

A CONCEPTUAL STUDY OF FINTECH ADOPTION AND MSMEs GROWTH IN INDIA

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Abstract

MSMEs form the backbone of India's developmental growth journey. It plays a critical role in the country's economic development by significantly contributing to GDP, Employment Generation, export and industrial growth. However, it faces many challenges such as a lack of access to credit facilities, higher transaction cost and operational inefficiency. This is due to a lack of skill and literacy. The rapid development of financial technology (Fintech) has emerged as a transformative solution to many of these challenges. This paper presents a conceptual study that examines the relationship between fintech adoption and MSMEs' growth based on existing literature. The study proposes a conceptual framework linking fintech innovation, such as digital payments, peer-to-peer lending, AI-based credit search, and blockchain technology, to MSMEs' performance Indicator including financial inclusion, profitability, productivity, and market expansion. The paper also discusses challenges, opportunities and policy implications of fintech adoption in the MSMEs sector. The study contribution growing body of literature by offering a structural theoretical foundation for future empirical research.

Keywords: *FinTech, MSME Growth, Digital Finance, Financial Inclusion, Conceptual Framework*

Introduction

Micro, small and medium enterprises are the backbone of the Indian economy, which enhances GDP and employment with over 90% of global firms and 70% of total employment, as they are classified by investment and turnover. It contributes heavily to industrial production, export and employment generation, especially in the rural areas and tier 1 and 2 cities. The government provide support through initiatives like the Atmanirbhar Bharat package, MSMEs champions and ZED (zero effect zero defect) certification to boost competitiveness. Despite their importance, MSMEs often struggle with inadequate access to formal finance, delayed payment, and a lack of technology infrastructure. The emerging trends of fintech delivered through advanced digital technologies have transformed the traditional financial system. Companies such as Paytm, Razorpay, and Lendingkart have enabled faster payments, digital lending, and alternative credit assessment mechanisms for small businesses and also in rural areas. This paper aims to conceptually examine how FinTech adoption influences MSME growth in India.

Concept of FinTech

Fintech (financial technology) in 2026 has reached a pivotal inflexion point, transferring from a layer on top of finance to the new operating system of the global economy. Financial technology integrates technology with financial services to improve efficiency, accessibility and cost effective to all the nation, including the vulnerable sections of society. It includes Digital payment systems, Peer-to-peer (P2P) lending, Crowdfunding platforms, AI-based credit scoring, Blockchain technology and Mobile banking applications. This top trend reduces the transaction cost, increases transparency and improve finance access for the underserved sector.

Concept of MSME Growth

In India, MSMEs are defined under the Ministry of Micro, small and Medium Enterprises based on investment and turnover criteria. MSME growth can be measured through an Increase in revenue, Profitability improvement, Employment generation, Market expansion, Productivity enhancement, and financial stability and this growth is influenced by financial access, innovation, market demand, and regulatory support. MSMEs' growth depends on:

- Access to finance
- Technology adoption
- Government support
- Market access
- Digital and fintech adoption

Literature Review

Mahender Pal (2025) provides a theoretical review of the influence of FinTech on MSMEs in India, focusing on how digital tools transform financial behaviour, access, and operational efficiency for small businesses. It synthesises earlier studies and highlights major drivers and barriers in adoption.

A systematic literature review on FinTech innovation by **Mohammed et al. (2025)** maps the broader FinTech ecosystem, including digital payments, AI, blockchain, and institutional disruption. It stresses that infrastructure readiness, regulatory flexibility, and digital literacy are central to adoption and sustainable growth.

Singh and Hess (2022) conducted a longitudinal study on SME technology adoption and concluded that sustained digital usage leads to long-term performance improvement.

Patel and Joshi (2022) examined digital lending platforms in India and observed faster loan approval times and improved credit accessibility for MSMEs compared to traditional banking channels.

The Reserve Bank of India (2021) emphasised the expansion of digital payments and regulatory sandbox initiatives. The report noted that MSMEs increasingly use digital payment platforms to streamline transactions.

Das (2021) found that the adoption of digital payment systems improved revenue tracking and customer retention among Indian MSMEs. The study concluded that FinTech increases business transparency.

Chatterjee and Das (2021) identified digital literacy as a major barrier to FinTech adoption among small businesses. The study recommended targeted digital training programs for MSME owners.

Gupta and Garg (2021) analysed FinTech growth in India and highlighted regulatory support and smartphone penetration as key drivers of adoption among small enterprises.

Kumar and Kaur (2021) found that MSMEs using digital marketplaces and online payment systems experienced expanded customer reach and increased sales growth.

The Ministry of Micro, Small and Medium Enterprises (2020) reported that MSMEs contribute nearly 30% to India's GDP and face significant credit gaps. FinTech solutions are viewed as instruments to bridge this financing deficit.

The World Bank (2019) reported that digital financial services significantly improve financial inclusion among small businesses. The study highlighted India as a rapidly growing FinTech market supporting MSME growth.

Lee and Shin (2018) examined the FinTech ecosystem and identified five components: startups, technology developers, government, customers, and traditional financial institutions. Their findings show that collaboration between banks and FinTech firms enhances SME financing.

Kshetri (2018) analysed blockchain adoption in developing countries and concluded that blockchain enhances transparency and reduces fraud. For MSMEs, this improves trust in digital transactions.

Arner et al. (2015) examined the evolution of FinTech in the post-global financial crisis period and argued that FinTech represents a structural transformation in financial intermediation. The study highlighted regulatory innovation and digital disruption as key drivers. Their framework helps explain how FinTech platforms reduce transaction costs and enhance credit accessibility for MSMEs.

Hew et al. (2015) studied mobile wallet adoption and confirmed that perceived security and ease of use significantly influence adoption intention among small business operators.

Davis (1989) introduced the Technology Acceptance Model (TAM), proposing that perceived usefulness and perceived ease of use determine technology adoption. This model is widely applied in FinTech adoption studies among MSMEs to explain behavioural intention toward digital financial tools.

Objective of the study

1. To analyse the role of fintech in enhancing financial inclusion among MSMEs sectors.
2. To propose a conceptual framework linking fintech adoption and MSMEs growth.
3. To evaluate the impact of fintech adoption on MSME growth indicators.
4. To identify challenges, opportunities and policy implications for fintech- driven MSME growth.

Theoretical Foundation

Financial Inclusion Theory says that universal access to affordable, secure and usable financial services such as savings, credit, insurances and payment – empower individuals, reduce poverty and foster sustainable economic growth. This theory includes 4 pillars:

1. Access (Availability)
2. Usages (Actual Adoption)
3. Quality (Standard)
4. Consumer Protection (Safeguarding)

The access to this financial service enhances economic participation, reduces poverty, and promotes enterprise development. FinTech improves inclusion by providing access to previously underserved MSMEs and also helps in reducing transaction costs, geographical barriers, enabling digital credit scoring and promotes mobile banking and UPI.

Explain that Financial Inclusion Theory focuses on providing affordable, accessible financial services to underserved populations and businesses.

FINTECH = ENABLER OF FINANCIAL INCLUSION

Let us know how fintech leads MSMEs Growth,

1. Increased credit access → Business expansion

2. Digital payments → Cash flow transparency and Physical Evidence
3. Alternative lending → Working capital improvement

Limitations:

1. Digital divide
2. Cybersecurity risk
3. Informal businesses are still excluded
4. Over-indebtedness through digital lending

VRIO/VRIN (Proposed by Barney (1991))

It is a tool for analysing a resource or a capability that can provide a sustained competitive advantage based on Value, Rarity, Imitability and Organisation. This can be clarified.

1. Valuable → Improves efficiency
2. Rare → Unique capability
3. Inimitable → Difficult to copy
4. Non-substitutable → Cannot be replaced easily

Apply RBV (Resource-based view) to FinTech

According to resources-based view (RBV) of strategic management, it argues that firms gain sustainable competitive advantage through internal resources that are (VRIN/VRIO).

Fintech capability becomes a strategic resource for MSMEs, like Digital data analytical capability, online payment, infrastructure, digital customer database and platform integration. These digital capabilities Improve Efficiency, reduce cost and enhance competitiveness.

RBV helps MSMEs adopt FinTech and gain a competitiveness advantage, which leads to

1. Revenue growth
2. Market expansion
3. Operational efficiency
4. Innovation capability

Not all MSMEs have equal digital capability of there investment and turnover division due lack of availability, capital adequacy and skill. Small enterprises/firm may lack managerial competence.

The technology acceptance model (TAM) developed by Fred Banis in 1986 is a Foundational theory explaining how user accepts and adopt new technology. This has three core components of TAM

- Perceived Usefulness
- Perceived Ease to Use
- Behaviour Intention

If MSME owners perceive fintech services as easy and useful, adoption increases and also leads to financial inclusion.

These digital capabilities:

- Improve efficiency
- Reduce cost
- Enhance competitiveness

Research methodology

This study is based on a conceptual and descriptive research design. It is based on a systematic review of the latest literature review related to fintech adoption and MSMEs growth. The study relies on secondary data collected from peer-reviewed journal articles, Government reports, RBI reports, the Ministry of MSMEs and world bank. The thematic analysis approach has been used to synthesise literature across major themes in the fintech ecosystem in India. TAM (Technology adoption model), RBV (Resource-based view) and Diffusion of innovation theory are integrated to develop a comprehensive conceptual framework.

Opportunities of FinTech for MSMEs

1. **Easy access to credit-** fintech platform uses alternate credit scoring models to assess the creditworthiness of the MSMEs, unlike the banking sector, which relies heavily on previous lending and creditworthiness of the MSMEs. Fintech allows MSMEs to access credit with ease and in real time, breaking the barrier of collateral-packed loans. This helps small units, especially in rural and semi-urban area to obtain quick credit.

2. **Increased digital payment-** with the government's push for increased digital transaction fintech will serve the purpose. It will increase digital payment, reducing the costs, and ensuring faster settlement. Unified interface (UPI), mobile wallet, etc., will enable MSMEs to receive payment instantly and maintain a record of all maiden transactions, thus enhancing transparency and reducing dependency on cash.

3. **E-commerce integration-**Fintech provides a way to integrate MSMEs into e-commerce platforms. They can connect to wider world outside, and share their market product. Earlier, smaller and local business were depended mainly on the local market due to lesser financial and technical support. Fintech has reduced these barriers.

4. **Better financial inclusion-**Financial inclusion has become the foremost priority of the government. With more and more push for financial inclusion, fintech is a step in that direction. Fintech is promoting financial inclusion by connecting unbanked and underbanked MSMEs to formal financial systems. It uses e-KYC and Aadhar-based verification to open a bank account quickly without paperwork.

5. **Wider market reach through digital platforms-** fintech provides a wider market accessibility to MSMEs where there is easy availability of credit, market, integrated supply chain and raw material. An e-commerce platform provides a market for MSMEs, and UPI provides faster transactions and other facilities like easy credit availability.

Challenges in Fintech Adoption

1. **Digital Illiteracy-** People in India are not well educated enough (especially in rural areas) to understand digital technologies, making financial solution hurdle among the MSMEs. Even if people understand they are resistant to change their early practice of depending on age-old traditional methodology.
2. **Cybersecurity concern** – cybersecurity issue has emerged as a major threat to the adoption of any new technology, whether it may be fintech or anything. People are scared that in the race to adopt something new, they may end up losing what they have. Cybersecurity has emerged as a modern threat to mankind.
3. **Poor Digital Infrastructure** – For the adoption of fintech stable internet connection and availability of smartphones are the utmost priority. Many places in India lack these basic facilities.

4. **Data Privacy Issues** – People feed a large amount of data on fintech, and data collected on their platforms may be misused or leaked, leading to data privacy concerns, breaking the trust of people in digital payment systems.
5. **Regularity and Compliance Issues** – fintech platforms must follow the guidelines issued by the authority, and regular checks and mandates should be done to ensure that compliance is maintained.

Policy Implications

1. **Ensuring collaboration between the bank(traditional) and fintech (modern) solution** – this will ensure that people who are resistant to change can smoothly be integrated into the fintech framework, making the system more transparent, easier and smoother for MSMEs in rural areas as well as semi-urban areas.
2. **Enhancement of Digital Literacy Program** – The government should take effective measures to ensure that digital literacy is percolated beneath the rural household via the awareness campaign to make people aware of fintech solutions and their usage in daily life.
3. **Ensuring regulatory clarity** – financial authorities must ensure that all rules and regulations regarding data collection, data storage and maintenance must be followed in due process, minimising regulatory hurdles, increasing clarity, transparency and trust in the fintech solutions.
4. **Promotion of digital infrastructure** – Development of better digital infrastructure, like better internet connectivity, availability of smartphones are hindrance towards fintech adoption, especially in rural areas. The government must work on building up additional facilities in these areas that lack basic facilities.
5. **Strengthening cybersecurity framework** – Cybersecurity risks are the major threat posed by fintech adoption. The government must work in this direction to minimise the risk of cybersecurity threats by implementing a better regulatory framework, periodic checks and review of financial authorities. The government must frame dedicated guidelines to guide the fintech sector in the country.

Future Research Directions

1. **Empirical testing of the proposed framework:** It involves a systematic method for validating theoretical constructs data against real-world data. Some are the method like performance benchmarks, case study and statistical analysis.
2. **Comparative study between urban and rural MSMEs:** Examining this area to identify similarities, difference and challenges.
3. **Impact of specific FinTech tools on profitability:** Analyse the effect of the use of fintech tools like AI finance, UPI, and Online Banking System, etc.
4. **Sector-wise analysis (manufacturing vs services):** Sector-wise analysis can be done to find out obstacle in this field.

Conclusion

Fintech has revolutionised the financial sector by making transactions faster, services cheaper and more convenient. It has played a crucial role in changing the economic perspective of India, where the economy

shifted to a digital economy, financial inclusion, boosts to MSMEs, formalisation of the economy and data-driven growth. Especially talking about MSMEs, improved access to credit, digital payment use, e-commerce integration, and wider market reach are some of the benefits that fintech provides; however, changes come with challenges too. Fintech adoption over time has posed many challenges, cybersecurity related concern, data privacy issues, poor digital infra and digital illiteracy. Effective policy regulations and digital literacy programs are necessary to reap the full benefit of fintech adoption.

Thus, fintech has transformed the economic perspective from a traditional, bank-centred system to tech driven, where MSMEs from the important pillar of growth.

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