

Entrepreneurship and Start-ups through Digital Platform- Prospects and Challenges

Mrs. Jyotsana Darshan Raut¹, Dr. V. D. Jadhav²

¹Research Scholar, The School of Commerce and Management Sciences, SRTMU, Nanded

²Assistant Professor, P.G. Department of Commerce, People's College, Nanded

ABSTRACT:

A startup or start-up may be a company or project undertaken by an entrepreneur to hunt, develop, and validate a scalable business model. While entrepreneurship refers to all or any new businesses, including self-employment and businesses that never shall become registered, startups ask new businesses that shall grow large beyond the solo founder. At the start, startups face high uncertainty and have high rates of failure, but a minority of them do continue to achieve success and influential. Entrepreneurship is one of the outstanding factors for the development of a nation. The Government of India rigorously encourages innovation, startups and entrepreneurship and allocates huge funds to encourage the growth of the entrepreneurial environment. To encourage students to explore entrepreneurship as a career option, a variety of organizational programs and projects provide a support system and connect industries, institutions and skills development programs.

This Research Paper will highlight the prospects and challenges faced by the new start-ups through Digital platform. This paper will generate new ideas of forming start-ups and creating entrepreneurs.

Keywords: Start-ups, Entrepreneurship, Self-employment, Success, Failure, Career,

1. Introduction

Entrepreneurship has long been recognized as a catalyst for socio-economic development and innovation. In emerging economies like India, it represents a key engine of structural transformation by fostering new industries, generating employment, and enabling inclusive growth. Since independence, India's entrepreneurial landscape has evolved from small-scale traditional enterprises to globally recognized start-ups driving technological and social innovation. However, the digital revolution that began in the 2010s has fundamentally redefined the contours of entrepreneurship, shifting from brick-and-mortar operations to platform-based, data-driven models.

The Indian government has played a pivotal role in nurturing this ecosystem. The Startup India Initiative, launched in January 2016, provided a comprehensive framework for supporting innovation through policy reform, funding mechanisms, and capacity-building programs. Complementing this, the Digital India campaign focused on improving digital infrastructure and governance. As a result, start-ups in India have witnessed exponential growth—from just 471 recognized ventures in 2016 to over 100,000 by 2025 (DPIIT, 2024). India now stands as the world's third-largest start-up ecosystem, after the United States and China.

The COVID-19 pandemic further accelerated the digitalization of business operations. As physical marketplaces were disrupted, entrepreneurs increasingly relied on e-commerce, fintech, and remote

collaboration tools to sustain operations. Start-ups in sectors such as healthtech, edtech, agritech, and fintech leveraged digital platforms to reach underserved populations. However, despite these advances, systemic challenges persist—limited access to venture capital outside metro areas, low digital literacy in rural regions, and regulatory complexities hinder equitable growth.

The purpose of this study is to analyze how digitalization has transformed India's entrepreneurial ecosystem, assess the challenges encountered by new ventures, and explore strategies to foster sustainable start-up growth. By synthesizing government and industry reports, this research identifies the interplay between technology, policy, and innovation as key determinants of entrepreneurial success in India's digital era.

2. Literature Review

Digital entrepreneurship—defined as the creation and scaling of businesses through digital technologies—has emerged as a central theme in economic research (Nambisan, 2017). Scholars argue that the digital economy lowers entry barriers and enables new forms of value creation (Bharadwaj et al., 2019). In the Indian context, digital entrepreneurship is not only a driver of economic competitiveness but also a vehicle for social inclusion.

Policy and Ecosystem Evolution.

Gupta and Singh (2023) attribute the surge in start-ups to the government's proactive policy measures, especially under the Startup India framework. These include tax exemptions, funding through the Fund of Funds for Startups (FFS), and mentorship programs. Similarly, Sharma, Mehta, and Rao (2021) highlight that Digital India has improved e-governance efficiency and reduced bureaucratic barriers for entrepreneurs. KPMG's (2022) India Startup Ecosystem Report emphasizes that fintech and SaaS-based ventures have benefited most from digital enablement due to easier scalability and lower fixed costs.

Technological Drivers of Entrepreneurship.

The role of technology in facilitating start-up growth is underscored in multiple studies. According to Dasgupta (2021), cloud computing, AI, and mobile applications have allowed Indian start-ups to expand at lower operational costs. The World Bank (2024) identifies India as a "digital opportunity hub," where innovation thrives on affordable technology and a young talent pool. The NASSCOM (2023) Tech Start-up Report notes that 70% of Indian start-ups adopted AI or machine learning tools for customer engagement and analytics by 2023. Moreover, the democratization of fintech platforms has enabled easier credit access, even for micro and small enterprises in Tier-II cities (EY India, 2024).

Challenges Identified in Literature.

Despite optimistic growth trends, challenges persist. Kaur and Joshi (2020) point out that the concentration of start-up funding in metropolitan hubs like Bengaluru, Delhi NCR, and Mumbai creates regional disparities. Additionally, the regulatory environment—though improving—remains cumbersome, with overlapping state and central compliances (NITI Aayog, 2022). The World Bank Digital Economy Report (2023) highlights another constraint: India's digital divide, as rural internet penetration remains below 55% despite significant infrastructure progress. Skill gaps are another recurring theme. According to the OECD (2023), only 23% of the Indian workforce possesses digital skills relevant to the start-up ecosystem, limiting innovation diffusion.

Social Inclusion and Gender Dimensions.

Dasgupta (2021) and Bhatia (2022) emphasize that digital entrepreneurship has created new pathways for women, youth, and rural entrepreneurs. E-commerce and social media marketing allow female

entrepreneurs to operate businesses from home, breaking cultural and logistical barriers. However, systemic barriers—limited access to finance, gender bias in investment, and lack of mentoring networks—still constrain inclusivity.

Post-Pandemic Shifts.

The pandemic catalyzed a structural shift toward digital-first entrepreneurship. According to PwC (2022), 83% of Indian start-ups reported adopting digital sales or service delivery channels post-2020. Sectors like edtech (Byju's, Unacademy) and healthtech (Practo, 1mg) exemplify rapid digital adoption. The World Economic Forum (2023) further notes that India's resilience during COVID-19 was largely enabled by digital payment infrastructure (UPI), which processed over 10 billion monthly transactions by 2024.

Synthesis of Literature.

The collective evidence underscores a dual reality: digitalization has unlocked unprecedented opportunities for innovation, yet it also magnifies pre-existing inequalities. Access to capital, digital literacy, and policy consistency remain critical determinants of success. A consistent theme across literature is the need for ecosystem-oriented policies that balance innovation with inclusion.

3. Research Objectives

This study is designed to investigate how digitalization has transformed the landscape of entrepreneurship and start-ups in India. Specifically, the objectives are:

1. To analyze the growth trajectory of Indian start-ups in the post-pandemic digital economy.
2. To assess the role of government initiatives in fostering digital entrepreneurship.
3. To identify challenges faced by new ventures in leveraging digital platforms for business expansion.
4. To propose policy interventions to strengthen India's start-up ecosystem.

4. Methodology

This paper adopts a **qualitative and descriptive research design**, relying primarily on **secondary data sources**. Information was obtained from official government publications, such as the DPIIT Annual Startup Report (2023), NITI Aayog Startup Landscape Report (2022), World Bank Digital Economy Reports (2023–2024), and industry analyses from NASSCOM, EY India, and KPMG. Peer-reviewed journals from Elsevier, Springer, and Emerald Insight were also reviewed to ensure academic rigor.

Data Collection and Scope

The research spans the period **2015 to 2025**, capturing a decade of digital transformation. It includes start-up registration data, funding patterns, and digital infrastructure indicators. Qualitative insights were derived from case studies of emerging digital start-ups in fintech, edtech, and agritech sectors.

Analytical Framework

The analysis is structured around three dimensions:

1. **Ecosystem Enablers** – policy, infrastructure, and funding mechanisms.
2. **Digital Adoption Metrics** – technology utilization and platform penetration.
3. **Performance Indicators** – start-up growth, survival rate, and regional distribution.

Data visualization techniques (bar charts and trend lines) were employed to illustrate growth patterns and key sectoral shifts.

5. Findings and Discussion

5.1 Start-up Growth Trends (2015–2025)

Digitalization has dramatically increased the pace of start-up creation in India. The DPIIT (2024) reports that recognized start-ups grew from **471 in 2016** to **100,000 by 2025**, reflecting an average annual growth rate of 65%. This growth coincides with a steep rise in internet users—from 252 million in 2014 to 850 million in 2025 (TRAI, 2025).

Below is a visual representation of this trend:

Figure 1: Growth of Recognized Start-ups in India (2015–2025)

Year	Recognized Start-ups
2015	471
2017	5,475
2019	14,000
2021	50,000
2023	85,000
2025	100,000

The introduction of digital platforms—especially UPI, GeM (Government e-Marketplace), and DigiLocker—has simplified registration and compliance processes, lowering entry barriers for entrepreneurs. The Startup India Portal and Startup India Seed Fund Scheme (SISFS) have further improved access to resources.

5.2 Sectoral Analysis

Fintech and Financial Inclusion

The fintech sector has experienced exponential growth due to India’s digital payment ecosystem. According to NASSCOM (2024), fintech start-ups constitute 19% of all start-ups in India. The Unified Payments Interface (UPI) has become the backbone of digital finance, processing over **12 billion transactions per month** in 2025. Start-ups like Razorpay, PhonePe, and Paytm have democratized financial access for small businesses and individuals.

Edtech and Digital Learning

The pandemic accelerated the adoption of digital learning platforms. KPMG (2022) reports that India’s edtech market is projected to reach **USD 10 billion by 2025**. Companies such as Byju’s, Vedantu, and Unacademy have transformed the learning experience, expanding beyond urban centers through affordable mobile-based solutions.

Healthtech and AgriTech Innovations

Healthtech start-ups like Practo and 1mg revolutionized healthcare access through telemedicine and digital diagnostics. Meanwhile, agritech enterprises—such as DeHaat and AgroStar—use data analytics, IoT, and mobile apps to enhance farm productivity. According to NITI Aayog (2023), over **1,200 agritech start-ups** now serve smallholder farmers.

Figure 2: Start-up Distribution by Sector (2025)

Sector	Share of Start-ups (%)
Fintech	19%

Edtech	12%
Healthtech	11%
Agritech	9%
SaaS and IT Services	22%
E-commerce	14%
Others	13%

This distribution demonstrates India's diversification beyond traditional technology-driven sectors toward purpose-led innovation in agriculture, healthcare, and education.

5.3 Regional Concentration and Inclusion

Despite overall growth, start-up activity remains highly concentrated in metropolitan regions. EY India (2024) found that **75% of venture capital investments** are directed to Bengaluru, Delhi NCR, and Mumbai. However, Tier-II cities such as Pune, Ahmedabad, Jaipur, and Kochi are emerging as new innovation hubs due to government incubators and university-led accelerators.

Programs like Atal Innovation Mission (AIM) and Startup Village Entrepreneurship Program (SVEP) have extended entrepreneurial opportunities to rural India. Still, gaps in infrastructure, mentorship, and local funding remain significant.

5.4 Digitalization as an Enabler of Resilience

Digital platforms proved crucial for start-up survival during the pandemic. According to PwC (2022), 82% of Indian start-ups adopted digital sales channels in 2021–2022. Cloud-based operations and digital supply chains allowed businesses to continue despite physical restrictions. The World Economic Forum (2023) identified India's start-ups as among the most resilient globally, thanks to digital financial inclusion tools and data-driven models.

Digital marketing and social media also enabled small entrepreneurs to build brands with minimal cost. Micro-entrepreneurs, particularly women-led businesses on platforms like Instagram and Meesho, leveraged digital spaces to reach consumers directly.

5.5 Funding and Investment Trends

Venture capital inflows peaked in 2021 at USD 42 billion, with fintech and SaaS sectors attracting the most interest (KPMG, 2022). However, a correction followed in 2023–24 due to global economic slowdowns. Domestic investors such as SIDBI and the Fund of Funds for Start-ups (FFS) have played an increasingly vital role in stabilizing financing availability.

Foreign investment has also contributed substantially. According to World Bank (2024), India ranks third globally in attracting venture capital funding after the U.S. and China. However, early-stage start-ups in smaller cities continue to face funding challenges due to limited investor networks.

5.6 Discussion

The findings underscore that India's digital start-up ecosystem is thriving, dynamic, and globally competitive. However, growth remains uneven. The digital divide, regulatory complexity, and funding inequality continue to constrain inclusive development.

From a macroeconomic perspective, digital entrepreneurship has boosted productivity, fostered innovation, and generated employment. Yet, it requires continuous policy support, improved education–industry linkages, and a focus on sustainability.

India's journey exemplifies the paradox of progress—where technology democratizes opportunity but also deepens structural gaps. The government's next phase of policy design must therefore focus on

“decentralizing innovation,” ensuring that Tier-II and Tier-III regions are equally empowered through digital infrastructure and localized venture support.

6. Challenges and Prospects

Despite the impressive expansion of India’s start-up ecosystem, several **structural and operational challenges** continue to inhibit inclusive and sustained growth. The following issues are prominent in literature and field data:

6.1 Funding Inequality

Although India has attracted substantial venture capital inflows (USD 42 billion in 2021), investment remains concentrated in major metropolitan regions such as **Bengaluru, Delhi NCR, and Mumbai**, which together account for nearly 75% of total start-up funding (EY India, 2024). Start-ups in Tier-II and Tier-III cities struggle to attract investors due to weaker networks, limited exposure, and a lack of local mentorship ecosystems. The uneven distribution of venture funding undermines the broader goal of **decentralized innovation**.

6.2 Regulatory Complexity

Regulatory compliance continues to be a critical bottleneck. Although the Startup India Action Plan (2016) simplified several processes, start-ups must still navigate multiple state and central registrations, data protection obligations, and tax compliance norms. This complexity discourages early-stage entrepreneurs and diverts resources from innovation toward administrative tasks. As noted by NITI Aayog (2023), a **unified digital compliance framework** is urgently required to streamline business operations.

6.3 Digital Divide

India’s digital transformation remains uneven. While urban centers enjoy advanced connectivity, **rural internet penetration stands at around 55%**, limiting the reach of digital entrepreneurship (World Bank, 2024). The lack of robust broadband infrastructure and digital literacy hampers rural entrepreneurs’ ability to leverage e-commerce or digital payment platforms. Bridging this divide is crucial for ensuring that digital entrepreneurship contributes to **inclusive development**.

6.4 Skill Deficits and Talent Retention

Digital entrepreneurship depends on a skilled workforce capable of adapting to emerging technologies like AI, blockchain, and IoT. However, according to the OECD (2023), only 23% of India’s workforce possesses advanced digital skills. Many start-ups face high attrition rates and skill mismatches, especially in smaller cities where technical education infrastructure is underdeveloped. The result is a persistent gap between innovation potential and implementation capability.

6.5 Cybersecurity Threats

With increased digital adoption comes heightened exposure to cyberattacks, data breaches, and fraud. Start-ups often lack the financial and technical capacity to deploy advanced cybersecurity frameworks, making them vulnerable to threats that can undermine consumer trust. The Data Security Council of India (2024) reported that 68% of start-ups experienced at least one cyber incident between 2020 and 2024. Strengthening cybersecurity resilience is therefore essential for maintaining long-term credibility and compliance.

7. Policy Implications and Recommendations

The future of India’s digital start-up ecosystem depends on **sustained policy intervention** that aligns with evolving technological and social dynamics. Based on the findings, the following recommendations are

proposed:

7.1 Streamline Compliance and Governance

The government should adopt a “**Digital Single Window**” system to unify start-up registration, taxation, and reporting. Integration across state and central databases will reduce duplication and administrative delays. Enhanced e-governance, combined with AI-based compliance tracking, could further ease the regulatory burden.

7.2 Expand Funding Access Beyond Metros

To address funding disparities, regional innovation funds should be created under the Fund of Funds for Start-ups (FFS) scheme, targeting Tier-II and Tier-III regions. Incentives for domestic investors and angel networks in emerging cities can foster equitable growth. Collaboration with public sector banks for micro-venture lending can also catalyze local entrepreneurship.

7.3 Foster Digital Literacy and Skill Development

Digital literacy should become a national priority. Expansion of programs like Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and integration of entrepreneurship modules into school and college curricula can build foundational digital competencies. Partnerships between industry, academia, and government can enhance curriculum relevance and ensure a steady talent pipeline.

7.4 Promote Gender-Inclusive Entrepreneurship

Targeted initiatives must encourage women entrepreneurs by improving access to credit, mentorship, and market linkages. Platforms such as Women Entrepreneurship Platform (WEP) can be scaled nationally, coupled with dedicated funds for women-led start-ups. Gender inclusion not only enhances social equity but also expands the innovation base.

7.5 Strengthen Cybersecurity Frameworks

A **National Start-up Cybersecurity Mission** should be established to provide start-ups with affordable cyber insurance, data protection tools, and regulatory guidance. Awareness campaigns and partnerships with cybersecurity firms can improve risk management capabilities across the ecosystem.

7.6 Encourage Sustainable and Tech-Driven Growth

The next phase of start-up development must focus on sustainability and resilience. Incentivizing green innovation, clean technology, and circular economy models can align India’s start-up ecosystem with global Sustainable Development Goals (SDGs). Start-ups that adopt ESG (Environmental, Social, and Governance) frameworks should be prioritized in government funding schemes.

8. Conclusion

India’s start-up revolution—fueled by digitalization—marks a transformative chapter in the nation’s economic evolution. The country’s journey from 471 recognized start-ups in 2016 to over 100,000 by 2025 reflects not only technological progress but also policy foresight. Digitalization has empowered entrepreneurs to access global markets, reduce transaction costs, and create employment across diverse sectors.

However, achieving the goal of a **truly inclusive and sustainable entrepreneurial ecosystem** requires confronting the structural challenges that persist beneath the surface. Addressing funding disparities, strengthening digital literacy, enhancing cybersecurity, and simplifying regulatory frameworks are imperative for sustaining momentum.

India’s unique advantage lies in its youthful population, expanding internet base, and proactive policy environment. If these assets are strategically leveraged, India can evolve from a start-up nation to a **start-**

up superpower, leading the Global South in digital innovation and inclusive growth.

References:

1. Bhatia, M. (2022). Gendered dimensions of digital entrepreneurship. *Indian Journal of Innovation*, 15(2), 50–70.
2. Dasgupta, R. (2021). Women entrepreneurs and digital inclusion in India. *Journal of Entrepreneurship Studies*, 9(1), 33–49.
3. EY India. (2024). *State of the Start-up Ecosystem: India 2024*. EY Publications.
4. Gupta, R., & Singh, P. (2023). Digital entrepreneurship and growth of Indian start-ups. *Journal of Business Innovation*, 12(2), 45–59.
5. Kaur, S., & Joshi, A. (2020). Regional disparities in start-up funding in India. *Asia-Pacific Management Review*, 25(4), 120–138.
6. KPMG. (2022). *India Start-up Ecosystem Report*. KPMG Insights.
7. NASSCOM. (2023). *The Future of Indian Startups: Digital Acceleration and Beyond*.
8. NITI Aayog. (2023). *India's Start-up Landscape Report*. Government of India.
9. OECD. (2023). *Digital Skills and Workforce Readiness in Emerging Economies*. OECD Publications.
10. PwC. (2022). *India's Digital Transformation and Start-up Resilience Report*.
11. World Bank. (2024). *Digital Development and Entrepreneurship in Emerging Economies*. World Bank Publications.
12. World Economic Forum. (2023). *India's Digital Resilience in a Post-Pandemic World*.