P value*
Financial Technology → Financial Inclusion	0.351	5.618	0.000
Financial Technology → Financial Literacy	0.506	10.637	0.000
Financial Literacy → Financial Inclusion	0.392	5.631	0.000
Financial Technology → Financial Literacy → Financial Inclusion	0.198	4.952	0.000



Results in Table 5 indicate that all hypotheses are supported. Financial technology has significant positive effects on both financial literacy and financial inclusion. Financial literacy also significantly influences financial inclusion and partially mediates the relationship between financial technology and financial inclusion.

Discussion

Financial technology has a positive effect on financial inclusion

The results show that financial technology has a positive and significant effect on financial inclusion, with a path coefficient value of 0.351, a t-statistic of 5.618, and a p-value of 0.000. This indicates that the higher the utilization of fintech services, the easier it becomes for individuals to access formal financial services. Broader access through digital payments, electronic wallets, and contactless transactions helps individuals especially those who previously faced barriers to formal financial access conduct financial activities more easily and efficiently.

Financial technology has a positive effect on financial literacy

The study also found that financial technology has a positive and significant effect on financial literacy, with a path coefficient value of 0.506, a t-statistic of 10.637, and a p-value of 0.000. Features commonly available in fintech applications, such as transaction records, balance monitoring, bill reminders, and budgeting tools, allow users to become more accustomed to managing daily financial activities. Therefore, fintech functions not only as a transaction platform but also as a tool that helps improve financial understanding and competence.

Financial literacy has a positive effect on financial inclusion

Financial literacy is proven to have a positive and significant effect on financial inclusion, as indicated by a path coefficient value of 0.392, a t-statistic of 5.631, and a p-value of 0.000. Individuals with higher financial knowledge tend to be more confident and capable of using various financial services, both conventional and digital. Skills such as budgeting, saving, and understanding financial risks encourage greater engagement with formal financial systems.

Financial literacy mediates the relationship between financial technology and financial inclusion

Furthermore, financial literacy is found to partially mediate the effect of financial technology on financial inclusion, with a path coefficient value of 0.198, a t-statistic of 4.952, and a p-value of 0.000. This means that the use of fintech can improve users' financial knowledge, and the improvement in financial literacy strengthens their ability to utilize formal financial services. In other words, fintech contributes to financial inclusion not only by increasing accessibility but also by enhancing the user's financial capability.

Conclusion and Suggestion

Conclusion

Based on the analysis conducted in this study, the following conclusions can be drawn:

1. There is a positive and significant effect of financial technology on financial inclusion.
2. There is a positive and significant effect of financial technology on financial literacy.
3. There is a positive and significant effect of financial literacy on financial inclusion.
4. Financial literacy is able to mediate the effect of financial technology on financial inclusion.

Suggestion

Based on the results of this study, several suggestions can be considered for future research. First, future studies are recommended to expand the research area to include respondents from other regions, so that the findings can better represent the conditions of fintech users on a broader scale. In addition, future research may consider adding more independent variables to strengthen the model's explanatory power related to financial literacy and financial inclusion.

References

Alkhawaldeh, B. Y., Alhawamdeh, H., Al-Afeef, M. A. M., Abu-Alhija, S. M. M., Al_Rawashdeh, H. A. A., Mustafa, S. M. B., Abozraiq, A. M., & Almarshad, M. (n.d.). Mediating Effect of Financial Behaviour on the Influence of Financial Literacy and Financial Technology on Financial Inclusion Development in Jordanian MSMEs. *Journal of Hunan University Natural Sciences*, *50*(3), 95-108. https://doi.org/10.55463/issn.1674-2974.50.3.10

Alqam, M. A., & Hamshari, Y. M. (2024). The Impact of Financial Literacy on Financial Inclusion for Financial Well-being of Youth: Evidence from Jordan. *Discover Sustainability*, *5*(1), 1-21. https://doi.org/10.1007/s43621-024-00704-6

Amnas, M. B., Selvam, M., & Parayitam, S. (2024). FinTech and Financial Inclusion: Exploring the Mediating Role of Digital Financial Literacy and the Moderating Influence of Perceived Regulatory Support. *Journal of Risk and Financial Management*, *17*(3), 1-20. https://doi.org/10.3390/jrfm17030108

Anastasya, A., & Pamungkas, A. S. (2023). Pengaruh Financial Literacy, Financial Attitude, dan Self Control terhadap Saving Behavior. *Jurnal Manajerial dan Kewirausahaan*, *5*(2), 343-352. https://doi.org/10.24912/jmk.v5i2.23403

Asif, M., Khan, M. N., Tiwari, S., Wani, S. K., & Alam, F. (2023). The Impact of Fintech and Digital Financial Services on Financial Inclusion in India. *ournal of Risk and Financial Management*, *16*(2), 1-12. https://doi.org/10.3390/jrfm16020122

Demetrius, F., & Yusbardini. (2025). Pengaruh Literasi Keuangan dan Teknologi Keuangan terhadap Kinerja UMKM. *Jurnal Manajerial Dan Kewirausahaan*, *7*(1), 325-333. https://doi.org/10.24912/jmk.v7i1.33012

Dewi, M. A. (2020). Dampak Fintech Terhadap Perkembangan Inklusi Keuangan Pada UMKM Di Jawa Timur. *Gorontalo Accounting Journal*, *3*(2), 68-83.

Farhansyah, I., & Amna, L. S. (2025). Pengaruh Literasi Keuangan dan Financial Technology Terhadap Inklusi Keuangan. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi)*, *11*(2), 723-735

Geriadi, M. A. D., Sawitri, N. P. Y. R., Wijaya, B. A., & Putri, I. G. A. P. T. (2023). Pengaruh Literasi Keuangan Terhadap Inklusi Keuangan Melalui Financial Technology. *Jurnal Studi Manajemen Dan Bisnis*, *10*(2), 178-187. https://doi.org/10.21107/jsmb.v10i2.23401

Goenadi, G. F., Murhadi, W. R., & Ernawati, E. (2022). The Influence Of Financial Literacy On Financial Inclusion: Social Capital As Mediating Variable. *Media Ekonomi dan Manajemen*, *37*(2), 195-209. http://dx.doi.org/10.24856/mem.v37i2.2738

Kamara, A. K., & Yu, B. (2024). The Impact of FinTech Adoption on Traditional Financial Inclusion in Sub-Saharan Africa. *Risks*, *12*(7), 1-19. https://doi.org/10.3390/risks12070115

Kompas.id. (2024). Pertumbuhan dan Peluang Fintech di Indonesia. *Kompaspedia*. https://kompaspedia.kompas.id/baca/paparan-topik/pertumbuhan-dan-peluang-fintech-di-indonesia?track_source=kompaspedia-paywall&track_medium=login-paywall&track_content=https://kompaspedia.kompas.id/baca/paparan-topik/pertumbuhan-dan-peluang-fintech-di-indo

Kompas.id. (2025). Tingkat Literasi dan Inklusi Keuangan Masyarakat 2025 Meningkat. *Kompas.id*. https://www.kompas.id/artikel/tingkat-literasi-dan-inklusi-keuangan-masyarakat-2025-meningkat

Lai, K. P.Y. P. Y., & Langley, P. (2024). Playful finance: Gamification and intermediation in FinTech economies. *Geoforum*, 1-12. https://doi.org/10.1016/j.geoforum.2023.103848

Lontchi, C. B., Yang, B., & Shuaib, K. M. (2023). Effect of Financial Technology on SMEs Performance in Cameroon amid COVID-19 Recovery: The Mediating Effect of Financial Literacy. *Sustainability*, *15*(3), 1-15. https://doi.org/10.3390/su15032171

Marginingsih, R. (2021). Financial Technology (Fintech) Dalam Inklusi Keuangan Nasional di Masa Pandemi Covid-19. *Moneter: Jurnal Akuntansi dan Keuangan*, *8*(1), 56-64.

Mulasiwi, C. M., & Julialevi, K. O. (2020). Optimalisasi Financial Teknologi (Fintech) Terhadap Peningkatan Literasi dan Inklusi Keuangan Usaha Menengah Purwokerto. *Performance: Jurnal Personalia, Financial, Operasional, Marketing dan Sistem Informasi*, *27*(1), 12-20.

Nguyen, T. A. N., & Luong, T. T. H. (2023). The Determinants of Financial Inclusion in Vietnam: A Demand-Side Approach. *SAGE Open*, *13*(4), 1-12. https://doi.org/10.1177/21582440231210639

Otoritas Jasa Keuangan Republik Indonesia. (2023). Peraturan Otoritas Jasa Keuangan Nomor 3 Tahun 2023 tentang Peningkatan Literasi dan Inklusi Keuangan di Sektor Jasa Keuangan bagi Konsumen dan Masyarakat. 1-29.

Rusnawati, Farild, M., & Indriyani, E. (2022). The Fintech E-Payment: The Impact to Financial Behavior. *LAA MAISYIR: Jurnal Ekonomi Islam*, *9*(1), 20-32. https://doi.org/10.24252/lamaisyir.v9i1.23793

Song, X., Li, J., & Wu, X. (2024). Financial Inclusion, Education, and Employment: Empirical Evidence from 101 Countries. *Humanities & Social Sciences Communications*, *11*(1), 1-11. https://doi.org/10.1057/s41599-024-02630-4

Vijayakumar, B. S., Perdana, A., & Kulkarni, M. S. (2023). Exploring the Synergy Between Financial Technologies and Financial Inclusion: What We Know and Where We Should Be Heading? *Pacific Asia Journal of the Association for Information Systems*, *15*(1), 87–126. https://doi.org/10.17705/1pais.15104