

Growth & Development of Startup Ecosystem in India

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I. INTRODUCTION

Indian economy is in a transformation phase after 2014 as several reforms and initiatives were taken after a thorough analysis of the growth journey of the last 70 years and also the major hurdles in the path of natural and due economic development of the country. Startup India Policy is one of the unique initiatives and implemented to utilize the young Indian talent in the country's growth and control the brain drain since independence. The term "startup" has now become a vital part of the Indian economy. It is often used along with the terms like "jobs," "innovation" and "growth" (Rault & Mathew, 2019)^[2]. Startups are widely regarded as an important source of economic growth and job creation. Startups can generate impactful solutions and serve as vehicles for socioeconomic development and transformation by leveraging innovation and scalable technology (Korreck D. , 2019)^[3]. At this point, it is important to analyze the growth and development of the startup ecosystem in the country and examine the outcome of the policy initiated in 2016 (Department for Promotion of Industry and Internal Trade, 2020)^[4].

If we analyze the growth and development of the Indian Startup Ecosystem, it is observed that it has evolved dynamically over the last two decades. Previously, youth were more attracted towards white collared jobs especially in MNC's rather than taking risks and starting their own business. The reason was simple. The legal and administrative system of the country was driven by a plethora of rules and regulations and was also badly impacted by red-tapism. The New Economic was Policy initiated in 1991 and the New Startup policy has jointly created a favorable atmosphere for new business development.

The startup ecosystem provided incubators, mentors and investors for innovative business ideas of the youths. As a result, the number of startups is increasing over the last few years. Some of the startups are creating new opportunities for growth. The growth witnessed during the last decade is the result of a systemic and diversified support system and the sheer number of entrepreneurial initiatives.

The Startup Policy launched by the Government of India in 2016 was developed to cater the ideas, talent and capabilities of the young generation into small businesses and also to create new areas of jobs. This new startup policy has been

designed in such a way that the goals of job creation and youth mindset change can be achieved at the same time (Kushwaha & Puntambekar, Startup India Movement: A Review of Growth In Madhya Pradesh, 2019)^[5]. The startup plan includes many plans and policies. Such plans and policies will not only help to create job opportunities, but the scheme can also provide various types of assistance to make people self-employed and encourage even young students to participate in contributing their new talents in R&D. The Startup India scheme aims to foster entrepreneurship and promote innovation by creating an ecosystem that is conducive to the growth of Startups in India. It will drive sustainable economic growth and generate large-scale employment opportunities. The basic objective of the startup policy is to make the country job creators instead of being a nation of job seekers (Meher & Puntambekar, 2016)^[6]. The Government through this initiative aims to empower startups to grow through innovation and design. This paper aims to examine the growth and development of the startup ecosystem in India.

II. OBJECTIVE OF THE STUDY

- To identify the factors responsible for the growth of startups in India.
- To assess the growth and development of the startup ecosystem in India.
- To assess the challenges faced by the government in implementing the policy.

III. HYPOTHESIS OF THE STUDY

H_{0a}: Startup policy has no positive impact on the growth and development of the startup ecosystem

H_{1a}: Startup policy has a positive impact on the growth and development of the startup ecosystem

IV. RESEARCH METHODOLOGY

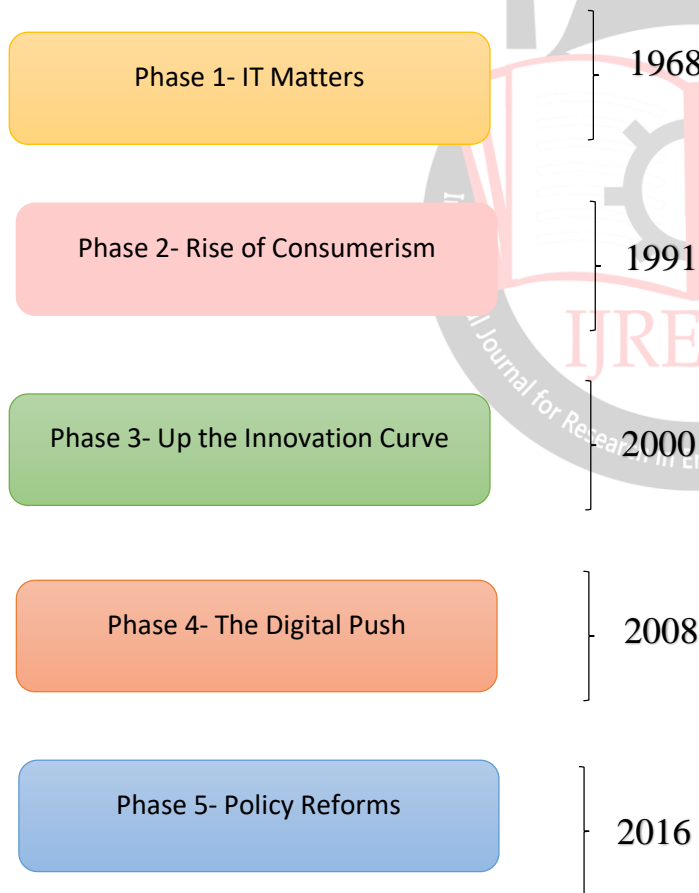
The study is both analytical and descriptive in nature. The research is based on both primary and secondary data. The primary data were collected through interviews with incubators, and the secondary data are collected from journals and various startup business websites. To identify the growth of startup businesses in India, simple tools and techniques like count, percentage and time series analysis are used. Further, the data is processed with help of MS-Excel, 2019.

V. HISTORICAL BACKGROUND OF INDIAN STARTUP ECOSYSTEM

Before diving into how India developed as a hub for startups, it's important to understand what a startup means. Startups are defined as young companies formed by one or two entrepreneurs to create a unique product or service that can solve a societal problem. A typical startup is, by definition, a low-budget operation, with initial funding provided by the founders or their friends and family. The word startup is often related to Silicon Valley of the U.S., which gave rise to several giant startups like Facebook, Google, et.al. However, today startups are not only limited to the U.S., rather they are now related to Shanghai in China and Bengaluru in India. India is the third-largest startup ecosystem in the world after U.S. and China.

Furthermore, the startup ecosystem in India is not a new phenomenon. It has been around for more than four decades. It has given rise to numerous industries and bolstered the Indian economy at various stages of development. The below-mentioned figure shows the phase through which the Indian Startup Ecosystem has evolved:

Figure No. 1



Timeline of Indian Startup Ecosystem

Source: Compile by the researcher from various articles & papers

Phase 1- There is no such evidence that when the culture of startups started in India. The exact origination of startups in India varies from author to author but many of them have an opinion that the Indian startup ecosystem originated after the entry of IBM in India, in the year the 1950s. The culture of startups started with the wave of IT-enabled services, during 1960s to 1980s various IT-based companies such as TCS, Infosys, Patni System etc. emerged through this wave (Wharton School of the University of Pennsylvania, 2019)^[7]. The founders of these companies not only set a milestone for innovation and entrepreneurship rather they also started nurturing the grounds of innovation and entrepreneurship for the next generation.

The expansion of IT businesses put a strain on technical education. As a result, engineering became every individual's first choice for further higher education, resulting in the creation of a large pool of engineers. Not only this, the success of IT businesses also benefited the prosperity of middle-class people. Between the 1960s and the 1990s, a typical middle-income household had at least one primary earner who was either employed or ran businesses. Later, with the introduction of the New Economic Policy in 1991, doors to international trade were opened, and Indian businesses began to make tremendous strides in productivity and modernization. Because of this policy initiative, international market competition has increased innovation by leaps and bounds. The plethora of businesses mushroomed in the 2000s which established new channels for consumption and stepped for the next phase of startup (KPMG, February 2015)^[8].

Phase 2- The government encouraged people to start their own businesses with the introduction of the Liberalization, Privatization, and Globalization (LPG) Policy. During the pre-LPG Policy, consumers faced numerous issues such as poor product quality, a production-based strategy, overpricing, and so on. But after the implementation of the policy, gateways for innovative products and services got opened. The policy also attracted investment from foreign countries which gave rise to the next generation of Indian startups.

Phase 3- The third phase of startups was founded in the dot-com era. This era defined startups into two characteristics i.e. B2B Models and deep-tech, IP-driven innovation. During this duration, the Indian startups shifted more towards B2B models that have deep tech and started climbing the ladder of intellectual property. As a result, more than 500 AI-based startups emerged that are leveraging affordable talent and providing easier access to large pools of data (Wharton School of the University of Pennsylvania, 2019)^[7].

Phase 4- Later, the era of the dot-com slowly gave a push to the digital era, which is considered the fourth phase of startup evolution. This phase started around 2007-2008, which comprised e-commerce, logistics, marketplaces, and

advertising startups. The Government initiative of Digital India acted as fuel to the fire. The push toward this began with the improvement of public goods digital infrastructure known as 'IndiaStack' in 2009 and the issuance of biometric IDs to Indians.

Phase 5- The next and most important phase of the startup evolved in the year 2016. In the history of the startup ecosystem, the year 2016 will be remembered as the year of transformation in which "The Startup India Movement" was launched. With the launch of this Startup India Initiative, the number of startups increased along with the increase in support organizations (Department for Promotion of Industry and Internal Trade, 2020)^[4]. For the last decade, the Government of India is emphasizing on innovation and digital transformation in each and every sector of the economy. Both Central Government & State Governments are formulating and implementing suitable schemes and programmes to support startups and accelerate the engine of economic growth. As a result, this phase gave rise to several new forms of startups such as business simplifying startups, FinTech startups, health tech startups and edu tech startups. It is also observed that the government efforts going in the right direction and the support of the policy are strengthening the startup ecosystem in our country.

VI. DRIVING FORCE OF STARTUPS IN INDIA

Startups do not exist in isolation, but rather as part of a larger business environment. As a result, the growth drivers of the Indian Startup Ecosystem must be comprehended. This section describes the factors identified as the drivers of startup growth in India (Kushwaha & Puntambekar, 2020)^[1].

- **The pool of educated and talented youth:** India is the second-largest populated country after China having 65 percent of the youth population below the age of 35 years. This huge young working population undoubtedly is a strong aspect of the nation. It is also an important fact that talented youths always think differently and if an appropriate opportunity is given to groom their innovative ideas, it may convert into an active business and become a growth driver.
- **Changing Perception towards Entrepreneurship:** As per the Global Entrepreneurship Monitor (GEM)^[9] Report on India (the financial year 2016-17), It has been determined that people's perceptions of entrepreneurship have significantly improved. Several people have quit their jobs to start their own businesses. Because startup business opportunities are transforming their ideas and innovations into reality, today's talented youths prefer the path of job providers rather than job seekers (Kushwaha & Puntambekar, 2020)^[1].
- **The Advent of Technological:** Innovation and technology have a significant impact on the nation's economic growth and social development. India has seen dramatic changes in innovation and

technology over the last few decades (Kushwaha & Puntambekar, 2020)^[1]. This technological advancement has reduced the cost of products and made them more accessible to customers. It not only has increased the economy's growth rate, but it has also contributed to job creation, access to resources, healthcare, and education, resulting in a decrease in poverty and an improved standard of living. The spread of technology has also created a fertile environment for new businesses. Startups have access to the marketplace as well as the ability to identify and charge their customers.

- **The Government Boost:**

For the last decade, Government of India is emphasizing on innovation and digital transformation in each and every sector of the economy. Both Central Government & State Governments are formulating and implementing suitable schemes and programmes to support startups and accelerate the engine of economic growth. It was recognized that startups are the only solution to reduce and control the rising unemployment rate in India. Therefore, a flagship programme i.e. "STARTUP INDIA" was initiated by the Central Government in 2016 to build a strong ecosystem for the growth of startup businesses as well as to drive sustainable economic growth and social development through generating employment for young talents (Department for Promotion of Industry and Internal Trade, 2019)^[10]. When we examine the efforts of the Government, the data reveals that in the year 2019 about 71,853 startups have been incorporated in 54 different sectors and industries like aviation, biotechnology, IT, Artificial Intelligence et.al. It is observed that the result of the efforts is going in the right direction and the support of the policy is strengthening the startup ecosystem in our country (Kushwaha & Puntambekar, 2020)^[1].

VII. GROWTH OF STARTUPS IN INDIA

The startup business model is gaining tremendous popularity in India, especially after the introduction of the Startup Policy by the Government of India. Startups are acknowledged as an important engine for economic growth and employment because of their quick expansion and diverse areas of coverage. Through innovative and unique ideas, startups are generating impactful solutions to the problems of almost all the areas of economic and social life. These startups are now acting as a vehicle for the development and transformation of the economy (Korreck, 2019)^[3]. The growth trajectory at national and state levels is not only encouraging but also creating new hopes for the young talent of the country. The growth of startups can be measured through various dimensions, some of the important dimensions are as follows:

- **Progress in Registration of startups on Startup India Hub:**

Whenever a young budding entrepreneur takes an initiative to start his/her business, he/she faces numerous challenges; a lot of questions arise in his mind which need to be answered to provide clarity for the development of the business model. Lack of guidance and unavailability of funds are common reasons for the failure of startups. Various financial schemes and policies are provided by the government to help startups, but due to a lack of information & approachability, entrepreneurs fail to avail the benefits of those initiatives. Along with this, to avail any benefits from the government, a startup needs to be registered. The registration process of the startup is complex and lengthy which often troubles the young and new entrepreneurs and rather than focusing on their core products, entrepreneurs are engaged in bureaucratic compliances of registration. Thus, the startup policy provided a one-step digital platform to support startups and entrepreneurs. The increasing rate of startups can be witnessed from the registration being done by startups on Startup India Hub to avail the benefits provided by the policy.

The below- mentioned table reveals the data of startups being registered on the startup India hub:

Table No. 1. Registration of Startups under Startup India Policy

S.no	States/UT	No. of Startups					
		2021	2020	2019	2018	2017	2016
1	Maharashtra	31696	13894	4443	2587	1079	4726
2	Karnataka	18186	8832	3444	1973	853	376
3	Delhi	21938	11468	3001	1833	748	372
4	Uttar Pradesh	18114	7157	1956	1129	383	138
5	Telangana	8627	3876	1320	748	296	121
6	Gujarat	11972	4759	1238	712	289	135
7	Tamil Nadu	10804	4135	1207	710	301	160
8	Haryana	8596	3450	1335	709	268	105
9	West Bengal	7526	2519	710	417	163	45
10	Madhya Pradesh	6279	2612	679	384	101	40
11	Others	37499	13493	4354	2421	869	396
	Total	181237	76195	23687	13623	5350	2360

Source: Department for Promotion of Industry & Internal Trade, Ministry of Commerce & Industry and www.startupindia.gov.in accessed on 31st December 2021

The above-mentioned table shows the growth in the number of startups in last 6 years. The table shows that in the year 2016, there were 2360 startups established all over India, where Maharashtra, Karnataka and Delhi were the top three leading states. The number rose by 126% and reached 5350 startups. Though the number of startups was increasing year after year but it was analyzed that people were not aware of the startup policy and the benefit of starting a startup.

Therefore in the year 2018, the Ministry of Commerce and Industry decided to organize an awareness programme i.e. “Startup India Yatra” to spread awareness of the policy and help entrepreneurs to realize their startup dream. The effect of this awareness programme was seen by the end of the year 2018. In the year 2017, the nation registered a total of 5350 startups which tremendously got increased by 154% by the end of 2018. Though the number of startup registration was increasing in the year 2019 but as compared to previous years, the rate of startup registration was decreasing. In the year 2019, the number of registered startups increase by 75% in startup registration. In the year 2020, it was expected that the number of startup registration will decrease as the whole nation was halted by the sudden outbreak of the corona pandemic. The global pandemic took away the jobs of many employees and forced them to return back to their hometowns in tier-II and tier-III cities.

The global pandemic not only damage the economic activities of the world but also fueled entrepreneurship and startup businesses to some extent as starting their own business was the only option left with the people for survival who lost their jobs due to pandemic. It is evident from the fact that by the end of the year 2020, the nation registered a total of 76195 startups all over

India. Despite the overall economic slowdown, startups from non-metro cities accepted the challenges thrown by COVID-19 and worked hard to find solutions with their innovative ideas. There were many existing startups which faced a race to survive while many took this as an opportunity and started taking advantage by introducing new innovative products/services in the market.

• **Employment Generated By Startups:**

India is reaping the advantage of its demographic dividend. It has a large youth population where half of its population is below the age of 25. These young blood have the power to change the economic condition of the country if their young mind and innovative thoughts are devoted towards the progress of the nation. It is believed that a country having a large youth population could always seem to have tremendous growth if sufficient opportunities are provided to them. Unfortunately, being the largest democratic nation in the world, India is still lagging behind in achieving socio-political & economic inequalities. One of the major issues is to provide sufficient, gainful employment opportunities with job satisfaction to educated youth. The issue of gainful employment is the most critical economic issue and cannot be resolved by the government itself. It has been a very tough task for the government to create employment for such a huge population; therefore, consolidated and diversified efforts are required. The Startup India movement is one such idea by which the mindset of young talent can change.

After analyzing the entire situation, the Central Government came up with the idea of the Startup India Initiative with the

aim to generate a large-scale employment opportunity. It was noticed that the youth population has the caliber to grow with their innovative ideas by establishing their own business and providing employment to others. As a result, in the last five years, 48,093 recognized startups have significantly contributed to job creation by providing 5,49,842 jobs (Department of Promotion of Industry & Internal Trade, 2021)^[10].

The below-mentioned table provides a vivid description of the job created by startups since the launch of the Startup India Policy:

Table No. 2. Employment Created by Startups

S.No.	State/ UT	2016	2017	2018	2019	2020
1	Maharashtra	0	8931	19125	25741	33783
2	Karnataka	0	9277	13158	23624	28022
3	Delhi	0	5633	13655	16141	19503
4	Uttar Pradesh	0	3354	7960	10358	16365
5	Gujarat	10	2263	5480	7047	9551
6	Haryana	0	2665	5628	12848	12589
7	Telangana	0	3058	5326	10297	9354
8	Tamil Nadu	0	3576	4504	8213	8628
9	Kerala	0	2187	2614	5230	5713
10	Rajasthan	0	1206	3216	4055	5160
11	Others	0	6013	15274	21263	23347
	Total	10	48163	95940	144817	172015

Source: Department for Promotion of Industry & Internal Trade, Ministry of Commerce & Industry (June, 2021)

The above table and graph described the year-wise employment generated all over India under the Startup India Initiative. Though startups should not be evaluated on the basis of employment creators as most of the startups are technology-driven but the business opportunities opened through these startups are more important. It was not an easy task for startups to generate employment as the motive and models of these businesses are different. It is also evident from the basic objective of the Startup Policy. When it was launched, the objective of the policy was to provide employment opportunities via changing the mindset of the youth and creating a conducive environment. It is evident by the fact that the policy has succeeded in changing the mindset as today youths are encouraged for becoming self-employed and are leaving their jobs to take the advantage of startup policy with the expectation of more earnings from self-employment (Meher & Puntambekar, 2016)^[11].

The data relating to employment generation reveals that startups have also created jobs with the growth and development of this model. The data clearly shows that the employment generated by startups is increasing year after year. In the year 2016, only 10 employment was reported and that too from Gujarat, as Gujarat was having its own startup

policy before the launch of the Startup India Initiative. The effect of the policy was witnessed in the year 2017 when 48163 employment was provided by the recognized startups. The year was the beginning of a new era, where there was not only an increase in the number of startups rather it also increased the employment opportunities.

Constantly the job creation by startups was increasing year after year. It is evident from the fact that in 2018, a total of 95940 employment generation through startups whereas in 2019, it reached 144817. In the year 2020, when the entire world was suffering from economic slowdown and unemployment, India saw an increase in the employment provided by the startup. On one hand, job creation by the startups was increasing at the national level but a declining trend was witnessed. In the year 2020, the policy reported 172015 employment across the nation. It's an interesting fact to know that though the pandemic might have slowed down the rate of employment generation but it hasn't frozen new job creation. Rather it has proved that startups are at the forefront of employment generation for the future.

• **Investment Position of Startups in India:**

Accessibility of finance has been one of the major key challenges faced by startups in India. Many Startups, due to lack of collateral or existing cash flows, fail to justify the loans. Besides, the high-risk nature of Startups wherein a significant percentage fail to take off, hampers their investment attractiveness (Department for Promotion of Industry & Internal Trade, 2016)^[12]. Nine out of every ten startups fail due to a lack of funds. Funds act as the lifeblood for any business. A business without a funding source will flounder under the weight of its own debt. Raising funds is an important as well as challenging procedure for any startup as scarcity of funds may pose liquidity and working capital challenges which may endanger the survival of the business.

In order to provide funding support to startups, the Central Government announced an initial corpus of INR 2,500 crore and a total corpus of INR 10,000 crore over a period of 4 years (i.e., INR 2,500 crore per year) in the year 2016 under the Startup India Initiative. The fund is treated in the nature of Fund of Funds which means that fund will not be directly invested into Startups but shall participate in the capital of SEBI registered Venture Funds. Table No. 5.10 highlights the amount of funds sanctioned by SEBI AIF in the last few years:

Table No. 3. Funds Invested In Startups by Alternative Investment Funds

States	No. of Startups (2017)	Amount (₹ Crore)	No. of Startups (2018)	Amount (₹ Crore)	No. of Startups (2019)	Amount (₹ Crore)
Delhi	10	NA	23	51.32	46	252.94
Gujarat	1	NA	1	1.65	1	3.14
Haryana	2	NA	9	68.88	12	120.54
Karnataka	23	NA	46	190.02	75	499.85

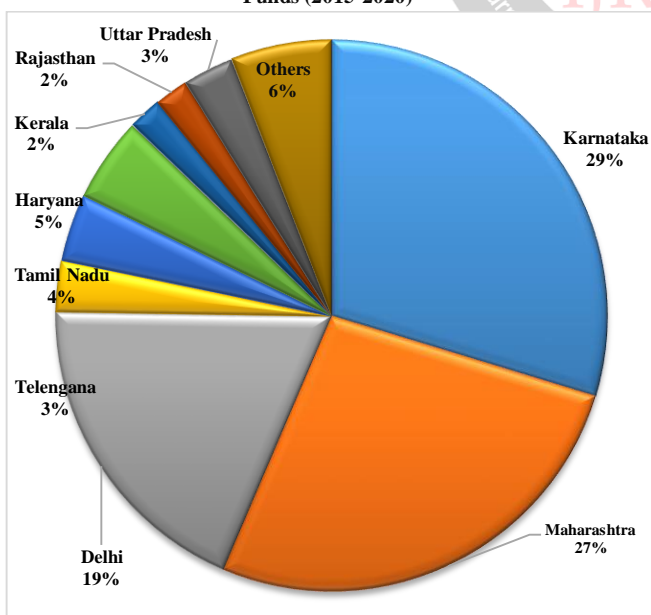
Kerala	0	NA	1	0.14	8	10.87
Madhya Pradesh	1	NA	1	2.7	4	5.1
Maharashtra	20	NA	42	200.96	68	440.38
Punjab	0	NA	1	8	1	14.5
Rajasthan	3	NA	4	27.88	5	47.61
Tamil Nadu	2	NA	3	6.03	11	113.34
Telangana	4	NA	5	20.5	6	32.22
Uttar Pradesh	0	NA	2	4.76	5	47.61
Uttarakhand	0	NA	1	0.21	1	0.22
West Bengal	1	NA	3	19.55	4	48.75
Total	67	NA	142	602.6	247	1625.73

Source: Press Information Bureau, 2019

The above table depicts the funds invested in startups by Alternative Investment Funds (AIF). In the year 2017, a total of 67 startups got funding from AFI out of which 23 were from Karnataka, 20 from Maharashtra, 10 from Delhi and 1 from Madhya Pradesh. But in this year, no data were available about the amount of funds sanctioned to the startups. In the year 2018, ₹ 602.6 cr. was invested among 142 startups, whereas 46 startups in Karnataka got ₹190.02 cr. Funding. Startups from Maharashtra got funding of ₹ 200cr. invested in 42 startups of, ₹ 68.88 cr. among 9 startups of Haryana and ₹ 2.7 cr. to 1 startup of Madhya Pradesh were invested during the year.

As of 1st December 2020, SIDBI had committed ₹ 4326.95 Crores to 60 AIFs, which have raised a total corpus of ₹ 31,598 Crores out of which ₹ 1,270.46 Crores have been drawn from the FFS by 51 AIFs. ₹ 4509.16 Crores have been invested in 384 startups through the scheme. The diagram of state-wise funding through fund of funds is as under:

Figure No. 2. State Wise Segmentation of Funding through Fund of Funds (2015-2020)



Source: 5-year Achievement Report (as on April 2020)

The above graph described the state-wise distribution of funding by fund of funds during 2015-2020. A corpus of ₹10,000 crore Fund of Funds was announced by the Central

government under the Startup India initiative, in January 2016. In the last five years, Karnataka shared 29% of funding as a maximum number of startups were established there itself and as per State’s Startup Ranking 2019, Karnataka is declared as the top-performing state. Maharashtra is one of the leading states with 27% of funding followed by 19% to Delhi. 5% of funding is sanctioned to Haryana which is said to be the aspiring startup state, 4% to the emerging startup ecosystem state of Tamil Nadu, 3% to Telangana & Uttar Pradesh each whereas 2% to Kerala & Rajasthan each. The remaining 6% among the other states & UTs. As per the Ministry of Commerce & Industry ₹5,089.55 crore funding has enabled 391 government-recognized startups, as of 31st January 2021. However, the jump in the number of funded startups has been only 22 percent from 320 startups backed under the programme as of February 18, 2020. Where Fintech with \$5.7 billion, Enterprises with \$3 billion, Healthtech with \$1.7 billion, E-commerce with \$11.7 billion, and Logistic with \$1.2 billion are the leading sectors that pervade the Indian startup landscape. This funding support will help to grow the startup businesses at a faster pace.

• **Unicorns Startups in India:**

Unicorns Startups are those who are valued at over \$1 billion. The startup business model, it is a sign of faster growth and worldwide reorganization of the innovation and business model of the startups. It is an encouraging fact that Indian startups are gaining the status of Unicorns (Kushwaha & Puntambekar, 2020)^[1]. It is not only due to the policy but also the overwhelming response of the young talent of the nation. Both are helping Indian start-ups scale up their businesses and are included in the list of Unicorns. India is 3rd largest unicorn community with over 16 high-valued Startups. These startups have raised over \$17.27 billion in funding, with an overall valuation of over \$58 billion. In 2019, seven startups reached unicorn status by grabbing massive funding whereas 12 unicorns were minted during the pandemic also. In December 2021, a total of 90 Indian startups got the status of Unicorns. Following are the details of Indian Unicorns:

Table No. 4. List of Unicorns in India

Company	Valuation (US\$billion)	Valuation Date	Year
Make my trip	1.3	2010	2000
Inmobi	1	2011	2007
Flipkart	16	2012	2007
MU Sigma	1.5	2013	2004
Just Dial	1	2013	1993
Snapdeal	1	2014	2010
Infoedge	10	2014	1995
OlaCab	7.3	2015	2010
Zomato	3.25	2015	2008
Quikr	1.5	2015	2008
Paytm	18	2015	2010

Hike Messenger	1.4	2016	2012
Shopclub	1.1	2016	2011
RenewPower	2	2017	2011
Byju's	10	2018	2011
Paytm Mall	3	2018	2016
Billdesk	1.8	2018	2015
Phonepe	5.5	2018	2015
Freshwoks	3.5	2018	2010
Policy Bazar	1	2018	2008
Swiggy	3.3	2018	2014
Udaan	2.8	2018	2016
OYO Hotels	10	2018	2013
Lenskart	1.5	2019	2010
Rivigo	1.05	2019	2014
Citius Tech	1	2019	2005
Icertis	1	2019	2009
Druva	1	2019	2008
Ola Electric	1	2019	2017
Delhivery	1.6	2019	2011

Source: Self-generated by the researcher (from various sources)

The above table includes the important Unicorns running in India. Though some of them are old but it is evident from the table that after the policy initiative of the Government, the number of Unicorns has also been increasing and the latest move from the Government of India will certainly ignite the growth of the startup model in India. Apart from Unicorns, there are several other lower stages of startups that have the potential to become Unicorns. There are “Minicorns” (a start-up with \$1 billion-plus valuation) and “Soonicorn” (funded by angel investors or venture capitalists and likely to soon join the unicorn club) which will soon become unicorns. The availability of private equity funds, increasing internet penetration, digital payments, more robust infrastructure and the rising pool of skilled talent are the factors that enable the rise of unicorns. From 2014 to 2019, the entire startup ecosystem raised \$50 billion in funding (The Indian Growth Stage Startup Trends Report). As far as employment is concerned, a single startup nearly created 12 jobs and as per this estimate, nearly 3,50,000 jobs have been created through this model. As far as the location of the Unicorn is concerned, all are from metropolitan cities including 31 potential unicorns from Bengaluru, 19 from Mumbai, and 13 from Delhi-NCR. Though this trend is a normal growth pattern of Indian industrial development but the nature of startup businesses will change the pattern in the near future and new unicorns will rise from the small cities also.

VIII. THE PRESENT STATE OF THE INDIAN STARTUP ECOSYSTEM

Cooperative Federalism is a guiding principle of the Indian Constitution in which "national and state agencies undertake government functions cooperatively rather than solely." The nation and states would share power, without power being concentrated at any government level or in any agency" (Singh V. K., June 2020)^[13]. With the equal

contribution of all the state governments, the Startup India movement has developed the entrepreneurship culture in almost all parts of the country including non-traditional centers like the northeast (Kushwaha & Puntambekar, Startup India Movement: A Review of Growth In Madhya Pradesh, 2019)^[5]. It is important that four states i.e., Andhra Pradesh, Goa, Kerala, and Rajasthan was having startup policies before the launch of Startup India Policy, 2016. Thereafter, more than 18 states announced the policy in their respective states with the aim of building a strong ecosystem to promote startups and entrepreneurs across the states. In the year 2016, Telangana, Odisha, Jharkhand, Uttar Pradesh, and Madhya Pradesh introduced their own startup policy followed by Punjab, Bihar, Haryana and Assam in 2017. In the year 2018, Jammu & Kashmir, Uttarakhand, Maharashtra, Tamil Nadu, and Andaman & Nicobar Island whereas Nagaland, Meghalaya, and Puducherry in the year 2019. Andaman and Nicobar Islands was the first Union Territory that dedicated its own Innovation and Startup policy in 2018. As a result, 30 states and union territories have enacted dedicated Startup policies to provide targeted incentives (both fiscal and non-fiscal) to Startups. It is encouraging that startup ecosystems have been developed in small cities as a result of this flagship initiative. A total of 590 districts out of 725 in the country now have at least one startup (Department for Promotion of Industry and Internal Trade, 2020)^[4].

The initiative of startup policy is not only encouraging young talent but women’s entrepreneurship is also booming in the country. More than 44% of the total startups in India have one or more women directors. Many states have provided special benefits and incentives to women who have made efforts in venturing their business ideas. A total of 19 states offer special benefits to women entrepreneurs and about 1200 women have been supported (Department of Promotion for Industries and Internal Trade, 2019)^[11]. With the launch of the Startup India Initiative, there is not only an increase in the number of startups but support organizations are also increasing. The incubation set up for supporting, developing and providing finances is an effective measure of the policy. The data relating to startup ecosystem in different states and UTs are as under:

Table No. 5 Numbers of Startup Ecosystem Players in Different States/ UTs

State/UT	Startups	Incubators	Corporates	Mentors	Investors
Maharashtra	31696	88	45	140	22
Karnataka	18186	92	51	56	12
Delhi	21938	77	41	139	23
Uttar Pradesh	18114	60	14	42	2
Telangana	8627	61	17	23	4
Gujarat	11972	54	3	28	3
Tamil Nadu	10804	98	3	29	3

Haryana	8596	31	16	30	4
Kerala	6132	39	3	13	
West Bengal	7526	15	3	12	2
Others	37646	236	11	189	39
Total	181237	851	207	701	114

Source: www.startupindia.gov.in accessed on 1st January 2022

The above table depicts the present state of the Indian Startup Ecosystem, where Maharashtra ranked the first position with 31696 startups, 140 mentors and 22 investors. Maharashtra is recognized as India’s Industrial powerhouse and contributes nearly 15% of India’s GDP. Maharashtra was the first state in India to implement a dedicated Fintech startup policy in 2018. For the successful implementation of the policy, the Maharashtra government established a Fintech hub. In the same year, the state issued the Maharashtra Electric Vehicle Policy 2018, with the goal of positioning the state as a globally competitive location for electric vehicle and component manufacturing, followed by the Maharashtra Industrial Policy 2019, with the goal of incentivizing investments in disruptive startups. The policy proposes steps to promote startups right from the college level and ensure coordination between government, industry, and academia (Department of Promotion for Industries and Internal Trade, 2019)^[11]. Maharashtra does not see its capital as a startup hub; rather is also keen to promote other locations such as Pune, Nashik, Aurangabad, and Nagpur, with each city having its area of expertise.

After Maharashtra, Karnataka grabbed the second position with 18186 startups, 92 incubators, 51 corporates, 56 mentors, and 12 investors along with several private investors. As per State’s Startup Raking 2019, Karnataka has been stated as the top-performing state in India. Among the 20 startup cities in the world, Bengaluru is one of them which is famously known as India’s Silicon Valley because of its role as the nation’s leading information technology exporter. Karnataka Electric Vehicle & Energy Storage Policy 2017, Karnataka Electronics System Design and Manufacturing Policy 2017-22, Karnataka Biotechnology Policy 2017-22, Karnataka Open Data Initiative (K-ODI), and Karnataka Animation, Visual Effects, Gaming and Comics Policy 2017-22 are few policies launched by the state to promote the development of disruptive technology areas (Department for Promotion of Industry and Internal Trade, 2020)^[4].

Delhi has made its place on the third rank with 21938 startups, 77 incubators, 139 mentors, 23 investors. The state’s efforts in building up a network of academic incubators have been well recognized and it has been acknowledged as an ‘Emerging State’ in the State Startup Rankings 2019 conducted by the Department of Industrial Policy and Promotion, Government of India (Department for Promotion of Industry and Internal Trade, 2020)^[4].

Nevertheless, the other states and UT’s are also in a similar condition where the number of startups has been established in the past few years, but the rate of establishment is not significant as compared to others. It is observed that the less number of startups in these states and UTs are due to a small number of supporting organizations. The above table reveals that except for Maharashtra, Karnataka, and Delhi, the other states have few or no supporting organizations. They are responsible for providing necessary resources like infrastructure, mentorship, technical support, and financial support to nurture and support the innovation of startups. A majority of startups fail at their initial stage due to the unavailability of proper guidance and lack of financial support. Therefore, providing an appropriate supporting environment will help these startups to grow and the growth of startups will consequently lead to the growth and prosperity of the nation.

The above-mentioned facts reveal that the startup India initiative is a long-awaited move and will contribute to faster economic growth with an inclusive growth target. It is evident from the progress and response of the young talents across various domains, geographies and economic strata. The policy support at different levels, by various ministries and departments, is now helping in motivating the young talent to enter into entrepreneurship. The startup model is not only creating new ways of development but also boosting the confidence of young talent to think differently and convert their unique and innovative ideas into a successful business. It is encouraging that the progress of the Startup India Policy and National Innovation and Startup Policy by the Government of India is very fast. The Government is also taking appropriate reformatory measures as per the experiences gathered after the implementation of the policy which is creating new hope for further growth at a faster pace.

IX. TESTING OF HYPOTHESIS

Today, Startups are not only a model of business, they have become synonyms of innovation, creativity and problem-solving capacities. Today the startup landscape is pervaded by dynamic statistics, ranging from the age of founders to the soaring number of unicorns. A Lot of passionate youth have started changing their mindset from having an idea of a job in a high corporate office or moving abroad in search of job opportunities and becoming an entrepreneur. They are devoting their efforts toward solving the problems of society through innovative ideas. Even the world’s renowned and big venture capitalists and Private Equity funds are investing in Indian startups. It is a testimony to the recognition of the Indian startup ecosystem.

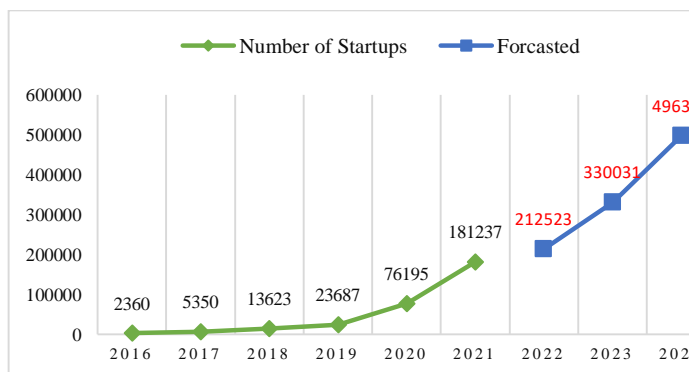
Till 2021, more than 1 lakh startups were registered in India out of which more than 50,000 are recognized by DPIIT. Instead of it, 2-3 new startups are established every day and this trend is creating new hope. This rise in startups is a result of the change in the mindset of being a job seeker to

a job provider. This trend has also made India the 3rd largest startup ecosystem in the world with 90 firms being valued at over \$1 Billion also called Unicorns. In 2020, the country minted 12 such unicorns despite the disruption to the economy caused by Covid 19 pandemic. Moreover, with the government opening up the space sector for private players, more than 40 startups are working on space & satellite projects. Apart from this, more than 39,000 startups have reported that 4,70,000 jobs were created through these startups by the end of 2020. Startups have created more than 40,000 employment opportunities every year, which proves that startups are an important driver of the development and growth of the economy. The initiative of the policy and its implementation proves that the culture of startups is gaining pace at both central and state levels and the startup policy and different implementing agencies and organizations are creating a fast-growing startup ecosystem. These data clearly reveal that the policy has created a significant impact on the growth of the startup ecosystem. Furthermore, to test this hypothesis, (i.e. H_{0a} : Startup policy has no positive impact on the growth and development of the startup ecosystem). Time Series Analysis and Forecasting were used.

Time series analysis is a statistical methodology that is useful for a wide range of longitudinal research designs. Single subjects or research units are typically measured repeatedly at regular intervals over a large number of observations in such designs. Time series analysis can be thought of as an example of a longitudinal design. A time-series analysis can assist us in understanding the underlying naturalistic process, the pattern of change over time, or evaluating the effects of a planned or unplanned intervention (Velicer & Fava, 2017)^[14]. Whereas time series forecasting is the process of analyzing time series data using statistics and modelling to make predictions and inform strategic decision-making.

For the purpose of time series analysis and forecasting, data of growth in the number of startups and the employment generated by the startups have been recorded every year from 2016 to 2021. On the basis of these past six-year growths in startups the growth of the upcoming three years has been projected in the below-mentioned figure:

Figure No. 3. Growth in Startup Registration



Source: MS-Excel Output

The above line graph reveals a growth pattern in the number of startups in India. From only 2360 startups in 2016, the nation had 181237 startups by the end of 2021. It is also forecasted that the number of startups is going to increase in future if nurtured with proper guidance. As per the time series forecasting, it can be observed that in the year 2022 the number may increase to 212523 startups. In the year 2023, this figure can rise to 330031 startups whereas in the year 2024 the nation might register 496363 startups. Hence on the basis of past six-year data and forecasting of three-year data, the conclusion can be drawn that the policy has a positive impact on the growth and development of the startup ecosystem. Therefore, the null hypothesis i.e. there is no positive impact of startup policy on the growth & development of the startup ecosystem is rejected and the alternative hypothesis i.e. (H_{1a}) Startup policy has a positive impact on the growth and development of the startup ecosystem is accepted.

X. CHALLENGES FACED BY THE GOVERNMENT

The proverb “no gain without pain” fits the growth and development of the startup ecosystem. Though undoubtedly the growth and development of the startup ecosystem are encouraging but to attain this status government had to undergo various hurdles and challenges. Some of the major challenges are:

- **Negative perception toward government:** Since decades government is trying to solve the problems of startups through various schemes, policies and initiatives. But it has been found that people have a negative attitude towards Government policies in which the entrepreneurs want only the benefits but the new startup policies are different and it is designed on the basis of promoting innovations and creating the base of steady and sustainable economic development of the country.
- **Startup’s dependency on government:** It is found that startups are totally dependent on government policies for their growth and progress. Rather they have to understand that their growth and progress depend on their own performance. The policy is just providing a support system to the startups at different stages and therefore over-dependence on policy is dangerous. For sustainable development, the uniqueness of the idea, product development process, market research and proper use of the policy support collectively ensure the success of a startup business.
- **Mis-Usage of Funds:** The importance of funds in business can never be ignored. Financial resources are a very crucial source by which the entire success and failure are decided. It is true that in the modern business world an innovative idea and strong willpower with dedicated efforts are sufficient to start a business but sufficient and timely funding for these innovative ideas are also important to get success. A startup needs funds

to flourish with its potential field. Lack of funds is one of the major causes of the failure of a startup. Therefore, to help startups and to overcome this situation, the Central Government launched various funding schemes. But it was found that the funds allocated by the government are being misused by entrepreneurs, especially in the early stages. Rather than investing the fund in their core products/services, entrepreneurs use those funds for their personal needs which further results lack of funds.

- **Support system itself lacking support:** The Government of India has given key responsibility to incubation centers in nurturing startups. The startups can avail the benefits of the policy through incubation centers but it has been found that incubation centers themselves contend with many challenges which threaten their long-term survival, the quality and quantity of service that they are rendering.

XI. FINDINGS & CONCLUSION

The Startup India Policy is one of the policy initiatives which has been designed for transforming the traditional economic development process and achieving multi-dimensional objectives. This policy was introduced in 2016, not only to motivate Indian youths toward the business sector but also to convert innovative ideas into active businesses. The policy aims to transform the economy of the country through startup businesses in each and every sector of the economy. During the last six years, the Indian startup ecosystem has been dynamically developed through unique and diversified support systems such as incubators, mentors, educational institutes, accelerators, and infrastructures along with the availability of financial support. The growth witnessed in the last six years can be considered as a pillar to transform India into a land of innovation and startups. In recent times, Indian startups are gradually progressing and evolved into global entities formulating business products and solutions for the International market. In this successful journey of the startup ecosystem, from just a handful of startups, today India has more than 1 lakh startups and it is expected that by 2024 India will leave U.S. and China behind by becoming home to more than 4 lakhs startups. The progress witnessed at the national level is encouraging, as but more efforts are needed to popularize the startup culture in different states of the country (especially the non-industrial states) and diversify it in the sectors which are still not used to develop business opportunities. Though some of the startups are still facing several challenges in establishing their startup but it is also important to know that the Government is regularly removing the hurdles and reforming the policy provisions. The changing global economic situation is an additional benefit for young Indian entrepreneurs to prove their capability to make our country a major economic power in the world.

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