

Fintech Win-Win: How Digital Financial Literacy Drives Stable Growth



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Problem of practice

While digital innovations are transforming financial services, making them available, accessible, and affordable, they can also lead to irresponsible consumer borrowing. India witnessed significant growth in unsecured personal loans, which pose a systemic risk to the financial system but could also impact borrowers' financial well-being. RBI responded by increasing risk weightage for unsecured personal loans to curtail unsecured personal loan growth. Interest rate change is a supply-side intervention that yields immediate effects. However, have you wondered if any long-term sustainable intervention can mitigate systemic risk in the financial system? Since financial well-being results from financial resources and appropriate capacity/skills, i.e. financial literacy, to manage those resources, **enhancing** financial literacy may provide an alternative mechanism to ensure responsible borrowing.¹ In today's digital context, financial literacy must be supplemented with digital skills, which is termed digital financial literacy (DFL). A recent **research** paper articulates what digital financial literacy is and analyses its components.² This essay unpacks the elements of digital financial literacy and explores the policy implications in the Indian context, which is relevant to policymakers, financial institutions and NGOs working in the area of financial literacy.

² The article 'Financial Literacy in the Digital Age—A Research Agenda' by Tiina Koskelainen, Panu Kalmi, Eusebio Scornavacca, and Tero Vartiainen, featured in Volume 57, Issue 1 of *The Journal of Consumers Affairs*, highlight how fintech, digital behaviours, and behavioural interventions are reshaping finance, stressing the need to measure digital literacy, modernize education, creating effective digital learning tools, and encouraging public-private partnerships to build inclusive, digitally competent consumer finance capabilities

Why is DFL relevant?

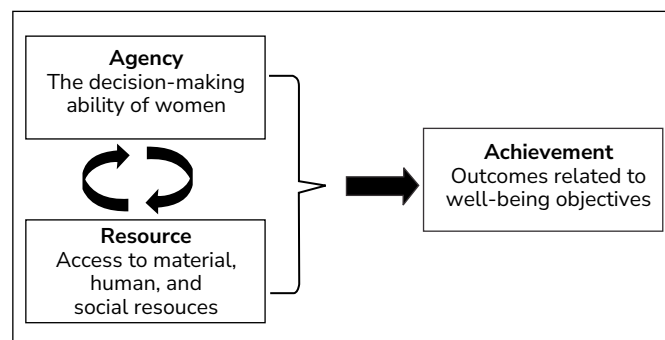
The transformative power of information technology in global finance is undeniable. Technology is crucial in democratising finance and enabling alternative money management methods. The global impact of digital payments is not just significant but profound. According to World Bank [Findex](#) statistics, digital payments have grown by 22% between 2014 and 2021, reaching a penetration rate of 57%.³ This data underscores the widespread adoption and relevance of digital finance globally. This change is primarily driven by mobile phone penetration, putting the power of financial transactions in the hands of users and reducing reliance on physical cash or cards. In some countries, the penetration of mobile payments is driven by private players, e.g., WeChat Pay and Alipay in China or M-Pesa in Kenya. In India, the Unified Payments Interface^a (UPI) has revolutionised retail payments using mobile technology. These technological advancements augment the complexity of digital banking and necessitate sufficient financial literacy and skills, both termed digital financial literacy.

Why is DFL important?

While we all intuitively agree that financial resources and skills are required for individual empowerment, Naila Kabeer's empowerment [framework](#), which is embedded in '[Sens theory of Capability](#)', provides the theoretical underpinning.^{4,5} The framework articulates empowerment as three interrelated components: achievements, agency or capacity, and resources. Resources are both financial and non-financial. The ability to set objectives and carry out actions in the

direction of achieving objectives is the second aspect of the agency. The third dimension, achievement, expresses how resources and capacity interact to achieve objectives. In our discussion, [achievement](#) is economic empowerment, which addresses an individual's knowledge, skills and confidence to address their financial well-being.⁶ To ensure financial well-being, it is necessary to have access to resources on the supply side, i.e., the availability of loans, savings products and payment systems. On the [demand side](#), it is the possession of financial literacy and digital skills, both termed DFL.⁷ Capability combines [resources](#) and [individual capacities](#); thus, digital financial literacy is the foundation of financial capability.^{8,9} This underscores the inspiring role of DFL in achieving financial well-being. DFL equips individuals with the knowledge and skills to use digital financial systems effectively, thereby contributing to financial empowerment. UPI and the digital footprint created by UPI have enabled financial institutions to provide access to [capital](#).¹⁰ However, DFL has received relatively lower importance.

Figure 1: Economic Empowerment Framework



Source: Author's creation based on multiple sources^{11,12}



Unpacking DFL

Before we discuss digital financial literacy, let us first unpack what financial literacy is. Financial literacy **combines** financial knowledge, confidence and the ability to use and manage financial resources effectively to achieve financial well-being.¹³ Financial literacy is the foundation of financial behaviours and plays a **significant** role in financial well-being.¹⁴ Financial literacy has three dimensions. The first is numeracy, the ability to perform mathematical calculations and ascribe significance to numerical values. Second is financial knowledge, which is reflected in understanding financial terms such as interest rate, compound interest, risk, etc. Moreover, the third component is **self-efficacy** or **confidence** to make decisions based on financial knowledge.^{15,16} 'Self-efficacy' indicates an individual's confidence in accomplishing a task. In the realm of financial literacy, it is the belief or assessment that a person makes about their ability to mobilise mental resources (**knowledge**), calculate the benefits and related risks (**numeracy**), possess the motivation, and translate it into necessary action (**self-efficacy**) to achieve the required financial objective.^{17,18,19} Higher financial **literacy** manifests in solid financial knowledge and confidence to make effective financial decisions.²⁰

Digital literacy in financial services comprises of **mobile phone** and money proficiency.²¹ Digital literacy has **three** dimensions: mobile technology access, mobile phone proficiency and mobile money proficiency.²² In the Indian context, mobile money proficiency must be studied in relation to the most popular digital payment solution, the Unified Payment Interface (UPI). Considering the ubiquitous presence of UPI in India, we contextualise mobile money proficiency as digital payment proficiency by including UPI.

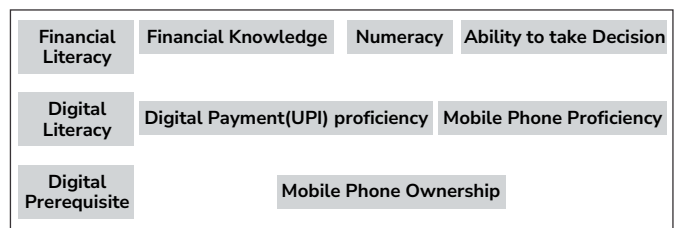


Table 1: Dimensions of DFL

Numeracy	The capacity to understand, apply (fundamental arithmetic operations such as addition, multiplication, division, and subtraction), and ascribe significance to numerical values.
Financial Knowledge	The capacity to handle debt, compute interest, and spread risks is essential. Financial literacy encompasses an understanding of interest compounding, the distinction between nominal and honest values, and the principles of risk diversification.
Confidence to make financial decisions	The capacity to think and act independently, free from the assistance or influence of others, encompasses the ability to determine one's identity and actions.
Digital Payments Proficiency	Capability to execute digital transactions independently while utilising mobile money services- (to be read as UPI in India).
Digital Skills	Ability to independently use mobile phones for digital transactions, including but not limited to social media transactions.

Source: Developed by the author based on multiple sources

Figure 2: Dimensions of Digital Financial Literacy



Source: Developed by the author based on research by Koskelainen and team²³

With the advent of **digital technology**, financial literacy needs to be looked at in a digital context.²⁴ It requires appropriate **supplementation** by digital literacy.²⁵ Thus, financial literacy and digital literacy can be **collectively termed** 'Digital Financial Literacy'.^{26,27}



Why DFL matters in India?

Financial literacy is necessary in this era of increasing financial optionality, as it empowers individuals to navigate the complex financial landscape, avoid potential pitfalls, and secure their **financial future**, thereby ensuring their financial well-being.²⁸ India, a country of 1.4 billion people, is driven by a young, consumption-oriented demographic, fuelling its growth. Private consumption as a percentage of nominal **GDP** in Dec 2024 was 64.8%.²⁹ India's UPI infrastructure, technological advancement in analytics and artificial intelligence (AI), and, most importantly, fintech–financial institution collaborations have played a pivotal role in the **growth** of **unsecured credit**, which in turn supports **consumption** growth.^{30,31,32} However, unsecured retail credit can have overarching impacts on borrowers and financial institutions during economic shocks and poses a systemic risk in the financial system. To address the systemic risk posed by high unsecured loans, the Reserve Bank of India (RBI) increased the risk weightage of unsecured lending from 100% to 125% in November 2023. This increase in risk weightage impacted lenders' capital requirements and, in turn, increased consumer lending rates. This move was possibly a pre-emptive measure to manage perceived risks in the financial sector in case of a potential economic downturn.

Financial literacy has three dimensions:

- numeracy
 - financial knowledge
 - self-efficacy
-

Additionally, as per the **RBI report**, in the fiscal year concluding in March 2024, digital payment frauds in India experienced an increase of over five times, reaching Rs 14.57 billion (Rs 1,457 crore) compared to the preceding period.³³ Digital payment methods, such as credit cards and online transactions, accounted for **10.4%** of the overall fraud total, an increase from 1.1% in the fiscal year 2023.³⁴ Though there is no causality unless proven, there is a correlation between UPI transactions and fraud. Over the last two years, UPI has experienced a remarkable increase in the value of transactions, reaching a total of **Rs 200 trillion**, indicating a strong association between digital fraud and transactions.³⁵ To mitigate **systemic risk**, while the regulatory authorities can **intervene** from the **supply side**, **demand-side** intervention in enhancing digital financial literacy can help.^{36,37,38,39}

Policy implications for DFL

Recognising the significance of financial literacy, various self-help groups (SHGs) facilitating organisations such as Mahila Arthik Vikas Mahamandal-Maharashtra (MAVIM) and microfinance institutions such as Mann Deshi Bank are engaged in offering financial literacy training. In pursuit of this goal, the financial regulatory authority has established the National Centre for Financial Education (NCFE), which organises seminars, workshops, and training sessions focused on financial education. Nevertheless, the current financial literacy training may not adequately improve DFL and needs strategic intervention. Some of the interventions are as follows:

Redesign/supplement financial literacy curriculum – As disbursement and collections move to digital channels,

financial institutions should focus on enabling knowledge and enhancing consumer abilities. Awareness of personal data privacy, cybersecurity policies, and digital hygiene must be incorporated into the communication of the financial institution with its customers. Especially, microfinance institutions need to be mindful and incorporate it into their training programs. With digital, the availability and accessibility of an abundance of options for purchases can encourage more impulsive behaviour on the part of consumers, which could result in excessive debt. There is a chance that a new digital divide may emerge between those who fully understand the implications of the ubiquitous technologies that power digital nudging and those who do not. Hence, there is a need to ensure that the financial literacy curriculum highlights the power of digital nudging during a purchase journey and its side effects on debt. In India, organisations such as Mann Deshi Bank [systematically](#) impart DFL to their customers.⁴⁰ Also, the [Alliance for Financial Inclusion](#), a policy leadership alliance owned and led by member central banks and financial regulatory institutions with the common objective of advancing financial inclusion in the country, regionally and internationally, has a particular working group and content tailored to digital financial literacy.⁴¹

Enhancing digital literacy through a collaborative approach – Financial institutions should seek partnerships and align their programs with capacity-building organisations to strengthen the effectiveness of their outreach efforts. Policywise, government schematic interventions that provide access to capital should be coordinated with non-schematic capacity-building initiatives to optimise results and impact. Additionally, the agencies responsible for implementing the government's financial literacy programs ought to consider collaborating with private financial institutions in both the design of their educational approaches and the geographical implementation of these programs. Established financial institutions are increasingly aware that their reputational standing and support from such institutions must be solicited, possibly from their CSR funds, to enhance financial literacy programs. While initiatives from the self-regulatory bodies, such as the Association of Mutual Funds in India AMFI or

Microfinance Industry Network (MFIN), have taken industrywide collaborative approaches to capacity building, it can be augmented and replicated in other financial services segments and products.

Appropriate assessment technique – Setting up a standard assessment method to measure digital financial literacy is the need of the hour. While a few NGOs and capacity-building organisations have been playing a role in enhancing digital financial literacy, the assessment of DFL has not progressed or received the required importance. There is no standardised tool to measure financial literacy or DFL. As a result, what is considered is observed financial behaviour rather than financial literacy, let alone DFL. What constitutes optimal behaviour for one individual may not hold for another. We recommend that the emphasis on assessing DFL be directed more towards knowledge and problem-solving skills rather than just observed behaviours. This adjustment would align the approach more closely with existing financial and digital literacy metrics.

Prioritise DFL

Regulatory bodies, non-governmental organisations, and financial institutions must prioritise DFL. On a microeconomic level, DFL is crucial in enhancing capability development and fostering more empowered citizens. On a macro scale, DFL contributes to establishing a robust demand-side framework, which is essential for mitigating systemic risks and advancing the development objective of a nation-state.

Notes

^a UPI is the single most popular National Payment Corporation of India (NPCI) product used by Indians. UPI offers interoperability of payments across all member banks and real-time payments via mobile payment app. There are 235 banks registered on UPI and 18 independent third-party mobile applications. The UPI system allows a seamless transition for 'consumer-to-business' (C2B), 'consumer-to-consumer' (C2C) or 'peer-to-peer', and 'business-to-consumer' (B2C). UPI witnessed 8.65 billion transactions in March 2023 and is the single largest payment method (around 70% of retail payments) ahead of credit cards, debit cards and wallets, making it imperative to understand and study mobile proficiency in terms of proficiency of UPI usage

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Article Information:

Date article submitted: Sep 10, 2024

Date article accepted: May 23, 2025

Date article published: Jun 30, 2025

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