



E-Wallet Integration with Banking Services: Implications for Financial Inclusion

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Abstract

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The rapid development of financial technology has significantly transformed the global financial landscape, particularly through the emergence of electronic wallets and digital payment systems. The integration of electronic wallets with banking services has become an important mechanism for expanding financial service access and improving financial inclusion, especially in developing economies. This study aims to examine the role of electronic wallet integration with banking services in enhancing financial inclusion. The study employs a systematic literature review method to analyze peer reviewed academic publications discussing digital payments, financial technology, and financial inclusion. The findings indicate that integrated digital financial services improve accessibility, efficiency, and convenience in financial transactions, allowing individuals to perform payments, transfers, and other financial activities without relying on traditional banking infrastructure. In addition, electronic wallet integration supports financial participation among underserved populations and promotes economic empowerment. However, several challenges remain, including digital literacy limitations, cybersecurity risks, and regulatory constraints. Strengthening digital infrastructure, supportive regulations, and financial education is essential to maximize the benefits of integrated digital financial services.

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1. Introduction

The development of financial technology (FinTech) has brought major changes to the global financial system, particularly through the rapid expansion of digital payment solutions such as electronic wallets (e-wallets). These technologies allow financial transactions to be conducted electronically using mobile devices, offering a more efficient and convenient alternative to conventional banking services. As digital transactions become increasingly common, the integration of e-wallet platforms with formal banking services has attracted growing attention as a strategy to broaden access to financial systems, especially in developing countries. Digital financial services are able to reduce transaction costs, increase operational efficiency, and enable individuals who previously lacked access to formal financial institutions to participate in financial activities more easily (Shaikh et al., 2023; Zuasnábar & Hidalgo, 2023).

Financial inclusion refers to the ability of individuals and businesses to access affordable and appropriate financial services within the formal financial system. Although technological innovation in the financial sector has advanced rapidly, a significant portion of the global population still experiences limited access to banking services. Digital financial platforms such as mobile banking, e-wallet applications, and online payment systems have emerged as alternative solutions to address this challenge. By allowing users to conduct payments, transfers, and savings digitally, these technologies reduce the need for physical bank branches and expand participation in financial systems (Setiawan et al., 2023; Ly, 2024).

The connection between e-wallet platforms and banking infrastructure is considered an essential component in the development of a modern digital financial ecosystem. Through such integration, users are able to link their bank accounts with digital wallet applications, enabling seamless financial activities such as instant transfers, bill payments, and online purchases. This integration not only enhances the functionality of digital wallets but also encourages individuals who previously had limited interaction with financial institutions to engage with the formal banking sector. Several studies indicate that digital payment systems significantly increase access to financial services in areas where traditional banking infrastructure is limited (Shaikh et al., 2023).

In addition to improving financial accessibility, integrated digital payment services can contribute to broader economic empowerment. Convenient and secure digital financial platforms enable individuals to manage savings, access financial products, and participate in digital commerce more effectively. However, despite these advantages, challenges such as limited digital literacy, cybersecurity threats, and regulatory barriers may slow the adoption of integrated financial technologies. Therefore, examining the relationship between e-wallet integration and financial inclusion is important for policymakers, financial institutions, and technology providers seeking to develop inclusive and sustainable financial systems (Kodongo, 2024).

2. Literature Review

The advancement of financial technology has significantly influenced the structure of digital payment systems worldwide. One of the most notable innovations in the FinTech industry is the development of electronic wallet services that allow users to store funds and conduct transactions electronically. E-wallets simplify financial activities by providing faster and more convenient payment methods compared to traditional transaction systems. Previous studies suggest that the integration of digital payment platforms with banking infrastructure enhances both efficiency and accessibility in financial services, particularly for users who rely heavily on mobile devices for daily financial transactions. As a result, digital payment technologies are increasingly contributing to the modernization of financial systems across both developed and developing economies (Thakor, 2020; Ozili, 2021).

Another important aspect discussed in the literature is the role of digital financial services in improving financial inclusion. Traditional banking systems often present barriers such as high costs, geographical limitations, and limited infrastructure. Digital financial technologies offer alternative mechanisms that allow individuals to access financial services through mobile platforms without the need to physically visit bank branches. By providing affordable and easily accessible financial tools, digital payment technologies enable underserved communities to carry out essential financial activities such as payments, transfers, and savings. Empirical research shows that mobile-based financial services have significantly expanded financial access among previously unbanked populations (Sahay et al., 2020; Demirgüç-Kunt et al., 2022).

Furthermore, the integration between digital wallets and banking institutions enhances interoperability within financial systems. This connectivity allows financial institutions and fintech service providers to collaborate in delivering more efficient and user-friendly financial services. By linking bank accounts directly to e-wallet applications, users can perform financial transactions more smoothly and efficiently. Such integration not only strengthens the functionality of digital financial platforms but also encourages individuals who were previously excluded from the formal financial system to engage with regulated financial institutions. Consequently, integrated digital financial services have the potential to support economic participation and strengthen financial empowerment (Kou et al., 2021).

3. Methods

This research applies a Systematic Literature Review (SLR) approach to examine the relationship between e-wallet integration with banking services and its impact on financial inclusion. The SLR method is widely used in academic research to systematically collect, evaluate, and synthesize findings from existing studies related to a particular topic. By using this method, the study aims to provide a comprehensive overview of theoretical perspectives and empirical evidence regarding the role of digital financial technologies in expanding financial access.

The data used in this study were obtained from peer-reviewed academic publications indexed in Google Scholar and several reputable academic databases. The literature search focused on research discussing financial technology, digital payment systems, e-wallets, banking integration, and financial inclusion. A set of

relevant keywords was used to identify appropriate journal articles related to these topics. Only academic publications that met specific inclusion criteria such as peer-reviewed journal articles and recognized scholarly publications were included in the review to ensure the reliability and credibility of the sources. Articles that were not directly relevant to the research topic or lacked academic rigor were excluded from the analysis.

Following the literature selection process, the selected studies were examined using a qualitative synthesis approach. Each article was analyzed to extract key information including research objectives, methodologies, key findings, and implications related to the integration of e-wallet platforms with banking services. The collected information was then categorized and compared to identify common patterns, research trends, and gaps within the existing literature. This process allows the study to provide a clearer understanding of how integrated digital financial services contribute to improving financial inclusion and expanding financial accessibility for underserved populations.

4. Results and Discussion

The findings of the systematic literature review indicate that the integration of e-wallet platforms with banking services plays a significant role in expanding financial inclusion. The literature consistently demonstrates that digital financial technologies have changed the way individuals interact with financial institutions. Through mobile-based applications, e-wallet services enable users to conduct transactions quickly and conveniently, reducing reliance on traditional banking

channels. Studies conducted by Shaikh et al. (2023) and Zuasnábar and Hidalgo (2023) show that digital payment systems can significantly lower transaction costs while increasing accessibility to financial services, particularly for individuals who previously lacked access to formal banking institutions.

The literature also highlights the importance of digital financial accessibility in promoting financial inclusion. In many developing economies, individuals face challenges such as limited banking infrastructure, high service costs, and geographical barriers to financial institutions. Digital financial platforms provide alternative solutions that allow individuals to perform financial transactions remotely using mobile devices. Research by Setiawan et al. (2023) and Ly (2024) indicates that the adoption of digital financial services has contributed to the expansion of financial access among underserved populations, allowing them to participate more actively in formal financial systems.

Another important finding is that the integration between e-wallet platforms and banking systems improves interoperability in digital financial services. By linking bank accounts with digital wallet applications, users are able to conduct various financial activities such as transfers, bill payments, and online purchases more efficiently. According to Thakor (2020) and Ozili (2021), collaboration between financial institutions and fintech providers improves the efficiency of payment systems while supporting the modernization of financial services. Similarly, Kou et al. (2021) suggest that integrated digital financial services increase the usability of financial platforms and encourage wider adoption of digital payments among consumers.

In addition to improving financial accessibility, integrated digital financial services also contribute to economic empowerment. Mobile-based financial platforms provide individuals with opportunities to access a broader range of financial services beyond basic payment transactions. For example, users can develop savings habits and gain access to financial products that were previously unavailable to them. Empirical evidence from Sahay et al. (2020) and Demirgüç-Kunt et al. (2022) shows that digital financial technologies have significantly increased financial participation among unbanked populations, particularly in regions where traditional banking infrastructure remains limited.

Despite these positive outcomes, several challenges still need to be addressed to ensure the sustainability of digital financial integration. Issues such as low levels of digital literacy, cybersecurity concerns, and regulatory barriers may limit the adoption of digital financial technologies. Kodongo (2024) emphasizes that although fintech innovations offer strong potential to promote financial inclusion, effective policy frameworks and institutional support are required to ensure the security and stability of digital financial ecosystems. Therefore, successful implementation of e-wallet integration with banking systems requires cooperation among policymakers, financial institutions, and fintech companies.

Overall, the findings of this study demonstrate that integrated digital financial services contribute significantly to improving financial inclusion by enhancing accessibility, efficiency, and financial participation. The results also highlight the importance of collaboration among stakeholders in developing a sustainable and inclusive digital financial ecosystem.

5. Conclusion

The integration of e-wallet platforms with banking services represents an important advancement in the development of modern digital financial systems. The results of this study demonstrate that digital payment technologies have transformed financial transactions by providing faster, more convenient, and more accessible financial services through mobile-based platforms. By connecting bank accounts with digital wallet applications, integrated financial systems enable users to conduct various financial activities more efficiently, including payments, transfers, and online transactions.

The study also indicates that the integration of digital wallets with banking infrastructure plays an important role in promoting financial inclusion. Digital financial platforms provide alternative channels for individuals who previously faced barriers to accessing financial services due to limited infrastructure, geographical constraints, or high service costs. Through mobile-based financial services, underserved populations are able to participate more actively in the formal financial system and access broader economic opportunities.

Furthermore, integrated digital financial services support economic empowerment by encouraging financial participation, facilitating savings behavior, and improving access to financial products. Collaboration between financial institutions and fintech providers strengthens the efficiency of payment systems and enhances the development of digital financial ecosystems. Consequently, integrated financial technologies can contribute to inclusive and sustainable economic development.

However, several challenges remain in the implementation of digital financial integration. Factors such as limited digital literacy, cybersecurity risks, and regulatory complexities may hinder the widespread adoption of e-wallet technologies. Addressing these challenges requires coordinated efforts from policymakers, financial institutions, and fintech providers to develop supportive regulations, improve financial literacy, and ensure the security of digital financial services.

In conclusion, integrating e-wallet platforms with banking services has strong potential to enhance financial inclusion and expand access to financial services, particularly for underserved populations. Strengthening digital infrastructure, improving regulatory frameworks, and promoting financial education will be crucial to maximizing the benefits of digital financial technologies and building a more inclusive financial ecosystem.

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