Title of Research Paper: The Current Scenario of Start-Ups in India

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Abstract:

India's start-up ecosystem has experienced transformative growth over the past decade (2014–2023), emerging as a significant driver of economic development, innovation, and employment. ***This research explores the current scenario of start-ups in India, analyzing their growth trajectory, funding trends, contributions of start-up to job creation between 2014 and 2023, the most funded hub on funding amount and number of deals 2023, top start-ups sectors performed on the funding amount and number of deals, and Indian start-ups M&A.*** This research has used secondary data from reputable reports and statistical tools; it investigates key factors such as funding amount, deal count, start-up recognition rates, and job creation. The study confirms a positive correlation between funding amounts and the number of deals but finds only a weak link between start-up recognition and job creation. It also examines the high failure rates within the ecosystem, with only 10% of start-ups succeeding, underscoring challenges like product-market fit, infrastructure, and regulatory barriers.

Key Words: *Start-ups in India, Funding trends, Job creation, Start-up ecosystem, Funding amount, Deal count.*

1. Introduction

The term "start-ups" refers to a company in the early stages of its operations. Start-ups are founded by one or more entrepreneurs who want to develop a product or service for which they believe there is demand. Start-ups are young companies founded to develop a unique product or service, bring it to market, and make it irresistible and irreplaceable for customers. Rooted in innovation, a start-up aims to remedy deficiencies of existing products or create entirely new categories of goods and services, disrupting entrenched ways of thinking and doing business for entire industries. That’s why many start-ups are known within their respective industries as “disruptors.”Most familiar start-ups are Facebook, Amazon, Apple, Netflix, and Google, collectively known as FAANG stocks—but even companies like Nykaa and Droom are considered start-ups.

As per the Global Entrepreneurship Monitor (GEM) India Report (21-22), India's entrepreneurial activity expanded in 2021, with its Total Entrepreneurial Activity rate (percentage of adults (aged 18–64) that are starting or running a new business) increasing to 14.4% in 2021, up from 5.3% in 2020.

1.1 Definition of Start-Ups

An entity shall be considered as Start-ups:

- **Company age :** Period of existence and operations should not be exceeding 10 years from the Date of Incorporation
- **Company Type :** Incorporated as a Private Limited Company (as defined in the Companies Act, 2013) or registered as a partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2008) in India.
- **Annual Turnover:** Should have an annual turnover not exceeding Rs. 100 crore for any of the financial years since its Incorporation. Turnover of the entity for any of the financial years since incorporation/ registration has not exceeded one hundred crore rupees.

Entity is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation. Provided that an entity formed by splitting up or reconstruction of an existing business shall not be considered a 'Start-ups'.

1.2 Main Characteristics of a Start-up Company

- **Innovation** - Start-ups are usually founded on a unique idea
- **High Growth Potential** - Start-ups are designed to proliferate,
- **Scalability** - Scalability refers to the ability of a company to overgrow while maintaining or increasing its efficiency and profitability.
- **Problem-solving** - start-ups are often focused on solving problems.

- **Customer Focus -** Start-ups are focused on creating value for their customers

1.3 Different Types of Start-Ups Business

There are many different types of start-ups in India, but some of the most common categories include the following:

- **Technology start-ups:** India is known for its thriving tech start-up ecosystem, with many companies focused on developing innovative software, mobile apps, and other tech solutions.
- **Social impact start-ups:** There is a growing trend of start-ups in India that are focused on creating social impact, often by addressing issues related to healthcare, education, poverty, and sustainability.
- **E-commerce start-ups:** Many start-ups focused on online retail, grocery delivery, and other e-commerce services.
- **Fintech start-ups:** Many start-ups focus on developing innovative financial products and services.
- **Health tech start-ups:** Many start-ups focused on developing new technologies and solutions to improve healthcare delivery and outcomes.
- **Artificial Intelligence (AI) and Machine Learning (ML) start-ups:** There is a growing number of start-ups in India that are focused on developing AI and ML technologies, with applications in industries ranging from healthcare to finance to logistics.

2. Literature Review

Sebanti Snow (2018) analyzed the start-ups in India—present scenario, scope, and challenges. He aims to find out the present scenario of new start-up ventures in India and to analyze the scope and challenges faced by these ventures. He found that start-up business challenges may hamper its growth to a great extent. The possible challenges are financial, technological, sustainability, regulatory, social, cultural etc.

Pragati Gupta and Dr. Anvita Raghuvanshi (2024) explored the emerging start-up trends in India. They analyzed the dynamic changes that the Start-ups India campaign has brought to the country. They aimed to discover opportunities, gaps, and challenges that startups face during their stages of operation. Since its inception, the Journey of Start-Ups India campaign has successfully nurtured a large number of start-up firms in the country and has enabled thousands of youth to be employed and fulfil their dreams of building a start-up. Focusing on this notion, the paper tries to find out the opportunities and challenges that start-ups are facing in the present scenario. They found that start-ups in India face a variety of obstacles, including regulatory obstacles, inadequate infrastructure, and a lack of market knowledge. Successful businesses have shown that proactive measures can overcome these challenges, such as performing in-depth research, building strong relationships with stakeholders, utilizing technology, and asking for mentorship and advice from seasoned business owners.

Dr. G Suresh Babu and Dr. K Sridevi (2019) studied the issues and challenges of start-ups in India. They discussed the few issues and challenges that an Indian start-up has to face and the opportunities that the country can provide in the current eco-system. They conclude that the current economic scenario in India is in expansion mode. They found that the start-up arena has a lot of challenges ranging from finance to human resources and from launch to sustaining the growth with tenacity.

ArpitaLakhre and Maneesh Kumar Dubey (2023) analyzed the Indian Growing Start-up Ecosystem Using Statistical Tools. The study was carried out based on the secondary data and used statistical tools for the data analysis and inference. The study found that the huge scale for the start-ups in

India and vulnerable challenges also impact the growth of start-ups. The study also focused further research areas on start-ups in India. India has emerged as the world's second-largest start-up ecosystem, next to the US. India is a hotspot. For start-ups and spacing forward at an exponential rate. Bangalore, Mumbai, and Delhi are ranked among the top 40 start-up hubs across the globe in the Global Start-up Ecosystem Report 2022. In 2021 alone, India start-ups have raised more than $23 billion, spread over 1000+ deals, with 33 start-ups entering the coveted unicorn club. So far, 2022 has added 13 more start-ups to the unicorn club.

Kathirvela K. and V.Y. John researched on Critical Study on the Start-Up Eco System in India (2014–2023). They explored global and Indian trends in the clothing start-ups sector, emphasizing the direct-to-consumer (D2C) model, subscription services, and traditional craftsmanship revival, while also addressing challenges like supply chain inefficiencies and stiff competition. Through Anveshana Clothing's case study, the research delineates its inception, business model, target audience, and growth strategies, underscoring the socio-cultural and regulatory factors shaping the Indian start-up landscape.

3. Research Methodology

3.1 Research Objectives

This research aims to:

- Investigate the relationship between the amount of funding received and the number of deals in the Indian start-up ecosystem.
- Investigate the relationship between the number of recognized start-ups and the number of direct jobs created.
- Identify the leading and emerging start-up hubs in India based on funding received, deal counts, and growth over time.
- Analyze sectoral performance in funding amount and start-up deals.
- Analyze trends in start-up mergers and acquisitions over the years

3.2 Research Design

This study is descriptive, focusing on systematically analyzing the existing conditions and drawing inferences based on statistical correlations and comparative studies from literature.

3.3 Population of the Study

The population for this study includes all start-ups officially recognized in India across different sectors and regions.

3.4 Sample Size

Sample size includes all recognized start-ups in India within the years covered (2014–2023), with a focus on year-wise data for funding deals and job creation.

3.5 Data Collection Method

We have used **secondary data sources**, meaning it relies on previously published reports, research studies, and statistical data available from reputable databases, government publications, and industry reports. Key sources include: **i**nc42's Indian Start-ups Funding Report (2023)**,** GEM India Reports for entrepreneurial activity rates; various research studies for insights on challenges and sectorial trends; and year-wise data from "A Critical Study on the Start-Up Ecosystem in India" and "A Rise in Failed Start-Ups in India: Facts, Reasons, 2024."

4. Data Analysis and Interpretation

4.1 Hypothesis of Funding Amount Received and the Number of Deals

Null Hypothesis (H_0): There is a negative co-relation between the funding amount received and the number of deals.

Alternative Hypothesis (H_1): There is a positive co-relation between the funding amount received and the number of deals.

Table: 4.1 Year-wise Data on Funding Amount and Number of Deals (2014-2023)

Year	Deals in Start-ups	Funding in Start-ups ($ Mn)
2014	5	376
2015	9	983
2016	6	1045
2017	13	996
2018	12	832
2019	13	812
2020	11	953
2021	42	1584
2022	25	1517
2023	10	897

(Source: A Critical Study on the Start-Up Eco System in India (2014 – 2023)

Interpretation:

Table 4.1 shows year-wise data on funding amount and number of deals (2014-2023).The p-value at a significance level of 0.05 is 0.003211. The result is significant at p <.05.The correlation coefficient is positive (r = 0.8263). ***It suggests a positive relationship between the funding amount and the number of deals. If the correlation coefficient is statistically significant (p < 0.05), it would further support the alternate hypothesis, indicating a significant positive correlation between funding amount and the number of deals in start-ups.***

4.2 Hypothesis of Number of Start-Ups Recognized and Number of Direct Jobs Created

Null Hypothesis (H_0): There is a negative co-relation between the number of start-ups recognized and the number of direct jobs created.

Alternative Hypothesis (H_1): There is a positive co-relation between the number of start-ups recognized and the number of direct jobs created.

Table: 4.2 Year-wise Data on Number of Start-Ups Recognized and Number of Direct Jobs Created (2016-2023)

Year	Number of Start-ups Recognized	Number of Direct Jobs Created
2016	428	271
2017	5052	42930
2018	8576	87866
2019	11216	131594
2020	14454	159803
2021	19989	201144
2022	26522	270196
2023	118882	141043

(Source: A Rise in Failed Start-ups in India: Facts, Reasons, 2024)

Interpretation:

Table 4.2 shows year-wise data on the number of start-ups recognized and the number of direct jobs created (2016-2023). The correlation coefficient is 0.27. This positive, albeit weak, correlation suggests a slight tendency for the number of start-ups recognized and direct jobs created to increase together. However, this is not strong evidence of a linear relationship. P-value is 0.525. With a p-value greater than 0.05, we fail to reject the null hypothesis at common significance levels. ***This result indicates that we do not have statistically significant evidence to confirm a strong positive correlation between the number of start-ups recognized and the number of direct jobs created.***

4.3 The Main Hubs of Indian Start-Ups

Table: 4.3 The Most funded hub on Funding Amount and Number of Deals (2023)

The Main Hubs	Deal Count	Funding Amount ($ Mn)
Bangalore	249	4154
Delhi NCR	241	2693
Mumbai	160	1457
Chennai	32	211
Pune	30	211
Hyderabad	27	129
Ahmedabad	17	46
Kolkata	10	8
Jaipur	10	8
Surat	5	7

(Source: Agarwal, 2024b)

Interpretation:

Table 4.3 shows the most funded hub on funding amount and number of deals (2023). Together, the developing start-up clusters raised $1.4 billion in funds, which is 40% less than the $4.7 billion they raised in 2022.Chennai, Pune, and Hyderabad, the top three developing start-up clusters in 2023, saw an average the funding reduction of 47.6% year over year.

Bangalore leads significantly with $4,154 million in funding, followed by Delhi NCR ($2,693 million) and Mumbai ($1,457 million).

Bangalore also tops in the number of deals (249), followed closely by Delhi NCR (241), indicating these are the most active investment ecosystems.

Bangalore exhibits the highest funding per deal at **$16.68 million**, highlighting strong investor confidence. Other regions like Hyderabad, Kolkata, and Jaipur have significantly lower funding efficiency, with Kolkata and Jaipur at just **$0.8 million per deal**.

With its highest-ever $6.9 million in 2023***, Surat unexpectedly made it into the top 10 start-up centers. Jaipur achieved only eight deals***, a 56% decrease from the 16 deals in 2022, even though it has been ranked among India's top 10 rising start-up hotspots since 2014. With 355 agreements totalling $4.7 billion in investment between 2014 and 2023, ***Pune became India's fastest-growing start-up cluster.***

4.4 Top Start-ups Sectors Performed on the Funding

Table: 4.4 Top Start-ups Sectors Performed on the Funding Amount and Number of Deals (2023)

Sectors	2023	
	Funding Amount	**Deal Count**
Fintech	$3 Billion+	129+
Ecommerce	$2.6 Billion+	192+
Enterprisetech	$1.3 Billion+	157+
Cleantech	$861 Million+	57+
Deeptech	$496 Million+	61+
Consumer Services	$385 Million+	39+
Logistics	$368 Million+	32+
Media & Entertainment	$285 Million+	44+
Edtech	$283 Million+	47+
Healthtech	$233 Million+	57+
Travel Tech	$209 Million+	25+
Agritech	$208 Million+	28+

(Source: Kashyap, 2024b)

Interpretation:

Table 4.4 shows top start-ups sectors performed on the funding amount and number of deals.

- Fintech leads the sectors in funding with over $3 billion and 129 deals, showcasing its dominance.
- Ecommerce has the highest number of deals (192+) with $2.6 billion in funding, indicating broad adoption.

- Cleantech, Deeptech, and Healthtech have similar deal counts (57-61) but vary significantly in funding, highlighting differences in investment scale.
- Consumer Services and Media & Entertainment have relatively low funding and deal counts compared to others, suggesting niche but focused investments.
- Agritech and Travel Tech are at the lower end of funding and deals, indicating emerging or constrained growth.

4.5 Start-Ups M&As

Null Hypothesis (H_0): There is no significant difference in M&A deal counts between 2015-2019 and 2020-2023.

Alternative Hypothesis (H_1): There is a significant difference in M&A deal counts between 2015-2019 and 2020-2023.

Table: 4.5 Indian Start-ups M&As (M&As Deal Count)

Sectors	Deal Count
2015	117
2016	149
2017	128
2018	124
2019	113
2020	82
2021	210
2022	243
2023	123

(Source: Pushkarna, 2024)

Interpretation:

To analyze the trend in Mergers and Acquisitions (M&A) deals among Indian start-ups from 2015 to 2023, we have considered two time period**:** ***pre-covid 19 (2015-2019) and post- covid 19 (2020-2023).*** Since the p-value 0.383 is greater than the standard significance level 0.050, we fail to reject the null hypothesis. This suggests that the difference in M&A deal counts between the two periods is **not statistically significant***. M&A activity dropped sharply in 2020 due to COVID-19 but rebounded significantly in 2021 and 2022.*

4. 3Successful Start-Up Rate in India

The start-up rate of achievement in India is 10%, which is much lower than the 33% global average. However, this percentage varies by industry and has been observed to rise for those with previous experience in successful start-ups.

With an estimated 74,263 start-ups, the USA has the most in the world, according to the Start-ups Failure and Success Rates: 2023 Research. India has 15,246 start-ups, ranking second. Despite ranking second, the US has around five times as many start-ups as India. With 6,801 start-ups, the UK comes in third.

4. 4 Failed Start-Ups Statistics in India

Not every story is a success story. Though India has been a rising nation in terms of start-ups, the number of failed start-ups is also on the rise. Only a few of the start-ups in India make it big. On the one hand, young Indians in their 20s and 30s are becoming billionaires, transforming their start-ups into unicorn businesses; on the contrary, a significantly higher number of failed start-ups are taking place.

Based on the Start-up Failure and Success Rates: 2023 Research Article,

- Almost 90% of start-ups fail.
- The information industry has the highest failure rate at 63%.
- 27% of male-led start-ups successfully exit the VC as compared to 17% of women-led start-ups.

- Female-owned start-ups receive only 2.3% of VC funding.
- Cryptocurrency and digital healthcare start-ups have the highest failure rates at 95% and 98%, respectively.
- 33% of start-ups survive 10 years of operation.
- A start-up founder with a successful venture in the past has a 30% chance of success.
- The USA is home to the most number of start-ups, at 74,623, and more than 50% of all unicorns are located there.
- 80% of start-ups in India fail within 5 years.
- $3000 is the average cost of starting a small business.
- 75% of start-ups backed by VC funding fail.
- Fintech is the dominating industry, as 7.1% of all global start-ups fall in this category, with a market size of $310 billion.

5. Findings

India has emerged as the second-largest start-up ecosystem globally, with significant growth since 2014. As of 2023, the country is home to over 15,246 recognized start-ups. Start-ups are highly innovative, scalable, and customer-focused businesses with a high potential for disruption and job creation.

- ***There is a strong positive correlation ($r = 0.8263$, $p < 0.05$) between funding received and the number of deals,*** suggesting that higher funding levels are often associated with an increased number of deals.
- ***The correlation between the number of start-ups recognized and jobs created is weak*** ($r = 0.27$, $p > 0.05$), indicating other factors may influence job creation besides the number of start-ups. The number of recognized start-ups rose significantly from 428 in 2016 to 118,882 in 2023, with job creation increasing from 271 jobs to over 141,043 in the same period.
- ***Fintech dominated the funding landscape in 2023, securing $3 billion***+ across 129 deals, with lending tech attracting 40% of all fintech funding. Enterprise tech emerged as another strong sector with $1.3 billion+ in funding across 157 deals. Agritech, Travel Tech, and Consumer Services remain at the lower end of funding and deal counts.

- ***Bangalore, Delhi NCR, and Mumbai are the leading hubs***, collectively receiving $8.3 billion in funding in 2023. Emerging hubs like Chennai, Pune, and Hyderabad also demonstrated significant growth, with Pune recognized as the fastest-growing hub (total funding of $4.7 billion across 355 deals between 2014 and 2023).
- The p-value indicates no statistically ***significant difference in M&A activity between pre- and post-COVID-19 periods. A peak in 2022 followed by a decline in 2023.***
- ***The success rate of start-ups in India is 10%,*** significantly lower than the global average of 33%. Approximately 80% of Indian start-ups fail within five years, with the information, crypto currency, and digital healthcare sectors recording the highest failure rates. Female-led start-ups receive only 2.3% of VC funding, highlighting gender disparities in entrepreneurship.

6. Conclusion

India's dynamic start-up ecosystem offers immense potential for innovation, job creation, and wealth generation. A strong positive correlation exists between funding amounts and the number of deals, indicating that higher funding often drives greater deal activity. This suggests that funding inflows remain a critical factor for sustaining and expanding start-up activity in India. The correlation between recognized start-ups and job creation is weak, suggesting that job creation is influenced by other factors such as sectoral growth, operational scale, and technological advancements. Bangalore leads as the most prominent start-up hub, with $4.15 billion in funding and 249 deals in 2023. Delhi NCR and Mumbai follow closely, collectively receiving $8.3 billion across all three cities. There is no statistically significant difference in M&A activity between pre-COVID-19 (2015–2019) and post-COVID-19 (2020–2023) periods. However, 2021 and 2022 witnessed a significant rebound, with peaks in M&A deals at 243 in 2022 before declining to 123 in 2023.

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