Fintech Startups and Their Role in Empowering Indian MSMEs with Digital Credit

Anshika Saxena
Research Scholar
Teerthanker Mahaveer Institute of Management and Technology
Teerthanker Mahaveer University
Moradabad, Uttar Pradesh

Pankhuri Agrawal
Associate Professor
Teerthanker Mahaveer Institute of Management and Technology
Teerthanker Mahaveer University
Moradabad, Uttar Pradesh

Abstract: Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in India's economic development, yet face persistent challenges in accessing formal credit. Fintech startups have emerged as game-changers by offering innovative, technology-driven financial solutions that address the credit gap faced by MSMEs. This research explores how fintech startups empower Indian MSMEs through digital credit services. It examines the evolution of the fintech ecosystem, highlights key digital credit models, analyzes the impact on MSME growth, and evaluates challenges and regulatory considerations. Drawing from secondary data, case studies, and interviews, this paper provides a comprehensive understanding of the fintech-MSME nexus and suggests strategic directions for policymakers and entrepreneurs to enhance financial inclusion and business resilience in the MSME sector.

Keywords: Fintech, MSMEs, Digital Credit, Financial Inclusion, Startups, India, Lending Models

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are recognized as the backbone of the Indian economy, contributing significantly to GDP, employment, and exports. According to the Ministry of MSME, there are more than 63 million MSMEs in India, collectively employing over 110 million people and contributing nearly 30% to the national GDP. Despite their substantial economic footprint, MSMEs have traditionally been underserved by the formal financial system, primarily due to the perceived high risk of lending, lack of collateral, and limited credit history.

The resultant credit gap, estimated by the International Finance Corporation (IFC) at over USD 330 billion, has hindered the growth and competitiveness of these enterprises.

The advent of financial technology (fintech) startups has introduced a transformative approach to bridging this gap. Leveraging advancements in artificial intelligence (AI), machine learning (ML), big data analytics, and digital platforms, fintech startups have disrupted traditional lending models. These startups offer streamlined, tech-enabled solutions that assess creditworthiness using alternative data sources such as transaction history, GST returns, utility payments, and even social media behavior. As a result, MSMEs—especially those in remote or underserved areas—are now able to access credit with greater ease and speed.

The rapid digitization of financial services, bolstered by initiatives such as the Digital India campaign and India Stack infrastructure (including Aadhaar, e-KYC, UPI, and account aggregators), has laid the foundation for a vibrant digital lending ecosystem. This ecosystem empowers fintech firms to extend personalized, accessible, and scalable credit solutions to a previously excluded segment. Additionally, partnerships between fintech startups, traditional banks, non-banking financial companies (NBFCs), and government agencies have created a collaborative environment that amplifies outreach and operational efficiency.

However, the journey is not without challenges. While fintech solutions offer great promise, issues such as digital literacy among MSMEs, data privacy concerns, regulatory uncertainties, and the risk of over-indebtedness must be addressed. Furthermore, the COVID-19 pandemic tested the resilience of both MSMEs and fintech lenders, underscoring the importance of agile, inclusive, and sustainable credit delivery mechanisms.

This paper aims to analyze the role of fintech startups in enabling digital credit access for MSMEs in India. It explores the evolution of the fintech ecosystem, outlines major digital credit models, assesses the impact on MSME performance and growth, and discusses challenges and regulatory dynamics. By examining secondary data, case studies, and expert insights, the paper provides strategic recommendations for strengthening the fintech-MSME relationship and ensuring long-term financial inclusion and sectoral growth.

2. Evolution of the Fintech Ecosystem in India

The fintech revolution in India has evolved over the last two decades, fueled by technological advancements, increasing internet penetration, and a proactive regulatory environment. The evolution can be traced across several distinct phases that collectively reshaped the country's financial landscape and laid the groundwork for fintech startups to emerge as key enablers of MSME finance.

In the early 2000s, India's financial services sector was largely traditional and paper-based, with limited use of technology beyond basic banking services. The turning point came with the introduction of core banking systems, the advent of mobile banking, and the launch of digital payment services. However, it was the government's push towards financial inclusion through the Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014 and the simultaneous rollout of Aadhaar that truly set the stage for fintech growth.

The development of the India Stack—a set of open APIs including Aadhaar for identity, e-KYC for onboarding, UPI for payments, and DigiLocker for document storage—revolutionized digital financial services. These innovations enabled seamless, low-cost delivery of financial products and services, especially in underserved and remote areas. UPI in particular, launched in 2016, has become a game-changer by allowing real-time inter-bank transactions with just a smartphone.

The emergence of fintech startups was further supported by policy initiatives such as Startup India, Digital India, and the RBI's regulatory sandbox. These frameworks provided both the infrastructure and the legitimacy for startups to experiment, innovate, and scale. As a result, a vibrant fintech ecosystem emerged, encompassing a wide range of services including digital lending, payments, insurance, wealth management, and financial literacy.

The rise of digital lending startups has been particularly significant for MSMEs. Players like Lendingkart, Capital Float, Razorpay, NeoGrowth, and FlexiLoans have built platforms that offer fast, collateral-free loans tailored to the unique needs of small businesses. These platforms use data-driven algorithms to underwrite loans based on alternative data sources, enabling faster decision-making and reduced risk.

India now hosts one of the largest fintech markets in the world, with over 2,000 fintech startups and a market valuation expected to reach USD 150 billion by 2025. The fintech ecosystem's maturity is evident from the increasing collaboration between fintechs and traditional financial institutions, with banks now partnering with startups to co-lend and reach deeper into the MSME segment.

In summary, the evolution of the fintech ecosystem in India has been a confluence of technological innovation, supportive policy, and an urgent need for financial inclusion. This ecosystem is now poised to play a central role in transforming credit access for Indian MSMEs, with digital credit at its core.

3. Digital Credit Models Adopted by Fintech Startups

Digital credit delivery by fintech startups involves a variety of business models, each designed to cater to different segments of MSMEs. These models are distinguished by their technology architecture, partnership frameworks, risk management strategies, and target customers. Some of the major models include:

A. Marketplace Lending Platforms: Marketplace lending, also known as peer-to-peer (P2P) lending, enables MSMEs to access funds from individual or institutional investors through a digital platform. The fintech platform facilitates the match between lenders and borrowers, conducts basic due diligence, and manages the loan process. P2P lending platforms like Faircent and LenDenClub have helped many small enterprises raise working capital quickly without dealing with traditional banking red tape.

B. Balance Sheet Lending: In this model, fintech firms lend from their own balance sheets, assuming the credit risk directly. These companies use proprietary algorithms and data analytics to assess creditworthiness and determine loan terms. Lendingkart and FlexiLoans are prominent examples. While this model offers high-speed disbursal, it requires significant capital and robust risk assessment capabilities.

C. Co-lending and Bank Partnerships: Many fintechs collaborate with traditional financial institutions under co-lending arrangements. In such models, the fintech handles the customer interface and preliminary underwriting using digital tools, while the bank or NBFC funds the majority of the loan and manages regulatory compliance. This hybrid approach enhances reach and credibility while maintaining regulatory safeguards. Notable collaborations include Capital Float with IDFC First Bank and NeoGrowth with various NBFCs.

D. Invoice and Cash Flow-Based Financing: Another innovative model is invoice or cash flow-based lending, where loans are disbursed based on expected receivables or transaction data. Fintechs analyze real-time business performance, GST filings, and POS machine data to offer credit that aligns with cash flows. Razorpay and Indifi use this method to lend to digitally active MSMEs, ensuring repayment aligns with the business cycle.

E. Embedded Finance: This emerging model integrates credit offerings into platforms that MSMEs already use, such as e-commerce portals, accounting software, or B2B marketplaces. Amazon and Flipkart offer seller financing in partnership with fintech lenders, making credit access seamless and contextual.

These diverse models underscore how fintech startups are redefining MSME credit through flexibility, personalization, and data-driven innovation. They cater to previously excluded entrepreneurs, offering fast, frictionless credit suited to their unique needs and business cycles.

4. Impact of Fintech Digital Credit on MSMEs

The impact of fintech-enabled digital credit on MSMEs has been transformative in several dimensions:

A. Enhanced Access to Credit: Fintech startups have significantly improved the accessibility of credit for MSMEs. By eliminating physical paperwork, long wait times, and the need for collateral, digital lending platforms have allowed businesses to access formal credit—often for the first time. This is especially crucial for micro-enterprises in rural or semi-urban areas.

B. Improved Business Productivity: With easier access to working capital, MSMEs can now invest in inventory, machinery, and workforce expansion. This has translated into improved productivity, sales growth, and higher profit margins. Businesses no longer need to rely on costly informal lending sources, improving their financial health.

C. Digital and Financial Literacy: Interaction with fintech platforms has also nudged many entrepreneurs toward greater digital and financial literacy. Using mobile apps, understanding digital payments, tracking loan schedules, and managing cash flow have become more commonplace.

D. Formalization and Credit History Creation: Fintech lenders report loans to credit bureaus, helping MSMEs build a credit history. This formalization of financial behavior paves the way for future access to more affordable and higher credit lines from mainstream institutions.

E. Gender and Sectoral Inclusion: Women-led enterprises and non-traditional sectors such as artisans, weavers, and service providers are now being reached by fintech platforms. These platforms use customized scoring models that go beyond traditional risk profiles to include such enterprises.

Despite the progress, it is important to monitor risks such as borrower over-indebtedness and ensure that growth in credit access is sustainable and inclusive.

5. Challenges and Constraints in the Fintech-MSME Landscape

While the fintech-MSME synergy has yielded several benefits, significant challenges persist:

A. Data Privacy and Cybersecurity: With increasing reliance on data-driven lending, protecting sensitive customer information is paramount. Data breaches or misuse could erode trust in digital finance.

B. Low Digital Literacy Among MSMEs: Many small entrepreneurs still struggle to understand digital platforms or manage online transactions. This limits their ability to benefit from fintech services.

C. Regulatory Uncertainty: The evolving regulatory landscape, including RBI's frequent revisions to lending guidelines, poses compliance challenges for fintech startups. A lack of clear classification for certain digital lending models adds to the confusion.

D. Limited Credit Appetite: Even when credit is available, some MSMEs hesitate to borrow due to past experiences with debt or uncertain returns on capital.

E. Platform Sustainability: Not all fintech startups are financially sustainable. Intense competition, high customer acquisition costs, and limited profit margins pose existential risks.

Addressing these issues through capacity-building, targeted policy support, and ecosystem-level collaboration is essential for long-term success.

6. Policy and Regulatory Landscape

India's fintech sector operates under a dynamic regulatory framework overseen by the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), and other institutions. Key initiatives shaping the sector include:

- **Digital Lending Guidelines (2022):** These RBI guidelines mandate direct loan disbursals to borrower accounts, proper grievance redressal, and enhanced data transparency.
- **Account Aggregator Framework:** Enables secure, consent-based sharing of financial data for better credit underwriting.
- **Co-Lending Models:** Promote partnership between banks and fintechs, increasing credit access while ensuring risk-sharing and compliance.
- **Financial Inclusion Index:** A national tool to measure and guide progress in inclusion.

Further regulatory clarity and support for innovation are needed to nurture a responsible, inclusive fintech ecosystem.

7. Conclusion and Recommendations

Fintech startups have brought a revolution in MSME credit by breaking barriers of geography, documentation, and traditional risk perception. Their innovative credit models, customer-centric approaches, and tech-enabled operations have empowered millions of small businesses across India.

However, to sustain this momentum and deepen impact, the following actions are recommended:

1. **Enhance Digital Literacy:** Government and fintechs should collaborate on training programs for MSMEs to ensure wider adoption.
2. **Promote Responsible Lending:** Use predictive analytics to identify at-risk borrowers and avoid over-lending.
3. **Strengthen Regulations:** Clearer and more adaptive regulatory norms can encourage innovation while protecting stakeholders.
4. **Foster Public-Private Partnerships:** Combine the outreach of government programs with fintech agility for inclusive growth.
5. **Support Sustainable Fintech Models:** Encourage funding and capacity-building for startups focused on impact and underserved markets.

In conclusion, fintech startups represent a pivotal force in empowering Indian MSMEs with digital credit. With thoughtful policy support, stakeholder collaboration, and ethical innovation, fintech has the potential to build a more inclusive and resilient economic future.

References

- Capital Float. (n.d.). *Who We Are*. https://www.capitalfloat.com
- Digital India. (n.d.). *Power to Empower*. Ministry of Electronics and Information Technology. https://www.digitalindia.gov.in
- FlexiLoans. (n.d.). *Digital Lending for MSMEs*. https://www.flexiloans.com
- Government of India. (n.d.). *Ministry of Micro, Small and Medium Enterprises Annual Report 2022–23*. Ministry of MSME. https://msme.gov.in
- India Stack. (n.d.). *Open APIs for India*. https://www.indiastack.org
- International Finance Corporation. (2018). *MSME Finance Gap: Assessment of the Shortfalls in Financing Micro, Small and Medium Enterprises in Emerging Markets*. https://www.ifc.org
- Lendingkart. (n.d.). *About Us*. https://www.lendingkart.com

- National Payments Corporation of India. (2023). *Unified Payments Interface (UPI) Product Statistics*. https://www.npci.org.in
- NeoGrowth. (n.d.). *Empowering Small Businesses*. https://www.neogrowth.in
- Razorpay. (n.d.). *Helping Businesses Accept, Process, and Disburse Payments*. https://razorpay.com
- Reserve Bank of India. (2020). *Report of the Working Group on Digital Lending including Lending through Online Platforms and Mobile Apps*. https://rbi.org.in
- Startup India. (n.d.). *Government of India Initiative to Foster Innovation and Entrepreneurship*. https://www.startupindia.gov.in
- Veeraiah, V., Ahamad, S., Jain, V., Anand, R., Sindhwani, N., & Gupta, A. (2023, May). IoT for Emerging Engineering Application Related to Commercial System. In *International Conference on Emergent Converging Technologies and Biomedical Systems* (pp. 537-550). Singapore: Springer Nature Singapore.
- Jain, V. (2021). Word of mouth as a new element of the marketing communication mix: Online consumer review. *South Asian Journal of Marketing & Management Research*, *11*(11), 108-114.
- Kansal, A., Jain, V., & Agrawal, S. K. (2020). Impact of digital marketing on the purchase of health insurance products. *Jour of Adv Research in Dynamical & Control Systems*, *12*.
- Jain, V., Chawla, C., Arya, S., Agarwal, R., & Agarwal, M. (2019). An Empirical Study of Product Design for New Product Development with Special Reference to Indian Mobile Industry. *TEST Engineering & Management*, *81*, 1241-1254.
- Jain, V. (2017). Emerging Digital Business Opportunities and Value. *Data Analytics & Digital Technologies*.
- Khan, H., Veeraiah, V., Jain, V., Rajkumar, A., Gupta, A., & Pandey, D. (2023). Integrating Deep Learning in an IoT Model to Build Smart Applications for Sustainable Cities. In *Handbook of Research on Data-Driven Mathematical Modeling in Smart Cities* (pp. 238-261). IGI Global.
- Jain, V, Agarwal, M. K., Hasan, N., & Kaur, G. ROLE OF MICROFINANCE AND MICROINSURANCE SERVICES AS A TOOL FOR POVERTY ALLEVIATION.

- Gupta, N., Sharma, M., Rastogi, M., Chauhan, A., Jain, V., & Yadav, P. K. (2021). Impact of COVID-19 on education sector in Uttarakhand: Exploratory factor analysis. *Linguistics and Culture Review*, 784-793.
- Jain, V. (2021). Information technology outsourcing chain: Literature review and implications for development of distributed coordination. *ACADEMICIA: An International Multidisciplinary Research Journal*, *11*(11), 1067-1072.
- Jain, V. I. P. I. N., Chawla, C. H. A. N. C. H. A. L., & Arya, S. A. T. Y. E. N. D. R. A. (2021). Employee Involvement and Work Culture. *Journal of Contemporary Issues in Business and Government*, *27*(3), 694-699.
- Setiawan, R., Kulkarni, V. D., Upadhyay, Y. K., Jain, V., Mishra, R., Yu, S. Y., & Raisal, I. (2020). *The Influence Work-Life Policies Can Have on Part-Time Employees in Contrast to Full-Time Workers and The Consequence It Can Have on Their Job Satisfaction, Organizational Commitment and Motivation* (Doctoral dissertation, Petra Christian University).
- Verma, C., Sharma, R., Kaushik, P., & Jain, V. (2024). The Role of Microfinance Initiatives in Promoting Sustainable Economic Development: Exploring Opportunities, Challenges, and Outcomes.
- Verma, C., Sharma, R., Kaushik, P., & Jain, V. (2024). The Role of Microfinance Initiatives in Promoting Sustainable Economic Development: Exploring Opportunities, Challenges, and Outcomes.
- Jain, V. (2021). An overview on employee motivation. *Asian Journal of Multidimensional Research*, *10*(12), 63-68.
- Jain, V. (2021). A review on different types of cryptography techniques "should be replaced by" exploring the potential of steganography in the modern era. *ACADEMICIA: An International Multidisciplinary Research Journal*, *11*(11), 1139-1146.
- Jain, V., Chawla, C., Arya, S., Agarwal, R., & Agarwal, M. (2019). Impact of Job Satisfaction on relationship between employee performance and human resource management practices followed by Bharti Airtel Limited Telecommunications with reference to Moradabad region. *International Journal of Recent Technology and Engineering*, *8*, 493-498.

- Verma, C., Sharma, R., Kaushik, P., & Jain, V. (2024). The Role of Microfinance Initiatives in Promoting Sustainable Economic Development: Exploring Opportunities, Challenges, and Outcomes.
- Jain, V., Verma, C., Chauhan, A., Singh, A., Jain, S., Pramanik, S., & Gupta, A. (2024). A Website-Dependent Instructional Platform to Assist Indonesian MSMEs. In *Empowering Entrepreneurial Mindsets With AI* (pp. 299-318). IGI Global.