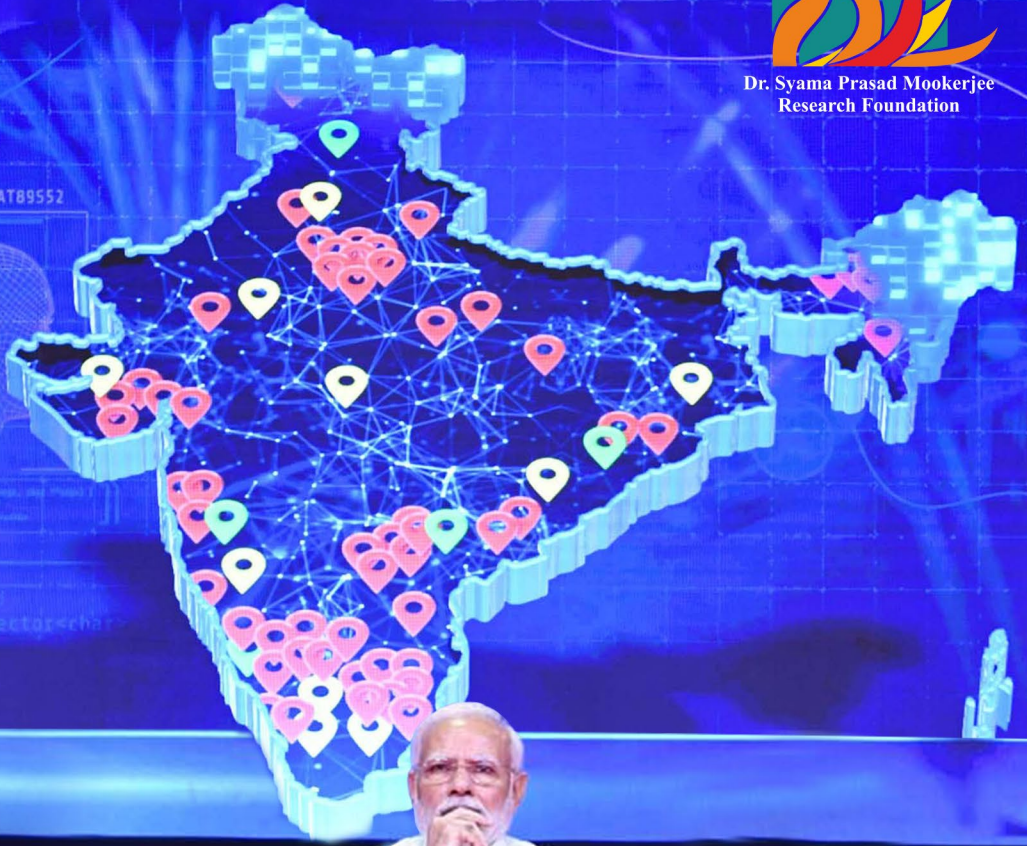




Dr. Syama Prasad Mookerjee
Research Foundation



India's Transformational Reforms **Under
Modi Government** and How it Helped
Build a **Thriving Startup Ecosystem**

Pathikrit Payne

First a rejoinder. In spite of major challenges across the world, including a devastating war between Russia and Ukraine, a cataclysmic pandemic situation that rocked the world and massively disrupted global supply chains, in spite of major challenges along the northern borders and collapsing economies in the neighborhood, India under Prime Minister Modi not only just remained resilient but emerged stronger.

Having administered more than 1.8 billion covid vaccines to eligible Indian population and providing additional free rations to more than 80 crore people for more than a year, India not only emerged out of the covid pandemic as a more resilient nation, but broke its own past records of exports for the financial year ended 2021-22. It clocked a record \$420 billion of merchandise export and around \$250 billion of services export. In total, India's export for the FY-2021-22 was \$670 billion. Also, in the calendar year of 2021, India received \$ 74 billion of FDI.

Modi Government Silently Worked to Make India Firmly Resilient

For months, during the peak of second wave of Covid, India's opposition parties did nothing except for pointing fingers at Prime Minister Modi with a single-minded objective of settling political scores. There were all kinds of doomsday predictions by them in their tweets. A year down the line, Prime Minister Modi led NDA Government proved

all of them wrong. At a time when many countries are facing balance of payment crisis, India continues to hold a respectable \$600 billion- plus forex reserve. It's GDP for financial year ended 2021-22 stands at around \$3,29 trillion and India has emerged as a beacon of hope to feed the world with its record foodgrain output at a time when the Russia-Ukraine conflict has menacingly threatened the global supply chain of wheat that can usher famine in many parts of the world.

One has to also take into account the fact that India's economic stability and record exports happened in spite of anarchists trying their best to disrupt peace, tranquility and reform process in India.

A Special Round of Applause for India's Startups

While Indian industry and services sector deserve major credit for India's iconic economic turnaround, a special round of applause has to be there for India's startup ecosystem which scripted history in many ways including the fact that not only India's start-ups survived the onslaught of Covid related challenges and market disruptions but also emerged stronger with a firm footing. At every step India's startups played a critical role through their nimble footed innovations in logistics, supply chain and medical applications, even during the peak of covid pandemic.

Interestingly, even during the peak of Covid second wave that battered the world, Indian startups mopped up a record \$24.1 billion in series fundings

as per NASSCOM, a vindication of the resilience of India's startup ecosystem and the level of confidence that global venture funds have in them.

The entrepreneurial quest of the ubiquitous Indian is nothing new especially if one looks at it from the perspective that more than 50% of Indians are self-employed and India being home to some of the world's largest conglomerates that were started by the enterprising Indian icons, be it Reliance Industries by Dhirubhai Ambani, Tata Group by Jamsheji Tata, Seth Shiv Narayan Birla who laid the foundation of the Birla Group, Bajaj Group founded by Jammalal Bajaj or Hero Group founded by B M Munjal to name a few. It was however also a reality that for almost four decades, India's entrepreneurial spirits were dampened by the state machinery due to its obsession with Nehruvian socialism that resulted in innumerable number of bright minds crossing the shores in search for greener and a better ecosystem that nurtures entrepreneurs.

Post economic liberalization of 1991, India found an unprecedented realm of entrepreneurial success in the IT sector that catapulted India's contribution to IT industry from nowhere to a more than \$200 billion sector by FY 2021-22. India's IT sector's iconic rise did inspire a generation of young Indians to plunge into the space of entrepreneurship. Some did succeed but many felt the need for institutional support from the state that India still lacked. While Industry did its part magnificently in terms of providing handholding,

and creating incubation centres, the initiatives from the state especially in terms of recognizing the importance of start-ups and their potential contribution to the economy was yet to be formalized.

Also, in early May this year, India witnessed the birth of its 100th startup unicorn (entities with valuation of \$1 billion or more). The combined valuation of India's 100 unicorns stands at a whopping \$332.7 billion and they also created 2.5 million jobs 'for contractual and ancillary services providers' as well as full time employment for three lakh forty thousand people.

How Startup India Initiative of Modi Government Made a Difference

It was only in 2016 that Prime Minister Modi took the novel initiative through the setting up of Startup India Initiative. As the Startup India website explains,

Startup India is a flagship initiative of the Government of India, intended to build a strong eco-system for nurturing innovation and Startups in the country that will drive sustainable economic growth and generate large scale employment opportunities. The Government through this initiative aims to empower Startups to grow through innovation and design

What makes Startup India campaign stand out is that it not only focuses on IT sector related ventures but also encompasses in its endeavors the entire gamut of entrepreneurial

activities happening across sectors including agriculture, manufacturing, social sector, healthcare and education to name a few.

Also, instead of restricting itself into tier-1 cities, Startup India initiative spread its wings to recognize and handhold ventures across tier-2 and tier-3 cities of India as well as sub-urban and rural parts of India.

As the portal states, the Startup India Action Plan encompasses three areas of broad support that includes

- Simplification and Handholding
- Funding Support and Incentives
- Industry-Academia Partnership and Incubation

In fact, Startup India is not just another campaign or a mere portal for registration of startups. It is much more than that. From self-certification based regulatory compliance, creation of single point of contact for the startup ecosystem, creating an enabling environment for startups to become financially viable, creation of a lifecycle based assistance and mentoring architecture to enable the startups obtain feasibility testing, business structuring advisory, enhancement of marketing skills, technology commercialization and management evaluation, from mobile application based interactive architecture for communication with Government and Regulatory Institutions for enabling on-the-go accessibility for registration, compliance updation, collaboration with other startup ecosystem partners, to provision of legal support and low

cost patent examination architecture, it addressed some of the teething problems that startups often faced in India.

Also, relaxing of norms for enhanced procurement by public enterprises and institutions from startups, to creating an enabling environment for seamless exit of startups, developing a fund of funds for startup funding, developing credit guarantee funds for startups, to provision of tax exemption on startups both on profits and capital gains, to tax exemptions on investments above Fair Market Value (FMV), went a long way in terms of making the Indian startup ecosystem much more appealing for the entrepreneurs and investors.

Not just that, from enabling an environment for better visibility of

Startup Centres		Technology Business Incubators		
RGIM Shillong	NIT Goa	MANIT Bhopal	IISER Bhopal	NIT Warangal
NIT Delhi	NIT Agartala	NIT Rourkela	IIM Rohtak	NIT Jaipur
MNIT Alahabad	NIT Silihar	NIT Jalandhar	IIT Mandi	NIT Tiruchirappalli
VNIT Nagpur	IIT Bhubaneswar	IIM Udaipur	IISER Mohali	IIT Patna
IIITDM Kancheepuram	NIT Patna	NIT Calicut	IIT Roorkee	
PDPM-IIITDM Jabalpur	NIT Arunachal Pradesh	IIT Ropar	IIM Kozhikode	
ABVIITM Gwalior		IISER Thiruvananthapuram	IIM Raipur	

startup innovations through fests and collaborative platforms, to optimizing the resources and expertise of private sector for setting up incubator startups, to building innovation centres at National Institutes, the Startup India initiative by Prime Minister Modi Led NDA Government brought in a structural metamorphosis in the manner in which startups are treated in India.

Source- Startup India website

Acknowledging the Importance of Indian Startups in India's Quest to become a \$10 trillion Economy.

The most important aspect of what has been accomplished by Modi Government for India's startup ecosystem has been its mainstreaming and through it, the acknowledgement that if India has to become a \$10 trillion economy by 2032, then the Indian startups would have a major role to play in it in terms of developing innovative solutions in the realm of cost-effective technology and last mile delivery of goods and services, in addition to creating jobs and economic value for the country. Startups are no more perceived by authorities as part time indulgence of young generation but as serious business propositions that can create the next generation of iconic business enterprises for India.

The impact of Startup India Initiative can be gauged from the fact that India now has more than 60,000 startups recognized by Government of India of which a whopping 14,000 startups were recognized in 2021-22 alone, up from a mere 733 in 2016-17. Interestingly, up till March 2022, India has logged 94 unicorns, meaning startups with more than a billion-dollar valuation, a vindication of India's thriving startup ecosystem and its ability to churn out success stories.

One important aspect of acknowledging the importance of startups and creating an institutional ecosystem for them to evolve and

eventually flourish, is that it is in sync with the stated policy of Prime Minister Narendra Modi of maximum governance and minimum government. Modi Government has also been successful in shedding the archetypal socialistic rhetoric made prevalent since the Nehruvian era that it is the job of the Government to create jobs, which is absolutely a fake notion bound to fail time and again. Beyond a point, governments cannot create jobs. Productive jobs can only be created by commercially thriving business organizations. If more jobs are to be created then more organizations are needed, and an enabling environment is to be created where employees of today aspire to be employers of tomorrow. If more jobs are to be created then seeds of entrepreneurship has to be sowed among students to aspire to become job providers rather than mere job seekers.

This is exactly what the success of Startup India initiative has been able to accomplish. Through sheer numbers, it has been able to vindicate that entrepreneurial success is no more an exception but a norm in today's India and that today's young minds need not think of crossing the shores to US or Europe in order to fulfill their aspirational dreams of becoming entrepreneurs.

Startup Success Stories No More Limited to IT Sector Alone

In fact, one major fundamental change that can be witnessed over the last half a decade is that of a large

liberalised drone policy under Drone Rules 2021, is also paving way for a major transformation, both in the realm of drone manufacturing and drone-based service delivery in India, both of which are showing immense potential in terms of harnessing the capabilities of young Indians to develop applications as well as products.

From last mile delivery of goods to mining survey, from spraying of fertilizers in agriculture fields, to surveillance activities by law enforcement agencies, from fast-track emergency response to geospatial mapping, from city-based revenue surveys and construction auditing, to film production, from defence applications to unmanned combat, India's drone sector is witnessing the rise of a large number of startups that have the potential of transforming India's new age manufacturing as well as service delivery landscape.

Some of the most well-known drone startups in India are as follows:

- IdeaForge Technology
- Asteria Aerospace
- Aarav Unmanned Systems
- Aotom Technology
- Enercomp Solutions
- IoTechWorld Avigation
- Magnum Wings LLP
- Optimized Electrotech
- Skylark Drones
- TechEagle Innovations

- UrbanMatrix
- Vecros

Source- Inc42

Space Sector Liberalization Creating a New Generation of Space Startups

Another major policy reform by Modi Government that is opening up considerable opportunities for India's startup sector is that of the liberalization of the space sector. From development of satellites to launch vehicles to development of space grade materials, the space sector liberalization may witness same kind of revolutionary innovations that India's IT sector witnessed. Already there are some promising startups in the space sector that have been creating ripples.

That day may not be far when India's startups in conjunction with established private sector majors would be building India's new generation of micro and mini satellites as well as develop own satellite launching vehicles while ISRO would focus on deep space explorations and development of space stations.

Some of the most well-known startups in Indian space sector are as follows:

- MeghVaahan
- NoPo Nanotechnologies
- Astrogate Labs
- Kawa Space
- Aantriksh

- Bellatrix Aerospace
- Dhruva Space
- Pixxel
- Agnikul
- Skyroot Aerospace

Source: vcbay.news

The Geospatial Revolution

In February 2021, Modi Government also allowed private sector to use India's geospatial data and services, which has far reaching positive impacts in terms of creating customized data for infrastructure projects, weather forecasting for renewable energy companies, as well as charting most authentic GIS solutions for ecommerce and logistics companies. Needless this is also creating a new generation of startups ready to unleash India's geospatial potential.

Select List of India's Geospatial Startups

- Dimension IGIS
- Geo Climate Risk Solutions
- Geoinfosys
- Geokno
- GeoSpoc
- Genesys
- Intraspacial
- Spageo

Source- AnalyticsIndiamag.com

The Defence Startups- Making India Atmanirbhar

This apart, one major area where policies of Modi Government are bringing in transformational change so far as involving India's private sector and proliferation of technology-based startups are concerned, is the Atmanirbhar Bharat initiative in the sphere of defence procurement in India.

The policy of Modi Government to manufacture the entire spectrum of defence products and sub-systems in India as well as approval of the central government scheme to promote innovation in defence through Innovation for Defence Excellence (iDEX) can potentially be a game changer.

The Department of Defence Production, Ministry of Defence has approved a central sector scheme viz. Innovations for Defence Excellence (iDEX) with budgetary support of Rs498.78 crore for the next 5 years from 2021-22 to 2025-26. The objective of the scheme is to provide financial support to nearly 300 Startups/MSMEs/ individual innovators and about 20 Partner incubators through Defence Innovation Organisation (DIO). Innovations for Defence Excellence (iDEX) framework aims to achieve self-reliance and foster innovation and technology development in Defence and Aerospace Sector by engaging Industries including MSMEs, startups, individual innovators, R&D institutes and academia. A total of 89 iDEX winners have so far been identified. 35 new problem statements have been launched recently to expand the network, under Defence India Startup

Challenge (DISC)-5

Source- Press Information of Bureau

<https://pib.gov.in/PressReleasePage.aspx?PRID=1782604>

Thirty five Problem Statements – 13 from the Services and 22 from Defence Public Sector Undertakings (DPSUs) – were unveiled under DISC 5.0. These are in areas such as Situational awareness, Augmented Reality, Artificial Intelligence, Aircraft-trainer, Non-lethal devices, 5G network, Under-water domain awareness, Drone SWARMS and Data Capturing

Source- Press Information Bureau

<https://pib.gov.in/PressReleasePage.aspx?PRID=1747370>

Also, some very critical defence deals in the realm of drones have been given to Indian startups by Ministry of Defence, which is a very positive sign for the sector as a whole.

In January 2021, for example, Indian Army signed a \$20 million contract with Indian drone startup Idea Forge for its SWITCH Vertical Take Off Landing (VTOL) drones for Intelligence, Surveillance and Reconnaissance (ISR) missions. This was followed by a repeat order in March 2022 by Indian Army for the same SWITCH VTOL from Idea Forge.

Likewise, it was also reported that in late 2021, Asteria Aerospace got a similar order from Indian Army for 40 UAVs. In 2021, Indian Army also gave an order of Rs 200 crore with Bengaluru based NewSpace Research

and Technologies, for swarm drones. Further, NewSpace is also collaborating with HAL on something known as air launched drone system or Combined Air Teaming System.

In the same league, another Indian startup namely Raphe Mphibr was given orders for both swarm drones and load carrying drones, while Alpha Design was given a Rs 100 crore contract for 125 units of loitering munitions. Further, Zen Technologies was given a Rs 155 crore contract for its Counter Unmanned Aircraft Systems (CUAS)

Interestingly, in March 2022, Defence Acquisition Council (DAC) cleared a proposal for acquisition of 14 items with an estimated contract value of around Rs 380 crore iDEX startups. Meanwhile, recent media reports indicate that a Bengaluru based EV startup Tresa Energy is working with Indian Navy to develop an unmanned rigid inflatable boat for Indian Navy's requirement.

India's most noted defence startups

- Big Bang Boom Solutions
- Sagar Defence Engineering
- Optimized Electrotech
- Dimension NXG (AjnaLens)
- Vinvelli
- IdeaForge
- EyeRov
- Cron Systems
- Axio Biosolutions

- Tonbo Imaging

Source-<https://www.theindianwire.com/startups/top-10-defence-startups-in-india-changing-the-indian-startup-ecosystem-315619/>

The Indispensable Role of India's Industry Majors in Handholding Indian Startups

It is also important however to mention the critical role of India's private sector majors and industrial conglomerates in terms of lending a helping hand to India's startups and the tremendous positive impact it is thereby creating. From Tata Group to Reliance Industries and several other Indian companies have set up dedicated funds to support startups through strategic investments, which have a tremendous positive impact on budding Indian entrepreneurs assured of better valuations and collaboration with industrial majors. This is a win-win situation for both Indian private sector industry, which is constantly looking for innovative solutions, as also for the startup ecosystem which through collaboration with industrial majors get better access to market and support system.

While Mukesh Ambani had set up a dedicated Rs 5000 crore fund way back in 2016, through Jio Digital India Start up Fund, even at his prime age of 84 India's iconic industrialist Ratan Tata has been extremely active in terms of identifying startups with strong potential and investing in them. There is now a frenzy among Indian companies to invest in startups

which is a great positive for the country. From Azim Premji to Anand Mahindra, the list in long of India's successful business giants and their founders taking keen initiatives in burturing India's startup ecosystem. The cooperative support from both industry and state is a great news for India's startup ecosystem.

Select list of Startups in which Ratan Tata has Invested

- Ola Electric
- Cure.Fit
- Lenskart
- Paytm
- CarDekho
- Zivame
- Urban Company
- Abra
- Snapdeal
- Urban Ladder

Source-Business Today

Select List of Indian Startups in which Reliance has invested

- Dunzo
- Embibe
- Addverb Technologies
- Saavn
- Haptik
- Netmeds
- Radisys
- Fynd
- Reverie

- Urban Ladder
- NowFloats
- Aesteria
- Grab
- C-square
- Funtoot

Source- India Times

Indian Startups Going for IPO: A Vindication of their Success Stories

Post the peak of the covid pandemic, as the Indian economy bounced back, Indian industry not just emerged stronger and more resilient but also had developed appetite for further expansion as they realised their intrinsic potential and ability to survive in the worst of crisis situations.

This led to a flurry of activities in the stock markets with a large number of privately held Indian companies now queuing up in the equity market to go public and raise funds. Among the innumerable companies which raised thousands of crores since late 2021 in the Indian equity markets, were a considerable number of Indian startups who had barely started operations a decade back, some even less than that, but were now ready to take the plunge to become public limited companies. Many have either already been listed or are waiting to do so in the near future. While the likes of Nykaa, Paytm, Zomato, Policy Bazaar have already been listed, there is a whole bunch waiting to test waters in 2022. Had the conflict

between Ukraine and Russia not happened or had it subsided sooner, many would have already gone for IPO by now. However, the conviction to go public is an indication of the intrinsic potential of Indian startups and their future prospects, short term aberrations notwithstanding.

Select List of Indian Starts that may go for IPO in 2022.

- Delhivery
- Ixigo
- Oyo
- Droom
- Mobikwik
- Pharmeasy
- Ecom Express
- Navi
- Snapdeal
- Tracxn
- Cappillary
- Ola

Source – inc42.com

From Mudra Yojana to Startup India: Modi Government Address Entrepreneurial Aspirations of the Entire Spectrum

Elaborating on the role of Modi Government in creating a startup ecosystem in India would be incomplete unless a mention is also made of the MUDRA Yojana, which is another flagship program of Modi Government to address the requirement of institutional finance of India's 6.30 crore microenterprises.

Since its launch in April 2015, as per the latest data, as of March 2022, Modi Government under MUDRA Yojana have provided an estimated Rs 18.60 lakh crore loans to 34.42 crore loan accounts, that not only helped in capacity building of microenterprises to generate more employment but also gave rise to a new generation of self-employed people who started their own micro enterprises. Not just 68% of loan accounts for MUDRA Loans belonged to women, an estimated 22% of the loans have been provided to new entrepreneurs.

This means Mudra Yojana created no less than 7 crore new entrepreneurs in urban, rural and suburban India who were no more looking for jobs, have potentially become self-employed and would also create jobs for others. There are innumerable success stories of enterprising people starting their own eateries, or starting their own beauty parlor, or have taken loan to buy own E-rickshaw or cab, or have started household small scale manufacturing units by availing MUDRA loans.

Therefore, Modi Government has strived to provide institutional support to expansion of entrepreneurship across the spectrum from high-end startups to microenterprises. While one creates major value for the economy, the other has immense potential to create new jobs in crores in microenterprises, which in its entirety can provide much greater number of jobs than organized sector ever potentially can. India's parochial opposition parties could still not gauge why PM Modi continues to be extremely popular among masses and why he continues to win elections

with elan. The secret is delivery of promises and making people truly empowered.

Startup Ecosystem as a Cross Border Outreach Tool

Given India's success story under Modi Government in terms of creating a thriving startup ecosystem and the manner in which India's private sector along with Government agencies have played a stellar role in providing the incubation system and handholding throughout the startup evolution stage to several such enterprises, India with its experience, and depth of its industrial and services sector, can certainly extend an institutional helping hand to budding entrepreneurs of neighboring states like Bangladesh, Sri Lanka or Nepal.

Take the example of Bangladesh. Bangladesh over the years has become known as one of the best performing emerging economies of the world. With a GDP of around \$400 billion, Bangladesh has shown how a nation can pull itself up from destitution to prosperity with the help of its industrious people and innovative entrepreneurs. It would thus not be surprising that the youth of Bangladesh too have similar entrepreneurial quest for building start-ups and get their names imprinted in the global start-up arena.

While India and Bangladesh share a considerable number of things including common cultural heritage and civilizational connect, there is immense potential for India to collaborate with Bangladesh in the

start-up sphere.

India with its experience of journey from being on the verge of a severe balance of payment crisis in 1991 to emerging in less than 30 years as a \$3.29 trillion economy with \$600 billion plus forex reserve and a flourishing industry, is surely a case study for many of Asian countries. Also, India's journey and experience in building the startup ecosystem with the help of academic institutions, industry and venture funds, can surely help Bangladesh in developing similar ecosystem and incubation centres in some of its best-known institutions, which can then act as catalysts to trigger a startup revolution in Bangladesh as well.

Integrating the start-up ecosystem of India and neighboring friendly countries like Bangladesh can pave way for major economic opportunities that can be created in both the countries and can always help in developing South Asia as the world's most successful startup hub. Just as India has deep connects with US due

to the shared future that India and US have in the realm of startups, India can also forge strong ties with Bangladesh by institutionalizing some amount of funding and assistance in setting up of incubation centres in some of the best-known technological institutions of Bangladesh.

There is immense potential for India to institutionalize a mechanism to fund at least a few Bangladeshi start-ups every year as well as assist in setting up the startup accelerator centres in Bangladesh.

If this model becomes successful, India can truly become a South Asian magnet to attract brightest minds with ideas to harness their potential here. That would go a long way in truly making India a global economic hub. If eventually that happens someday in the future, much of the credit would go to not just India's intrinsic entrepreneurial zeal, the success of its enterprise but also the role of Modi Government in mainstreaming startups and giving them the importance they truly deserved for long.

Published by



**Dr. Syama Prasad Mookerjee
Research Foundation**

9, Ashoka Road, New Delhi- 110001

Web :- www.spmrf.org, E-Mail: office@spmrf.org,

Phone:011-69047014



@spmrfoundation

Copyright © Dr Syama Prasad Mookerjee Research Foundation
All rights reserved.