



OPEN ACCESS

Volume: 5

Issue: 2

Month: June

Year: 2026

ISSN: 2583-7117

Published: 16.06.2026

Citation:

Himanshu Rai, Himanshi Gupta, Yogesh Sharma, Dr Richa Jain "Using FinTech Tools to Improve Financial Literacy: A Systematic Literature Review on Adoption and Challenges" International Journal of Innovations in Science Engineering and Management, vol. 5, no. 2, 2026, pp. 450-460.

DOI:

10.69968/ijsem.2026v5i2450-460



This work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Using FinTech Tools to Improve Financial Literacy: A Systematic Literature Review on Adoption and Challenges

Himanshu Rai^{1*}, Himanshi Gupta¹, Yogesh Sharma¹, Dr. Richa Jain²

¹MBA Student, Prestige Institute of Management & Research, Bhopal

²Assistant Professor, Prestige Institute of Management & Research, Bhopal

Abstract

The rapid expansion of Financial Technology (FinTech) has transformed the financial landscape by enhancing accessibility, efficiency, and financial inclusion through digital banking, mobile wallets, and Unified Payments Interface (UPI) platforms. However, the effectiveness of FinTech adoption depends significantly on users' financial and digital literacy levels. This study presents a Systematic Literature Review (SLR) of 33 scholarly articles published between 2019 and 2025 to examine the relationship between FinTech adoption, financial literacy, digital literacy, and financial inclusion, with particular emphasis on emerging economies such as India.

The review identifies three major themes: (i) adoption and utilization of FinTech tools, (ii) the impact of FinTech on financial literacy and financial behavior, and (iii) challenges affecting the effective use of digital financial services. Findings reveal that FinTech tools have significantly improved financial accessibility, reduced transaction costs, and promoted financial inclusion among diverse population groups. Financial literacy emerges as a critical determinant of adoption, influencing users' confidence, trust, decision-making ability, and responsible financial behavior. Individuals possessing higher levels of financial and digital literacy demonstrate greater readiness to adopt FinTech services and are more likely to engage in saving, investment, and effective financial management practices.

The review further highlights that vulnerable groups, including rural households, women entrepreneurs, and low-income consumers, continue to face barriers such as inadequate digital infrastructure, limited awareness, cybersecurity concerns, and socio-economic constraints. These challenges restrict the equitable benefits of digital financial innovations. The findings also indicate that sustainable FinTech adoption requires supportive regulatory frameworks, robust consumer protection mechanisms, digital education initiatives, and trust-building measures.

The study concludes that FinTech should be viewed not merely as a technological innovation but as a catalyst for financial empowerment. Integrating financial and digital literacy into FinTech ecosystems is essential for achieving inclusive and sustainable financial development. Future research should explore long-term behavioral outcomes, trust dynamics, and intergenerational patterns of digital financial adoption.

Keywords; FinTech Adoption, Financial Literacy, Digital Literacy, Financial Inclusion, Digital Financial Services, Systematic Literature Review.

INTRODUCTION

In recent years, the rapid advancement of financial technology, or FinTech, has reshaped the global financial landscape, offering innovative solutions that promise greater efficiency, accessibility, and convenience (Panos & Wilson, 2020; Morgan, 2021). This transformation is particularly significant in developing economies like India, where FinTech tools have emerged as powerful instruments for promoting financial inclusion and enhancing financial literacy (Kulshrestha, 2023; Gautam et al., 2022; Vijai, 2019). The proliferation of digital payment systems, such as the Unified Payments Interface (UPI) in India, has been pivotal in this evolution, bridging the gap for millions who were previously unbanked or underbanked (Mahesh & Bhat, 2021; Vidani, 2024; MANKAR, 2025). These technologies not only streamline transactions but also provide new avenues for individuals and micro, small, and medium enterprises (MSMEs) to engage with the formal financial system, fostering sustainable economic development (Hossain et al., 2025; Kishor et al., 2025).

Despite the promising potential of FinTech, its widespread adoption and effectiveness are not without challenges. A growing body of literature highlights that the success of these digital innovations is contingent on a parallel investment in digital financial literacy (Islam & Khan, 2024; Gupta et al., 2025; Yadav & Banerji, 2024). Individuals, particularly those in rural or low-income groups, face significant barriers to adoption, including a lack of awareness, socio-economic resistance to digital tools, and a general mistrust in technology (Hasan et al., 2023; Singh et al., 2024; Kushwaha et al., 2023). Furthermore, concerns related to cybersecurity risks and the persistent rural-urban digital divide hinder the widespread effectiveness of FinTech applications (Mandić et al., 2025). While FinTech can enhance financial well-being (Bhat et al., 2025), these barriers underscore the critical need for robust consumer protection frameworks and comprehensive financial education initiatives to build trust and ensure sustainable adoption (DANDEKAR & MISHRA, 2023; Panos & Wilson, 2020).

This paper aims to explore the multifaceted relationship between FinTech, financial literacy, and financial inclusion, drawing on a systematic review of existing literature. By synthesizing findings from various studies on the use of FinTech tools (Tullaili & Susanto, 2025), their impact on financial literacy (Yadav & Banerji, 2024), and the inherent challenges in their adoption (Mandić et al., 2025), this research will provide a comprehensive understanding of the current landscape. We argue that while FinTech offers a powerful pathway to financial empowerment, its full potential can only be realized through a holistic approach that combines technological innovation with targeted educational programs and supportive policy frameworks. This study will contribute to the ongoing discourse by highlighting key challenges and proposing a research agenda for future work aimed at maximizing the benefits of FinTech for all segments of society.

LITERATURE REVIEW

The growing body of literature on financial technology (FinTech) adoption consistently highlights its transformative role in enhancing financial inclusion, promoting digital participation, and improving financial literacy across diverse populations. Scholars argue that the increasing adoption of tools such as Unified Payments Interface (UPI), mobile wallets, and digital banking has significantly reshaped financial ecosystems, particularly in developing countries like India and other emerging

economies (Mahesh & Bhat, 2021; Vidani, 2024; Mankar, 2025).

Research demonstrates a strong link between financial literacy, digital literacy, and FinTech adoption. Panos and Wilson (2020) and Vijai (2019) emphasize that financial and digital capabilities act as enablers of responsible FinTech use, while Gautam et al. (2022) highlight how these literacies promote informed financial decision-making. Studies conducted in India and Southeast Asia (Kulshrestha, 2023; Tullaili & Susanto, 2025) suggest that digital tools provide opportunities for both individuals and small enterprises to access formal financial services, though adoption is uneven across socio-economic groups. This is supported by work from SAARJ Journal on Banking & Insurance Research (2023), which illustrates that financial literacy significantly moderates FinTech adoption in low-income groups.

A considerable number of studies focus specifically on UPI and digital payment platforms as enablers of financial inclusion. Research by Vidani (2024), Mankar (2025), and Mahesh & Bhat (2021) underscores UPI's role in bridging access gaps for unbanked populations in India. Complementary studies such as "Financial Inclusion through Digital Payments: How Technology is Bridging the Gap" and "Digital Payment Service in India: A Case Study of Unified Payment Interface" highlight UPI's efficiency, low transaction costs, and convenience as drivers of mass adoption. However, others such as "Unravelling the Dynamics: The Role of UPI in Digital Inclusion" caution that structural barriers like the rural-urban digital divide still constrain equitable impact.

Despite FinTech's potential, adoption challenges remain a recurrent theme in the literature. Several studies (Hasan et al., 2023; Singh et al., 2024; Kushwaha et al., 2023) identify a lack of awareness, mistrust in technology, and socio-economic resistance as barriers to adoption. Similarly, Mandic et al. (2025) and Gupta et al. (2025) highlight cybersecurity risks, data privacy concerns, and infrastructural deficits as critical limitations. Research specific to Indian youth (e.g., "Bridging the Gap: Examining FinTech Awareness and Adoption Challenges among Indian Youth") points to enthusiasm for digital finance but notes significant knowledge gaps. Exploratory studies also reveal the struggles of rural consumers and MSMEs in navigating digital tools, due to limited digital literacy and weak institutional support (Hossain et al., 2025; Kishor et al., 2025).

Recent studies expand the discourse by linking FinTech adoption with financial well-being and sustainable performance. Yadav and Banerji (2024) provide empirical evidence from India showing that digital financial literacy contributes positively to financial well-being. Similarly, Bhat et al. (2025) connect FinTech use with improved financial outcomes, though they stress the need for education and regulation to mitigate risks. In the context of women entrepreneurs and MSMEs, systematic reviews (e.g., “Financial Literacy and Use of FinTech in MSMEs: A Systematic Literature Analysis”; “Financial Literacy and Digital Inclusion among Women Entrepreneurs”) emphasize that digital literacy fosters competitiveness and resilience but requires supportive ecosystems.

Several bibliometric and systematic reviews (Dandekar & Mishra, 2023; Islam & Khan, 2024) have consolidated findings on the FinTech–literacy nexus. These reviews converge on three insights: (a) FinTech tools increase access to finance, (b) financial and digital literacy mediate adoption effectiveness, and (c) socio-economic and infrastructural barriers hinder sustainable outcomes. However, gaps persist in understanding long-term behavioral changes, the role of trust-building in digital adoption, and the differentiated experiences of rural versus urban populations.

Overall, the literature reveals that FinTech has strong potential to promote financial inclusion and literacy, but its benefits are unevenly distributed. UPI and mobile wallets stand out as transformative tools in India, yet challenges related to digital literacy, cybersecurity, and socio-economic divides persist. The reviewed studies collectively suggest that sustainable adoption requires not only technological innovation but also complementary efforts in financial education, regulatory frameworks, and consumer protection.

METHODOLOGY

This study adopts a **Systematic Literature Review (SLR)** approach to examine the relationship between FinTech adoption, financial literacy, financial inclusion, and digital payment systems. The review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to ensure transparency, rigor, and replicability in the selection and analysis of the literature.

Search Strategy

Relevant studies were identified through a comprehensive search of the **Google Scholar** database using combinations of the following search strings:

- FinTech tools AND financial literacy AND adoption
- Digital financial literacy AND (mobile wallets OR UPI OR “digital banking)
- Financial technology AND “financial education AND challenges
- FinTech AND financial inclusion
- Digital payments AND UPI AND banking transformation

The search was conducted to identify studies focusing on the adoption and impact of FinTech tools, including Unified Payments Interface (UPI), mobile wallets, digital banking platforms, and other technology-enabled financial services.

Inclusion and Exclusion Criteria

To ensure the quality and relevance of the selected literature, predefined inclusion and exclusion criteria were applied.

Inclusion Criteria

- Peer-reviewed journal articles.
- Conference proceedings and book chapters.
- Studies published in the English language.
- Research focusing on FinTech adoption, financial literacy, digital literacy, financial inclusion, digital payments, UPI, and related financial technologies.
- Studies providing empirical, conceptual, or review-based evidence relevant to the research objectives.

Exclusion Criteria

- PhD theses and dissertations.
- Books and unpublished manuscripts.
- Non-English publications.
- Duplicate records.
- Studies not directly related to FinTech adoption, financial literacy, or financial inclusion.

Study Selection Process

The initial search yielded 47 studies. Following the PRISMA screening process, duplicate records and studies that did not meet the inclusion criteria were removed. Titles, abstracts, and full texts were subsequently reviewed to assess relevance and methodological quality. After the screening and eligibility assessment stages, 33 studies were retained for the final review and analysis.

Data Extraction and Analysis

A structured data extraction framework was developed using Microsoft Excel to systematically organize and analyze the selected studies. Information was extracted under the different categories. The extracted data were subsequently categorized into three major themes: Financial Literacy and FinTech Adoption, FinTech and Financial Inclusion, and Digital Payments, UPI, and Banking Transformation. A thematic synthesis approach was employed to identify recurring patterns, research trends, key findings, and existing research gaps within the literature.

Research Framework

The review aims to provide a comprehensive understanding of how financial literacy influences FinTech adoption, how FinTech contributes to financial inclusion, and how digital payment innovations such as UPI are transforming the banking landscape. By synthesizing evidence from the selected studies, the review identifies emerging trends, challenges, and future research directions for academics, policymakers, and financial service providers.

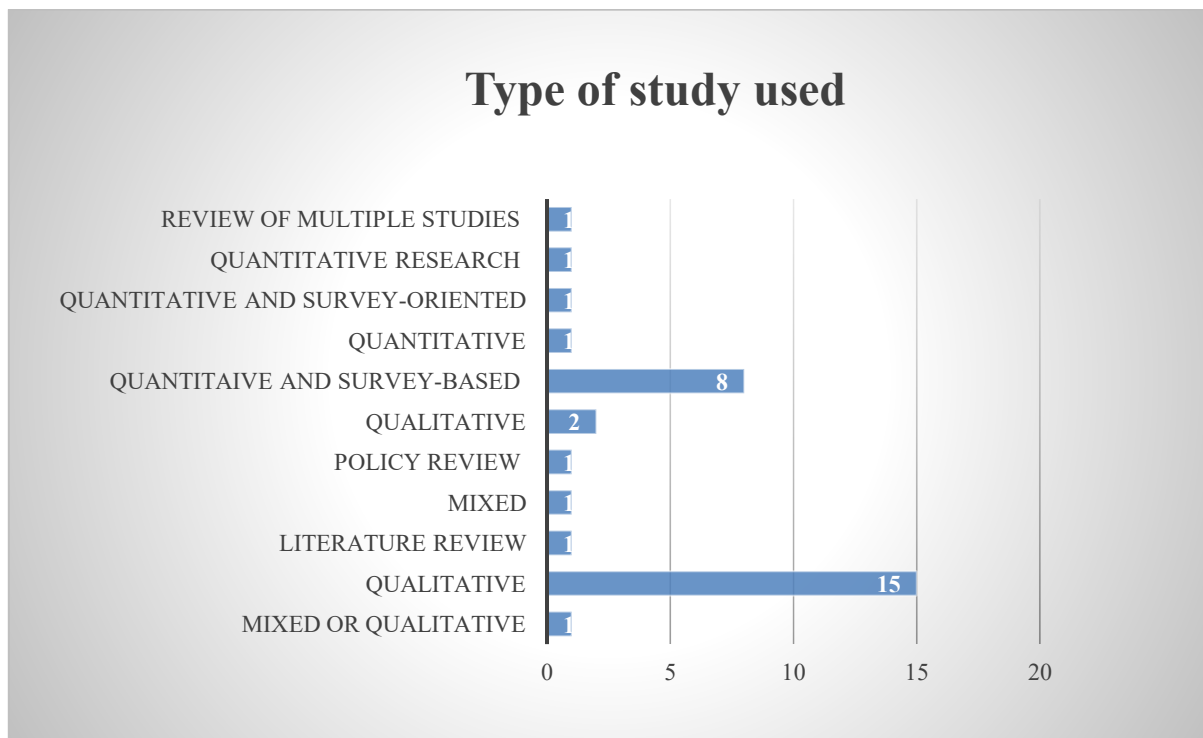


Figure 1 Type of Study used

SOURCE: Developed For the Purpose of Study

The analysis of the selected literature reveals that the majority of studies employed a quantitative and survey-based research design, accounting for 15 studies. This indicates a strong preference among researchers for empirical investigation using structured questionnaires and statistical analysis to examine financial literacy, FinTech adoption, financial inclusion, and digital payment behavior. A further 8 studies were categorized as quantitative and survey-oriented, reinforcing the dominance of quantitative methodologies in the field. Two studies utilized a mixed-method approach, combining quantitative and qualitative techniques to gain deeper insights into the research phenomenon.

The review also identified a limited number of conceptual studies, including one literature review, one policy review, and one review of multiple studies. Additionally, one study adopted a qualitative approach, focusing on exploratory understanding rather than statistical generalization. Overall, the findings demonstrate that quantitative survey-based methods remain the most widely used research approach in the domains of financial literacy, FinTech adoption, financial inclusion, and digital payments. However, the relatively low number of qualitative and mixed-method studies suggests an opportunity for future researchers to explore these areas using diverse methodological perspectives to obtain richer and more comprehensive insights.

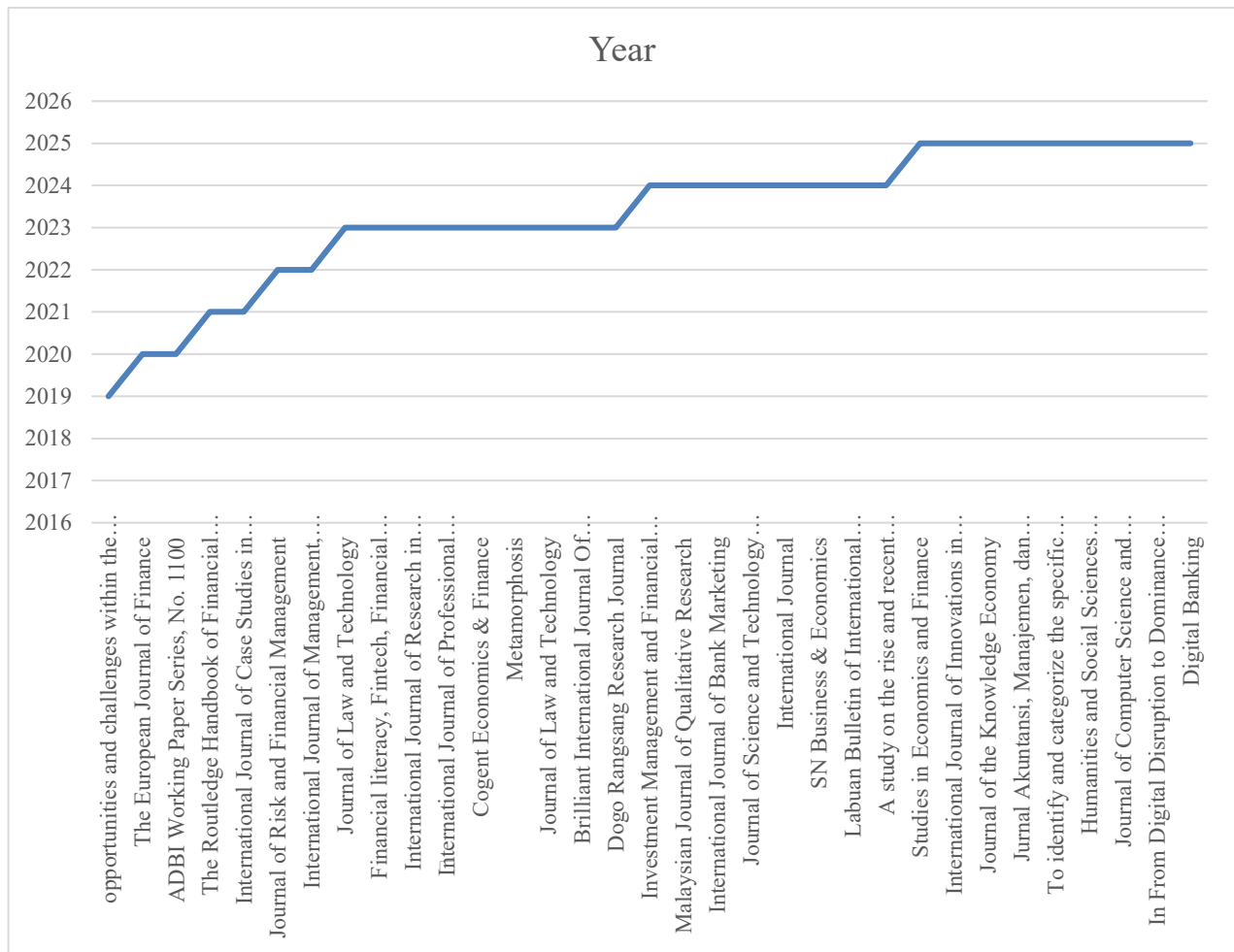


Figure 2 Publication Timeline of Reviewed Studies

SOURCE: Developed For the Purpose of Study

Publication Year Analysis

Figure 2 presents the year-wise distribution of the studies included in the systematic literature review. The selected research papers span the period from 2019 to 2025, indicating growing scholarly interest in the areas of financial literacy, FinTech adoption, financial inclusion, digital payments, and banking transformation.

The earliest studies included in the review were published in 2019, followed by a gradual increase in publications during 2020, 2021, and 2022. A noticeable rise in research output is observed from 2023 onwards, reflecting the accelerated adoption of digital financial technologies and increased academic attention toward FinTech-driven financial services.

The highest concentration of studies was recorded during 2024 and 2025, demonstrating that these topics have emerged as significant areas of contemporary research. This trend may be attributed to the rapid expansion of digital payment systems, widespread use of UPI, increasing financial inclusion initiatives, and the growing role of FinTech in transforming financial services globally.

The year-wise analysis indicates that research on financial literacy and digital financial ecosystems is relatively recent and rapidly evolving. The increasing number of publications in recent years highlights the relevance and timeliness of further investigation, particularly in developing economies such as India, where digital financial adoption continues to expand across diverse population groups.



Figure 3 Keyword Analysis

SOURCE: Developed For the Purpose of Study

Keyword Analysis

Figure 3 presents the keyword cloud generated from the selected studies included in the systematic literature review. The size of each keyword reflects its frequency of occurrence within the reviewed literature, highlighting the major themes and research focus areas.

The most prominent keywords are Financial, Digital, FinTech, and Literacy, indicating that these concepts constitute the core foundation of the existing body of research. The frequent occurrence of these terms suggests that scholars have extensively explored the relationship between financial literacy and the adoption of digital financial technologies. Other significant keywords include Financial Inclusion, Digital Payments, UPI, India, Payment Systems, Technology, and Adoption, reflecting the growing

emphasis on digital transformation within the financial sector. The presence of keywords such as Challenges, Services, Interface, and Management further indicates that researchers have examined both the opportunities and barriers associated with FinTech implementation and digital financial service utilization.

The keyword analysis demonstrates that contemporary research is primarily focused on understanding how digital technologies are reshaping financial services, promoting financial inclusion, and influencing consumer financial behavior. The prominence of India-related keywords also highlights the country's emergence as a leading case in digital payment adoption and financial technology innovation. Overall, the keyword cloud confirms that financial literacy, FinTech adoption, financial inclusion, and digital payment systems are closely interconnected research domains and continue to attract significant scholarly attention.

Table 1: Systematic Literature Review on Financial Literacy, FinTech Adoption, Financial Inclusion, and Digital Payments

Theme	Authors (Year)	Major Findings
Financial Literacy and FinTech Adoption	Islam & Khan (2024)	Financial literacy significantly influences FinTech adoption and digital financial behavior.
Financial Literacy and FinTech Adoption	Panos & Wilson (2020)	Financial knowledge improves the use of technology-enabled financial services.

Financial Literacy and FinTech Adoption	Moenjak et al. (2020)	Digital literacy enhances consumer confidence in FinTech platforms.
Financial Literacy and FinTech Adoption	Hossain et al. (2025)	Financial literacy positively impacts mobile banking and digital payment adoption.
Financial Literacy and FinTech Adoption	Morgan (2021)	Financially literate individuals exhibit greater acceptance of innovative financial products.
Financial Literacy and FinTech Adoption	Dandekar & Mishra	Financial awareness drives technology-enabled financial decision-making.
Financial Literacy and FinTech Adoption	Kamarudin et al.	Digital competencies strengthen FinTech acceptance among users.
Financial Literacy and FinTech Adoption	Hasan et al. (2023)	FinTech adoption is influenced by both financial and digital literacy levels.
Financial Literacy and FinTech Adoption	Kulshrestha (2023)	Financial literacy enhances trust and usage intentions toward FinTech services.
Financial Literacy and FinTech Adoption	Bhat et al. (2025)	Consumer knowledge significantly predicts digital financial service adoption.
Financial Literacy and FinTech Adoption	Singh et al. (2024)	Financial literacy mediates the relationship between technology readiness and FinTech usage.
Financial Literacy and FinTech Adoption	Kushwaha et al.	Digital financial awareness contributes to greater usage of online financial services.
Financial Literacy and FinTech Adoption	Gupta et al. (2025)	Financial education programs positively affect FinTech adoption behavior.
Financial Literacy and FinTech Adoption	Gautam et al. (2022)	Users with higher financial literacy demonstrate stronger digital finance engagement.
Financial Literacy and FinTech Adoption	Aggarwal et al. (2023)	Financial literacy reduces perceived risk associated with FinTech applications.
Financial Literacy and FinTech Adoption	Bhatia (2023)	Awareness and knowledge significantly influence digital financial service adoption.
Financial Literacy and FinTech Adoption	Maheshwari (2024)	Digital and financial literacy jointly impact FinTech acceptance.
Financial Literacy and FinTech Adoption	Yadav & Banerji (2024)	Financial literacy strengthens consumer confidence in digital financial ecosystems.
Financial Literacy and FinTech Adoption	Tullaili & Susanto (2025)	Financial literacy positively affects behavioral intention toward FinTech usage.
Financial Literacy and FinTech Adoption	Sugangga et al. (2023)	Literacy levels contribute significantly to adoption of financial technologies.
Financial Literacy and FinTech Adoption	Dzulkepli (2024)	Digital competence and financial knowledge jointly enhance FinTech adoption.
FinTech and Financial Inclusion	Kulshrestha (2023)	FinTech services improve access to formal financial systems and inclusion.
FinTech and Financial Inclusion	Kishor et al. (2025)	Digital financial platforms promote financial inclusion among underserved populations.
FinTech and Financial Inclusion	Mandić et al. (2025)	FinTech innovations reduce barriers to financial service accessibility.
FinTech and Financial Inclusion	Dzulkepli (2024)	Technology-driven financial solutions contribute to inclusive growth.
FinTech and Financial Inclusion	Mula (2025)	FinTech adoption supports broader participation in financial markets.
FinTech and Financial Inclusion	Mankar	Financial technology expands banking outreach and inclusion.
Digital Payments, UPI and Banking Transformation	Vijai (2019)	Digital payment systems are transforming traditional banking operations.
Digital Payments, UPI and Banking Transformation	Mahesh & Bhat (2022)	UPI has accelerated cashless transactions and customer convenience.
Digital Payments, UPI and Banking Transformation	Praveen	Digital payment adoption has increased operational efficiency in banking.
Digital Payments, UPI and Banking Transformation	Ungratwar et al. (2025)	UPI adoption has significantly influenced consumer payment behavior.
Digital Payments, UPI and Banking Transformation	Vidani (2024)	Digital payment innovations contribute to banking sector modernization.
Digital Payments, UPI and Banking Transformation	Mahesh & Bhat (2021)	UPI has emerged as a key driver of India's digital payment ecosystem.

Digital Payments, UPI and Banking Transformation	Vermani & Arora (2025)	Digital payments have accelerated banking transformation and financial accessibility.
--	------------------------	---

SOURCE: Developed For the Purpose of Study

Analysis of Table 1:

Table 1 presents a thematic review of the selected studies examining the interrelationship among financial literacy, FinTech adoption, financial inclusion, and digital payment systems. The reviewed literature can be broadly categorized into three major themes: (i) Financial Literacy and FinTech Adoption, (ii) FinTech and Financial Inclusion, and (iii) Digital Payments, UPI, and Banking Transformation.

The first theme, Financial Literacy and FinTech Adoption, represents the most extensively researched area within the reviewed literature. The findings consistently indicate that financial literacy plays a crucial role in facilitating the adoption of FinTech services. Studies conducted by Islam and Khan (2024), Panos and Wilson (2020), Morgan (2021), and Hasan et al. (2023) demonstrate that financially literate individuals are more likely to understand, trust, and utilize digital financial products effectively. Furthermore, digital literacy emerged as an equally important determinant of adoption, as users possessing stronger technological competencies exhibited greater confidence in using digital financial platforms. Research by Aggarwal et al. (2023), Bhatia (2023), and Yadav and Banerji (2024) further suggests that financial literacy reduces perceived risks associated with digital finance and enhances consumer confidence in FinTech ecosystems. Collectively, these studies establish financial and digital literacy as critical prerequisites for successful FinTech adoption.

The second theme, FinTech and Financial Inclusion, highlights the transformative potential of technology-enabled financial services in expanding access to formal financial systems. Studies by Kulshrestha (2023), Kishor et al. (2025), and Mula (2025) indicate that FinTech solutions have significantly improved financial accessibility, particularly for underserved and previously excluded populations. Digital financial platforms reduce geographical barriers, lower transaction costs, and increase the availability of financial services, thereby contributing to inclusive economic growth. Similarly, Mandić et al. (2025) emphasize that FinTech innovations can reduce obstacles to financial participation and support broader economic inclusion. However, the literature also suggests that the effectiveness of FinTech-driven inclusion depends on users'

financial capabilities, digital skills, and access to technological infrastructure.

The third theme, Digital Payments, UPI, and Banking Transformation, focuses on the rapid evolution of digital payment systems and their impact on the banking sector. The reviewed studies consistently identify Unified Payments Interface (UPI) as one of the most significant innovations within India's digital financial ecosystem. Research by Mahesh and Bhat (2021, 2022), Vidani (2024), and Ungratwar et al. (2025) highlights the role of UPI in accelerating cashless transactions, enhancing consumer convenience, and transforming traditional banking operations. The findings indicate that digital payment innovations have improved transaction efficiency, promoted financial accessibility, and encouraged the widespread adoption of digital financial services. Furthermore, Vermani and Arora (2025) argue that digital payment platforms have contributed substantially to digital inclusion by enabling seamless financial transactions across diverse population segments.

Overall, the literature demonstrates a strong and interconnected relationship among financial literacy, FinTech adoption, financial inclusion, and digital payment systems. The findings suggest that while technological innovations provide opportunities for expanding financial access and improving service delivery, their successful adoption largely depends on users' financial and digital literacy levels. The review further indicates that FinTech serves as an important mechanism for promoting financial inclusion and banking transformation; however, challenges related to digital awareness, infrastructure, cybersecurity, and consumer trust continue to limit its full potential. These observations underscore the need for integrated policy interventions that combine technological innovation with financial education and digital empowerment initiatives to achieve sustainable and inclusive financial development.

RESULTS OF THE STUDY

The systematic literature review of 33 studies provides comprehensive insights into the evolving relationship between FinTech adoption, financial literacy, financial inclusion, and digital payment systems. The findings indicate that FinTech has emerged as a significant catalyst for transforming financial ecosystems by enhancing accessibility, efficiency, and convenience in financial

transactions. Digital financial innovations, particularly Unified Payments Interface (UPI), mobile wallets, and digital banking platforms, have substantially expanded access to financial services and facilitated greater participation in the formal financial sector. Studies by Mahesh and Bhat (2021), Vidani (2024), and Mankar (2025) highlight the pivotal role of UPI in promoting digital transactions and bridging financial access gaps, particularly among previously underserved populations. These innovations have contributed significantly to the advancement of financial inclusion by reducing transaction costs, improving service delivery, and increasing financial accessibility.

A recurring theme across the reviewed literature is the critical role of financial literacy and digital literacy in influencing FinTech adoption. The findings consistently demonstrate that individuals possessing higher levels of financial knowledge and digital competence are more likely to adopt and effectively utilize digital financial services. Financial literacy serves not only as a direct predictor of FinTech adoption but also as a mediating factor that enhances users' ability to make informed financial decisions and manage digital financial risks. Studies by Panos and Wilson (2020), Islam and Khan (2024), and Yadav and Banerji (2024) emphasize that financially literate individuals exhibit greater confidence in using digital financial platforms and are better equipped to evaluate the benefits and risks associated with FinTech products. Conversely, low-income households, rural consumers, and digitally marginalized groups continue to face significant barriers due to inadequate financial awareness, limited digital skills, and lack of confidence in technology-driven financial services.

Despite the positive contribution of FinTech to financial inclusion, several challenges continue to hinder its sustainable adoption. The review identifies persistent disparities between urban and rural populations in terms of digital infrastructure, internet accessibility, and technological readiness. Socio-economic constraints, resistance to technological change, and limited trust in digital financial systems further restrict adoption among vulnerable groups. In addition, cybersecurity concerns, data privacy issues, and the increasing incidence of digital fraud have emerged as major deterrents to widespread FinTech utilization. Mandić et al. (2025) and other studies underscore the importance of robust consumer protection mechanisms, regulatory oversight, and trust-building initiatives to ensure

the secure and sustainable expansion of digital financial services.

The reviewed studies also reveal a positive relationship between FinTech adoption and financial well-being. Digital financial services enable users to access faster, more transparent, and cost-effective financial solutions, thereby improving financial management and economic participation. Evidence from Bhat et al. (2025) suggests that digital financial literacy significantly contributes to enhanced financial well-being by empowering individuals to make informed financial decisions. Similarly, FinTech adoption has been shown to support the growth and competitiveness of micro, small, and medium enterprises (MSMEs) and women-led enterprises by expanding market access, improving operational efficiency, and facilitating financial transactions. However, the effectiveness of these benefits remains contingent upon users' literacy levels, technological readiness, and trust in digital financial systems.

The review further identifies several important research gaps within the existing literature. Most studies focus primarily on short-term adoption intentions and usage behavior, while limited attention has been devoted to examining the long-term socio-economic outcomes of FinTech adoption. There is insufficient empirical evidence regarding the impact of FinTech on financial resilience, wealth accumulation, and intergenerational financial literacy. Furthermore, the literature lacks comprehensive investigations into trust-building mechanisms, digital consumer protection strategies, and their influence on sustained FinTech usage. Comparative analyses across demographic groups, particularly between younger and older generations and between urban and rural populations, also remain limited. Addressing these gaps would contribute to a more nuanced understanding of the factors influencing digital financial adoption and support the development of more inclusive financial ecosystems.

Overall, the findings of this review suggest that while FinTech has substantial potential to advance financial inclusion and improve financial well-being, its long-term success depends on the simultaneous development of financial literacy, digital literacy, consumer trust, regulatory safeguards, and supporting infrastructure. A holistic approach that integrates technological innovation with education, awareness, and governance is essential for ensuring equitable and sustainable participation in the digital financial ecosystem.

CONCLUSION

This systematic literature review examined the interrelationships among financial literacy, digital literacy, FinTech adoption, financial inclusion, and digital payment systems, with particular emphasis on the Indian context. The review demonstrates that FinTech innovations such as Unified Payments Interface (UPI), mobile wallets, digital banking, and other technology-enabled financial services have significantly transformed the financial landscape by enhancing accessibility, efficiency, and convenience. However, the findings consistently indicate that the effectiveness of these innovations depends not only on technological availability but also on users' financial knowledge, digital competencies, and confidence in utilizing digital financial services.

The review highlights financial literacy as a fundamental enabler of FinTech adoption and sustainable financial behavior. Individuals possessing higher levels of financial and digital literacy are more likely to adopt digital financial services, manage financial risks effectively, and utilize FinTech platforms responsibly. Furthermore, FinTech has emerged as a powerful instrument for promoting financial inclusion, particularly among underserved populations, women, rural households, and low-income communities. Nevertheless, persistent challenges such as digital divides, inadequate infrastructure, cybersecurity concerns, limited consumer awareness, and socio-cultural barriers continue to restrict the inclusive benefits of digital finance.

This study contributes to the existing body of knowledge by synthesizing fragmented literature across multiple domains and identifying key research gaps. The review reveals a need for greater attention to long-term impacts of FinTech adoption, comparative cross-country analyses, trust-building mechanisms, and the role of FinTech in enhancing financial resilience among vulnerable populations. Future research should adopt multidisciplinary and longitudinal approaches to better understand how digital financial ecosystems influence economic well-being over time.

From a policy perspective, the findings emphasize the importance of integrating financial education, digital literacy initiatives, consumer protection mechanisms, and regulatory safeguards into national financial inclusion strategies. Collaborative efforts among policymakers, educational institutions, financial service providers, and technology firms are essential to ensure that the benefits of FinTech are distributed equitably across society.

In conclusion, FinTech possesses substantial potential to accelerate financial inclusion and strengthen financial literacy; however, its transformative impact can only be fully realized when technological innovation is accompanied by education, trust, accessibility, and responsible governance. A holistic and inclusive approach is therefore critical for leveraging FinTech as a catalyst for sustainable economic development and equitable financial participation in emerging economies.

REFERENCES

- [1]. Aggarwal, M., Nayak, K. M., & Bhatt, V. (2023). Examining the factors influencing fintech adoption behaviour of Gen Y in India. *Cogent Economics & Finance*, 11(1), 2197699.
- [2]. Bhat, S. A., Lone, U. M., SivaKumar, A., & Krishna, U. G. (2025). Digital financial literacy and financial well-being: Evidence from India. *International Journal of Bank Marketing*, 43(3), 522–548.
- [3]. Bhatia, B. (2023). Indian millennials' financial literacy and its relationship with financial instruments and fintech. *Metamorphosis*, 22(2), 109–120.
- [4]. Dandekar, P. A., & Mishra, S. (n.d.). *An exploratory study on challenges faced by individuals in adoption of digital financial literacy*. [Publication details to be verified].
- [5]. Dzulkepli, S. (2024). Financial literacy and digital inclusion among women entrepreneurs: A comprehensive structured review. *Labuan Bulletin of International Business and Finance*, 22(2).
- [6]. Gautam, R. S., Rastogi, S., Rawal, A., Bhimavarapu, V. M., Kanoujiya, J., & Rastogi, S. (2022). Financial technology and its impact on digital literacy in India: Using poverty as a moderating variable. *Journal of Risk and Financial Management*, 15(7), 311.
- [7]. Gupta, R., Pandey, P., Singh, V. K., & Sinha, K. (2025). Influence of digital financial literacy on technology adoption in the non-banking financial sector in Jharkhand. *International Journal of Innovations in Science, Engineering and Management*, 305–312.
- [8]. Hasan, M., Noor, T., Gao, J., Usman, M., & Abedin, M. Z. (2023). Rural consumers' financial literacy and access to FinTech services. *Journal of the Knowledge Economy*, 14(2), 780–804.
- [9]. Hossain, M. N., Hidayat-ur-Rehman, I., Bhuiyan, A. B., & Salleh, H. M. (2025). Evaluating the influence of IT governance, fintech adoption, and financial literacy on sustainable performance. *Studies in Economics and Finance*.
- [10]. Islam, K. A., & Khan, M. S. (2024). The role of financial literacy, digital literacy, and financial self-efficacy in FinTech adoption. *Investment Management and Financial Innovations*, 21(2), 370–382.

- [11]. Kamarudin, N. S., Hadi, N. A., & Hashim, A. J. C. M. (n.d.). *Addressing financial challenges in Malaysia and enhancing digital financial literacy: Insights from practitioners*. [Publication details to be verified].
- [12]. Kishor, K., Bansal, S. K., & Kumar, R. (2025). The role of fintech in promoting financial inclusion to achieve sustainable development: An integrated bibliometric analysis and systematic literature review. *Journal of the Knowledge Economy*, 16(1), 5664–5692.
- [13]. Kulshrestha, S. (2023). The role of financial technology in enhancing financial literacy and inclusion among low-income households in India. *International Journal of Research in Marketing Management and Sales*, 5(1), 25–30.
- [14]. Kushwaha, S., Gurung, M. M., & Baig, M. I. (n.d.). *Bridging the gap: Examining fintech awareness and adoption challenges among Indian youth*. [Publication details to be verified].
- [15]. Mahesh, A., & Bhat, G. (2021). Digital payment service in India: A case study of Unified Payment Interface. *International Journal of Case Studies in Business, IT and Education*, 5(1), 256–265.
- [16]. Mahesh, A., & Bhat, G. (2022). A systematic review and research agenda of digital payment system with reference to Unified Payment Interface. *International Journal of Management, Technology, and Social Sciences*, 7(2), 679–709.
- [17]. Maheshwari, P. (2024). A review of the relationship between financial literacy and financial management in India. *International Journal*, 5(9). [Complete journal details to be verified].
- [18]. Mandić, A., Marković, B., & Žigo, I. R. (2025). Risks of the use of fintech in the financial inclusion of the population: A systematic review of the literature. *Journal of Risk and Financial Management*, 18(5), 250.
- [19]. Mankar, D. R. N. (n.d.). Financial inclusion in India through digital banking and Unified Payments Interface (UPI) system. In *Digital Banking*. [Book publication details to be verified].
- [20]. Moenjok, T., Kongprajya, A., & Monchaitrakul, C. (2020). *Fintech, financial literacy, and consumer saving and borrowing: The case of Thailand* (ADB Working Paper No. 1100). Asian Development Bank Institute.
- [21]. Morgan, P. J. (2021). Fintech, financial literacy, and financial education. In G. K. Xiao & T. K. Chou (Eds.), *The Routledge handbook of financial literacy* (pp. 239–258). Routledge.
- [22]. Mula, K. (2025). Financial inclusion through digital payments: How technology is bridging the gap. *Journal of Computer Science and Technology Studies*, 7(2), 447–457.
- [23]. Panos, G. A., & Wilson, J. O. S. (2020). Financial literacy and responsible finance in the FinTech era: Capabilities and challenges. *The European Journal of Finance*, 26(4–5), 297–301.
- [24]. Praveen, N. (n.d.). *A study on the role of banks in a digital wallet through a mobile payment app*. [Publication details to be verified].
- [25]. Singh, R., Rafat, A., & Srivastava, S. (2024). Payment fintech application adoption in low-income groups: How financial literacy moderates influencing factors? *Journal of Science and Technology Policy Management*.
- [26]. Sugangga, A., Handayati, P., & Zagladi, A. N. (2023). Measuring the contribution of financial literacy in building the competitive advantage of MSMEs in Indonesia: Systematic literature review (SLR). *Brilliant International Journal of Management and Tourism*, 3(3), 63–77.
- [27]. Tullaili, M., & Susanto, P. (2025). Financial literacy and use of fintech in MSMEs: Systematic literature analysis. *Jurnal Akuntansi, Manajemen, dan Perencanaan Kebijakan*, 2(4), 9–19.
- [28]. Ungratwar, S., Sharma, D., & Kumar, S. (2025). Mapping the digital banking landscape: A multi-dimensional exploration of fintech, digital payments, and e-wallets, with insights into current scenarios and future research. *Humanities and Social Sciences Communications*, 12(1), 1–22.
- [29]. Vermani, R., & Arora, N. (2025). Unravelling the dynamics: A theoretical exploration of the role of Unified Payment Interface (UPI) in digital inclusion. In *From Digital Disruption to Dominance* (pp. 75–102). Emerald Publishing Limited.
- [30]. Vidani, J. (2024). A study on the rise and recent development in Unified Payments Interface. *SSRN Electronic Journal*. Advance online publication.
- [31]. Vijai, C. (2019). FinTech in India: Opportunities and challenges. *SAARJ Journal on Banking and Insurance Research*, 8(1), 42–54.
- [32]. Yadav, M., & Banerji, P. (2024). Systematic literature review on digital financial literacy. *SN Business and Economics*, 4(11), 142.