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## RESEARCH ARTICLE

### Digital Financial Literacy in the Fintech Era: A Literature Review

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## ABSTRACT

*The rapid expansion of financial technology (fintech) has fundamentally transformed the way individuals' access, use, and manage financial services. Digital platforms such as mobile banking, peer-to-peer lending, digital wallets, robo-advisors, and cryptocurrencies have increased financial inclusion while simultaneously introducing new risks related to data security, consumer protection, and financial decision-making (Arner et al., 2017; Gomber et al., 2017). In this context, digital financial literacy has emerged as a critical capability for individuals to navigate increasingly complex financial ecosystems. This literature review synthesizes international peer-reviewed studies on digital financial literacy in the fintech era, focusing on conceptual development, key dimensions, determinants, and socio-economic implications. The findings indicate that digital financial literacy extends beyond traditional financial knowledge by incorporating digital skills, technological awareness, and behavioral competencies (Morgan & Trinh, 2019; OECD, 2020). Higher levels of digital financial literacy are consistently associated with improved financial behavior, increased adoption of fintech services, reduced vulnerability to fraud, and enhanced financial well-being (Lusardi & Mitchell, 2014; Xiao & O'Neill, 2016). However, substantial disparities persist across age, income, education, and geographic location. This review concludes that strengthening digital financial literacy requires coordinated policy interventions, inclusive education strategies, and responsible fintech design to ensure that digital finance contributes to sustainable and equitable economic development.*

## KEYWORDS

*Digital Financial Literacy; Fintech; Financial Behavior.*

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## INTRODUCTION

The digital transformation of financial systems has accelerated rapidly over the past decade, driven by technological innovation, increased internet penetration, and the proliferation of mobile devices. Financial technology, commonly referred to as fintech, encompasses a broad range of digital innovations that reshape traditional financial services, including mobile payments, online lending platforms, digital banking, blockchain-based assets, and algorithm-driven investment tools (Gomber et al., 2017). These innovations have altered how individuals interact with financial institutions, access credit, save, and invest.

While fintech offers significant opportunities for efficiency and financial inclusion, it also introduces new layers of complexity and risk. Consumers are now required to evaluate digital interfaces, understand algorithm-based recommendations, manage cybersecurity threats, and make financial decisions in highly dynamic environments (Arner et al., 2017). Traditional financial literacy—defined as the understanding of basic financial concepts such as interest rates, inflation, and risk diversification—has become insufficient in this context (Huston, 2010; Lusardi & Mitchell, 2014).

The emergence of digital financial literacy reflects the need to integrate financial knowledge with digital competence and technological awareness. Digital financial literacy enables individuals to effectively use fintech services, critically evaluate digital financial information, and protect themselves

against digital financial risks (Morgan & Trinh, 2019; OECD, 2020). Empirical studies suggest that individuals with low levels of digital financial literacy are more vulnerable to online fraud, excessive digital borrowing, and speculative financial behavior (Klapper et al., 2015).

Despite growing scholarly attention, digital financial literacy remains conceptually fragmented, with varying definitions and measurement approaches across disciplines. This literature review aims to synthesize existing international research to clarify conceptual frameworks, identify key determinants and outcomes, and discuss policy implications of digital financial literacy in the fintech era.

## **RESEARCH METHODS**

This study adopts a structured literature review methodology focusing on peer-reviewed international journal articles indexed in Scopus and Web of Science. These databases were selected due to their rigorous quality standards and broad coverage of interdisciplinary research. The literature search employed keyword combinations such as digital financial literacy, fintech adoption, digital finance, financial behavior, financial inclusion, and consumer protection. Articles published between 2010 and 2024 were considered to capture the evolution of digital finance and fintech-based financial services.

Studies were included if they explicitly addressed financial literacy in digital or fintech contexts, either through conceptual analysis or empirical investigation. Non-peer-reviewed sources, policy briefs, and conference proceedings were excluded. Selected articles were analyzed thematically, focusing on conceptual definitions, determinants, behavioral outcomes, and socio-economic implications of digital financial literacy.

## **RESULT AND DISCUSSION**

### **Conceptual Foundations of Digital Financial Literacy**

Digital financial literacy is widely recognized as an extension of traditional financial literacy that incorporates digital competencies and technological awareness (Morgan & Trinh, 2019). While traditional financial literacy emphasizes knowledge of financial products and numerical skills, digital financial literacy focuses on the ability to navigate digital platforms, assess online financial information, and manage technology-related risks (OECD, 2020).

Several scholars conceptualize digital financial literacy as a multidimensional construct comprising financial knowledge, digital skills, technological awareness, and behavioral competence (Huston, 2010; Xiao & O'Neill, 2016). This framework reflects the reality that financial decisions are increasingly mediated by digital interfaces and automated systems.

### **Digital Financial Literacy and Fintech Adoption**

A robust body of literature demonstrates a positive relationship between digital financial literacy and fintech adoption. Individuals with higher literacy levels are more likely to use mobile banking, digital payments, and online investment platforms due to reduced perceived complexity and increased trust (Zhang et al., 2018; Morgan & Trinh, 2019). However, fintech adoption without adequate literacy can increase exposure to financial risk. Studies highlight that digitally illiterate users are more susceptible to high-interest online loans, misleading digital marketing, and algorithm-driven nudges that encourage impulsive financial behavior (OECD, 2020).

### **Implications for Financial Behavior**

Digital financial literacy significantly influences financial behavior. Empirical research consistently shows that digitally financially literate individuals engage in better budgeting, saving, and investment practices (Lusardi & Mitchell, 2014; Xiao & O'Neill, 2016). They are more likely to compare financial products, diversify investments, and avoid excessive debt. In fintech environments,

digital financial literacy mitigates behavioral biases amplified by platform design features such as instant credit approval and gamified investment interfaces (Arner et al., 2017).

### **Digital Financial Literacy and Financial Inclusion**

Fintech has been promoted as a powerful tool for financial inclusion, particularly in developing economies. Mobile money services, for example, have expanded access to financial services for unbanked populations (Bongomin et al., 2018). However, access alone does not guarantee meaningful inclusion. Studies emphasize that digital financial literacy is a prerequisite for inclusive finance, as individuals lacking digital competence may remain excluded or become financially vulnerable despite access (Klapper et al., 2015; OECD, 2020). Persistent disparities in digital financial literacy across age, gender, income, and geographic location continue to limit the inclusive potential of fintech.

### **Consumer Protection and Risk Management**

Digital financial literacy plays a critical role in consumer protection. Online financial environments expose users to cybersecurity risks, data misuse, and fraudulent schemes. Literate consumers are better equipped to recognize risks, safeguard personal information, and understand the terms and conditions of digital financial products (OECD, 2020). Regulatory literature increasingly recognizes that disclosure-based consumer protection is insufficient without complementary literacy initiatives (Arner et al., 2017). Digital financial literacy is positively associated with financial well-being, defined as the ability to meet current and future financial obligations with confidence (Xiao & O'Neill, 2016). During periods of economic uncertainty, digitally financially literate individuals demonstrate greater resilience by effectively using digital financial tools to manage income shocks and financial risks. Despite growing interest, measuring digital financial literacy remains challenging due to the lack of standardized instruments. Existing studies employ diverse self-assessment and objective measures, limiting cross-study comparability (Huston, 2010). Recent research advocates composite indices integrating financial knowledge, digital skills, and behavioral indicators (Morgan & Trinh, 2019). Fintech firms and financial institutions also bear responsibility for promoting responsible usage through transparent communication and user-centered design (Gomber et al., 2017).

### **CONCLUSION**

This literature review demonstrates that digital financial literacy is a foundational capability in the fintech era. By integrating financial knowledge with digital and technological competencies, digital financial literacy enables individuals to navigate complex financial ecosystems, make informed decisions, and protect themselves against emerging risks. The reviewed studies consistently show positive relationships between digital financial literacy, financial behavior, financial inclusion, and financial well-being.

However, persistent disparities in digital financial literacy threaten to exacerbate financial inequality. Addressing these challenges requires coordinated policy interventions, inclusive education strategies, standardized measurement frameworks, and responsible fintech innovation. Future research should prioritize longitudinal studies, cross-country comparisons, and the integration of digital financial literacy into sustainable development agendas.

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