

The Role of Digital Wallets in Enhancing Financial Inclusion and The Quality of Financial Management: A Case Study of a Secondary City in East Indonesia

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ABSTRACT

This study aims to analyse the impact of digital wallet platform usage on financial inclusion and financial management among communities in Eastern Indonesia. The rapidly evolving digital financial transformation has altered people's behaviour in accessing and utilising formal financial services. This study employs a quantitative approach using a survey method targeting digital wallet users. The data were analysed using Structural Equation Modelling–Partial Least Squares (SEM-PLS). The results indicate that the use of digital wallets has a positive and significant effect on financial inclusion. Financial inclusion was also found to have a positive and significant effect on financial management. Furthermore, the use of digital wallets has a direct, positive, and significant effect on financial management. These findings suggest that the utilisation of digital wallet technology not only enhances public access to formal financial services but also promotes more structured and effective financial management. This study makes an empirical contribution to the digital finance literature by affirming the strategic role of digital wallets in strengthening financial inclusion and improving the quality of household financial management in Eastern Indonesia.

Keywords: digital wallets, financial inclusion, financial management, SEM-PLS, Eastern Indonesia

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I. INTRODUCTION

The development of digital financial technology has brought about significant changes to the financial system, particularly in developing countries. One innovation experiencing rapid growth is digital wallets, which are technology-based platforms that enable users to make payments, transfer funds and manage their finances via mobile devices. The presence of digital wallets is seen as capable of improving transaction efficiency, reducing costs, and expanding public access to formal financial services (Fadhilah, 2025).

In the context of economic development, digital wallets are often viewed as a key instrument for promoting financial inclusion. Financial inclusion refers to the availability and use of affordable, secure, and appropriate formal financial services that meet the needs of the public, including payment, savings, and money transfer services (Demirgüç-Kunt et al, 2021). Various studies indicate that the use of digital financial services can enhance financial inclusion by reducing geographical and administrative barriers, particularly for communities previously unreached by conventional banking services (Dwika & Naim, 2025).

Although global financial inclusion rates show an upward trend, disparities persist across regions and types of cities. Most empirical research on digital wallets and financial inclusion remains focused on major cities and metropolitan centres, which generally possess better financial infrastructure and higher levels of digital literacy (Salman et al., 2024). Consequently, understanding of the role of digital wallets in driving financial inclusion in secondary cities in developing countries remains limited, including in eastern Indonesia.

In addition to expanding access to financial services, recent literature emphasises the importance of the quality of financial management as one of the primary objectives of financial system development. The quality of financial management reflects an individual's ability to plan, control, and monitor personal finances effectively, such as in budgeting, saving, and expenditure management (Rieger, 2020). Low quality of financial management is often associated with financial vulnerability, household economic instability, and low financial well-being

This research gap is becoming increasingly relevant in the context of medium-sized cities in eastern Indonesia, such as Ambon. As a secondary city, Ambon has seen fairly rapid growth in the use of digital wallets; however, the rate of adoption and utilisation is not yet uniform across all sections of society. This situation makes

Ambon an important empirical context for examining the extent to which digital wallets can promote financial inclusion and improve the quality of household financial management outside major cities.

Based on the above, this study aims to analyse the role of digital wallets in promoting financial inclusion and the quality of household financial management, with financial inclusion serving as the mediating variable. This study utilises survey data from 300 respondents in Ambon City and is analysed using the Structural Equation Modelling–Partial Least Squares (SEM-PLS) approach. It is hoped that the findings of this study will provide an empirical contribution to the literature on digital finance and serve as a basis for formulating policies and strategies for the development of more inclusive digital financial services in medium-sized cities in developing countries.

II. THEORY

A digital wallet (or e-wallet) is a financial technology (fintech)-based application or system that enables users to store funds, make payments, receive transfers, purchase products or services, and manage financial transactions digitally via electronic devices such as smartphones (Deepak & Himanshu, 2019). The use of e-wallets enhances transaction efficiency, reduces reliance on cash, and accelerates the penetration of digital financial inclusion (Khando & Islam, 2023). In Indonesia, digital wallets such as DANA, GoPay, OVO, ShopeePay, LinkAja, and i.Saku have become an integral part of the national payment ecosystem (Pulungan et al., 2023).

Various studies indicate that the use of digital wallets is influenced by factors such as ease of use, security, incentives, social influence, habits, service quality, and technological innovation (Sahabuddin et al., 2025). Ease of use and security are the primary factors determining user trust, whilst incentives and social influence drive accelerated adoption, particularly among urban and semi-urban populations. Innovation and service quality also play a crucial role in sustaining long-term usage.

In the context of developing countries, digital wallets serve not only as a payment tool but also as an initial means for the public to engage with the formal financial system. Consequently, digital wallets hold significant potential in supporting the financial inclusion agenda, particularly in major economic hubs.

Financial inclusion is defined as a state in which individuals and businesses have access to, can afford, and are able to use formal financial services on a sustainable basis. Financial inclusion is a key priority in economic development as it contributes to poverty reduction, improved well-being, and financial system stability (Demirgüç-Kunt et al., 2021).

The dimensions of financial inclusion encompass the accessibility of financial services, the affordability of costs, the level of usage of financial products, and the sustainability of usage in the long term. Digital technology, particularly digital financial services, is considered capable of overcoming the geographical and structural barriers that have hitherto hindered financial inclusion in urban areas.

Several studies have found that digital financial services significantly increase levels of financial inclusion, particularly in developing countries and regions with limited infrastructure. Digitalisation enables people to access and use financial services without having to rely on the physical presence of financial institutions (Dwika & Naim, 2025).

Financial management is the process of planning, organising, controlling and monitoring the financial resources held by individuals, groups or institutions to ensure the effective and efficient use of funds in order to achieve specific objectives, such as financial stability and increased income (Handayani et al., 2022)

Digital wallets, through their automatically recorded transaction features, have the potential to improve the quality of financial management by helping users monitor their income and expenditure in real time. However, these benefits are not always immediate and often depend on the user's level of financial inclusion.

III. METHODOLOGY

This study is a quantitative study using a survey approach, which aims to analyse the relationships and influences between variables based on data obtained from a sample representative of the population (Syahrizal & Jailani, 2023). The study aims to explain the causal relationship between the use of digital wallets, financial inclusion, and the quality of financial management.

The population in this study consists of residents of Ambon City who have used digital wallets in their daily financial activities. The sampling technique employed purposive sampling, with the following criteria: residing in Ambon City, aged at least 17 years, and having previously used a digital wallet.

The sample size comprised 300 respondents, deemed to meet the minimum requirements for Structural Equation Modelling–Partial Least Squares (SEM-PLS) analysis and sufficient to test the model involving latent constructs and mediating variables.

Data analysis in this study was conducted using the Structural Equation Modelling–Partial Least Squares (SEM-PLS) method with the aid of statistical software. This method was chosen because it is capable of testing

relationships between latent variables simultaneously, including mediating relationships, and is suitable for use in studies with complex models and survey data.

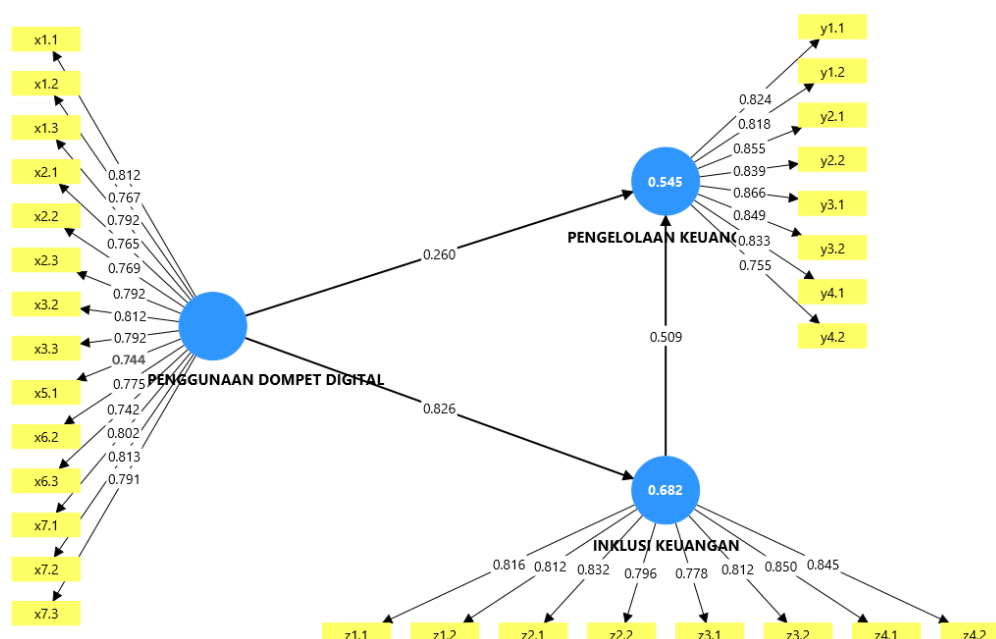
IV. RESULT

This study involved 300 respondents from the community of Ambon City, the majority of whom were women (63.33%). The majority of respondents were in the 22–26 age group (50.66%), followed by those aged 17–21 (35.33%). Meanwhile, respondents aged 27–29 years (7.33%), 30–40 years (5.33%) and over 40 years accounted for a relatively small proportion, namely 1.33%.

Referring to the guidelines for evaluating measurement models in SEM-PLS analysis, the construct reliability and validity in this study were evaluated using item loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) for each construct. The analysis results indicate that all research constructs possess an acceptable level of reliability. The lowest values for item loadings, CR, and AVE were recorded at 0.742, 0.942, and 0.605 respectively, indicating adequate internal consistency of the constructs. All item loading and Composite Reliability values were above the minimum threshold of 0.70, as recommended in the SEM-PLS literature. Furthermore, the Average Variance Extracted (AVE) values for each construct also exceeded the threshold of 0.50, thereby meeting the criteria for convergent validity for single-level reflective constructs.

Technological developments over the past decade have transformed various aspects of life, including the financial sector. One form of innovation resulting from progress in the financial sector is the digital wallet, particularly as it is so easy to use—simply via a mobile phone. Mobile-based digital wallet platforms have captured users' attention, and these effective services have replaced the use of traditional cash for carrying out everyday financial transactions. Using digital wallets empowers users to carry out financial transactions with ease (Bailey et al, 2022; Changchit et al, 2024). The results of this study indicate that the sample of the population in Eastern Indonesia considers that ease of use, security, social influence, services and innovation influence the intention to use digital wallets.

The research findings indicate that the use of digital wallets has a positive and significant impact on financial inclusion (t-statistic = 16.430; $p < 0.000$). These findings suggest that the higher the level of utilisation of digital wallet platforms, the greater the public's engagement with the formal financial system in Eastern Indonesia. Ease of use, technological accessibility, and transaction flexibility enable the public to carry out financial activities more practically without the limitations of conventional banking infrastructure. Furthermore, security aspects strengthen user confidence in digital payment systems, thereby encouraging the sustainable use of financial services. Incentives offered by the platforms also enhance the appeal of usage, particularly among younger age groups, who dominated the respondent characteristics in this study. These conditions indicate that digital wallets function as a strategic instrument in expanding public access to and participation in financial services in Eastern Indonesia.



Picture 1. Result Smart PLS

Furthermore, financial inclusion has been shown to have a positive and significant impact on financial management (t-statistic = 5.956; $p < 0.000$). This implies that increased access to and use of formal financial services is accompanied by an improvement in the quality of individual financial management. Access to financial services enables people to manage their income and expenditure in a more controlled manner, record transactions, and formulate more systematic financial planning. In the context of respondents who are predominantly from the young working-age group, ease of access to digital financial services helps them monitor cash flow more effectively and encourages more rational financial decision-making. These findings confirm that financial inclusion not only expands access but also improves the quality of financial behaviour.

In addition to the indirect influence via financial inclusion, the use of digital wallets was also found to have a direct and significant impact on financial management (t-statistic = 5.367; $p < 0.001$). These results indicate that the intensity of digital platform usage in daily activities contributes to improved control and discipline in financial management. Real-time transaction history features allow users to monitor incoming and outgoing funds transparently, whilst automatic recording, transaction categorisation, and payment reminders support more structured financial planning. Thus, digital wallets serve not only as a payment tool but also as an effective financial management instrument.

Overall, the findings of this study confirm that the use of digital wallets plays a strategic role in enhancing financial inclusion and the quality of financial management among communities in Eastern Indonesia. These results reinforce the argument that digital transformation in the financial sector impacts not only the expansion of service access but also the enhancement of individuals' capacity to manage their finances more efficiently and responsibly.

V. CONCLUSION

This study aims to analyse the impact of digital wallet usage on financial inclusion and financial management among communities in Eastern Indonesia using the SEM-PLS approach. The results indicate that the use of digital wallets has a positive and significant impact on financial inclusion. These findings suggest that the higher the level of adoption and utilisation of digital wallets, the greater the community's engagement with the formal financial system.

Furthermore, financial inclusion was found to have a positive and significant effect on financial management. This suggests that access to and utilisation of formal financial services encourage individuals to manage their income, expenditure, and financial planning in a more structured manner. Moreover, the use of digital wallets also has a direct, positive, and significant impact on financial management. Thus, digital wallets serve not only as a transaction tool but also as an instrument that supports improvements in the quality of the public's financial management. Overall, the results of this study confirm that digital financial transformation plays a strategic role in expanding financial inclusion whilst simultaneously enhancing the quality of financial management among the public in

REFERENCES

- [1] Brawijaya, U. (2025). Digitalisasi sistem pembayaran dan dampaknya terhadap inklusi keuangan di Indonesia. 02, 13–18.
- [2] Changchit, C., & Cutshall, R. (2024). Unveiling the Path to Mobile Payment Adoption : Insights from Thai Consumers.
- [3] Deepak, C., & Himanshu, J. (2019). Consumer attitude and intention to adopt mobile wallet in India – An empirical study. *International Journal of Bank Marketing*, 37(7). <https://www.emerald.com/ijbm/article-abstract/37/7/1590/109481/Consumer-attitude-and-intention-to-adopt-mobile?redirectedFrom=fulltext>
- [4] Dwika, I., & Indonesia, B. (2025). DIGITALISASI LAYANAN KEUANGAN : FINTECH SEBAGAI. 1(4), 189–200.
- [5] Handayani, M. A., Suwarni, E., Fernando, Y., Fitri, F., Saputra, F. E., & Candra, A. (2022). Pengelolaan Keuangan Bisnis Dan Umkm Di Desa Balairejo. *Suluh Abdi*, 4(1), 1. <https://doi.org/10.32502/sa.v4i1.4365>
- [6] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- [7] Inclusion, F., & Payments, D. (2021). Asli Demirgüç-Kunt, Leora Klapper, Dorothe Singer, and Saniya Ansar.
- [8] Khando, K., & Islam, M. S. (2023). The Emerging Technologies of Digital Payments and Associated Challenges : A Systematic Literature Review.
- [9] Matar, A., & Nader, A. (2025). Journal of Open Innovation : Technology , Market , and Complexity The mediating influence of perceived usefulness on consumer behaviour towards driving e-wallet adoption in Jordan. 11(June), 0–3.
- [10] Prastika, A. Y., Kadamingsih, A., Semarang, K., & Tengah, J. (2025). Kontribusi Literasi Keuangan , Inklusi Keuangan , dan Teknologi Finansial (Fintech) Pada Perilaku Manajemen Keuangan Mahasiswa. 5(1), 64–76.
- [11] Pulungan, F. A., Novita, H., Sitorus, S., & Samora, R. (2023). Increasing the Use of Electronic Money Transactions (E-Money) in Indonesian Society Peningkatan Penggunaan Transaksi Uang Elektronik (E-Money) pada Masyarakat Indonesia. 1(2), 59–70.
- [12] Rieger, M. O. (2020). How to Measure Financial Literacy ? <https://doi.org/10.3390/jrfm13120324>
- [13] Ringle, C. M., & Sarstedt, M. (n.d.). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R.
- [14] Romansyah Sahabuddin, azlan ashari, sweietha manggarani, fitri aulia ramadani, legistha meidy astuty, athira purnama. (2025). PENGARUH KEMUDAHAN, KEAMANAN, PROMOSI, DAN KEPERCAYAAN PENGGUNAAN DOMPET DIGITAL DI

- KALANGAN MASYARAKAT. Jurnal Rumpun Manajemen Dan Ekonomi, 2(3), 409–420. <https://ejurnal.kampusakademik.co.id/index.php/jrme/article/view/4536/4008>
- [15] Salman, M., & Rauf, N. (2024). Unlocking financial inclusion and economic empowerment in rural Pakistan : The interplay of financial literacy and infrastructure development in the impact of digital wallets. 3, 141–160.
- [16] Syahrizal, H., & Jailani, M. S. (2023). Jenis-Jenis Penelitian Dalam Penelitian Kuantitatif dan Kualitatif. 1, 13–23.
- [17] Yue, L. (2025). A Systematic Review of Research on Digital Mobile Payment A Systematic Review of Research on Digital Mobile. Telematics and Informatics, 102345. <https://doi.org/10.1016/j.tele.2025.102345>