

National Science & Technology Entrepreneurship
Development Board (NSTEDB)
Department of Science & Technology (DST)

CATALYSING INNOVATION, ENTREPRENEURSHIP AND INCUBATION



सत्यमेव जयते

Government of India
Ministry of Science & Technology
New Delhi

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प्रो. आशुतोष शर्मा
Prof. Ashutosh Sharma



MESSAGE

सचिव
भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
विज्ञान और प्रौद्योगिकी विभाग
Secretary
Government of India
Ministry of Science and Technology
Department of Science and Technology

31st July, 2020

Department of Science and Technology's (DST) contribution in fostering and nurturing the fledgling start-up ecosystem steered through its strong network of Incubators through National Science and Technology Entrepreneurship Development Board (NSTEDB) is unmatched in terms of efforts and impact. The last five years have been significant in bringing this to a fruition as is evident from the report.

What is even more significant is the fact that these efforts have not only been holistic in nature but have strived to equitable distribution across all regions. Other than the accelerated growth in the number of startup's supported, employment, intellectual property generated, and wealth created, these efforts have actually kindled the spark of entrepreneurship and added to the multiplier effect across the nation bringing global recognition to the entrepreneurs and enterprises nurtured and supported through this ecosystem.

It is not only encouraging to see this validated by the multifold increase of investments from Angel, VC and other stakeholders with significant valuation gains. The uniqueness in NSTEDB's approach in leveraging the technological strength of the higher learning institutes to the benefit of the start-up's through a network of academic incubators seeded and supported by it fulfilling and in many cases exceeding the mandate provided to them. This approach led to a cost-effective incubation support system bringing down the threshold for survival and success of these fledgling enterprises. With the unprecedented turn of events due to pandemic, the collective strength and power of NIDHI program, the DST Incubator network, its start-ups has been leveraged very timely and effectively through the CAWACH program by supporting various C19 solutions as a ray of hope in the ongoing war with Covid Health Crisis.

I extend my best wishes to Team of NSTEDB and IIT Kanpur in putting up sincere efforts to bring out this document. The report clearly depicts the positive impact from Incubation program of DST during the last five years and also the overall contribution in the National Initiative of Startup India and Standup India. Going forward the entire Incubator Community and the Startups have a significant role in realising and rising to the new Clarion call of Atmanirbhar India and I am confident, we with all stakeholders of the ecosystem will usher in the new Mission with a clear shared vision and sense of purpose.

(Ashutosh Sharma)



डा. अनिता गुप्ता

सलाहकार एवं प्रमुख, इनोवेशन एवं
इन्ट्रेप्रेन्योरशिप (एनएसटीईडीबी)

Dr. Anita Gupta

Advisor & Head, Innovation and
Entrepreneurship (NSTEDB)*

भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
विज्ञान और प्रौद्योगिकी विभाग
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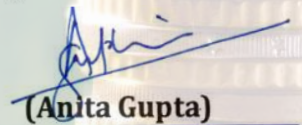
Foreword

The increasing recognition for Innovation and Entrepreneurship as the key development drivers for fuelling the economic growth, has now been fully established in the country. The pioneering and the concentrated efforts of NSTEDB, DST during last five years for supporting innovation driven entrepreneurship and fuelling incubation activity in institutions of higher learning has gained momentum and traction with speed and scale.

Technology Business Incubators are the potent instruments in the National Innovation System to spur techno- entrepreneurship. It is important that these unique experiences of Incubators are analyzed, understood, disseminated and practiced with suitable adaptation both at incubator level and at policy making level. In the last few years, as a response to the National Initiative of Start-up India, efforts and resources to support innovation and incubation have been enhanced significantly and are also being deployed in more coherent form through the newly carved out umbrella program of NIDHI (National Initiative for Developing and Harnessing Innovations).

This report has evaluated key input and output parameters for programs initiated and implemented by NSTEDB, DST including NIDHI. The key findings are testimony to the fact that the collective efforts in the context of nurturing national innovation and entrepreneurship ecosystem have yielded both positive outcomes and impact as well good learnings. Going forward, these learning would be leveraged to further scale up our existing capabilities to meet the futuristic requirements.

I would like to thank IIT Kanpur, ISBA & DST Team members for their efforts in carrying out this study. I am sure that the data and the analysis of NSTEDB, DST activities in last five years would enable in better policy and program formulation and which may go a long way in furthering the innovation and entrepreneurship ecosystem of the country.


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* National Science & Technology Entrepreneurship Development Board (NSTEDB)



PREFACE

AUTHORS

This document presents an independent assessment of National Science and Technology Entrepreneurship Development Board (NSTEDB) efforts in promoting innovation and entrepreneurship as implemented through the Board's highly successful signature program of Technology Business Incubation (TBI), funding, nurturing and sustaining incubators in academic and research institutions across the length and breadth of the nation.

The board's activities and programs have evolved dynamically over the decades in tune with needs of entrepreneurs, entrepreneurial enterprises and ever changing socio-economic landscape of the nation - from entrepreneurship parks (training focused) in the initial years to the current state of the art Centre's of Excellence (CoE).

In the last 38 years of its journey, board has adapted and added multiple layers to its core offering of incubation support - like seed fund support, fabrication support, prototyping grant, mentoring, international business connect, accelerator programs, public private partnership programs, challenges, competitions and hackathons, women specific programs and the programs under NIDHI umbrella - most of which were and are curated, tailored and implemented through the board's flagship TBI program.

This study explores and assesses the nuances of this ever changing landscape of this facilitation ecosystem and attempts to distil and capture the essence and impact of the various programs in nurturing fragile startups and transforming them in successful enterprises, constantly hand holding them through their entrepreneurial journey.

Dr. B. V. Phani
Mr. R. A. Bhaskar

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BACKGROUND



NSTEDB aims

- to convert 'job-seekers' into 'job-generators'
- Knowledge to wealth creation
- Nurture innovators, problem solvers and startups

Objectives

To promote and develop high-end entrepreneurship for S&T manpower as well as self-employment by utilising S&T infrastructure and by using S&T methods.

To facilitate and conduct various informational services relating to promotion of entrepreneurship.

To network agencies of the support system, academic institutions and Research & Development (R&D) organisations to foster entrepreneurship and self-employing using S&T with special focus on backward areas as well.

To act as a policy advisory body with regard to entrepreneurship.

- **1982**
Establishment
- **1984**
STEP Parks in collaboration with banks and financial institutions
- **2000**
TBIs introduced with many more add-on features
- **2016**
NIDHI umbrella launched with diverse programs like PRAYAS[1], EIR[2], SSS[3], CoE[4], Accelerator etc.

Technology-driven innovation plays a critical role in enhancing the effectiveness and hence productivity & global competitiveness and disrupts the existing economic equilibrium. The transition of national economies globally towards Knowledge Economies (KE) is a reality. Entrepreneurial Ventures, because of their size, agility, and innovative capacity for every monetary unit spent are the harbingers of this transformation.

This also goes hand in hand with higher failure rates but with less investment exposure. Given the criticality and transformational impact of these startups for an economy particularly economies with limited financial resources but ample human and knowledge resources, National Science and Technology Entrepreneurship Board (NSTEDB), hereinafter referred to as 'BOARD', was tasked with the responsibility of creating, nurturing, fostering and ameliorating a nationwide innovation ecosystem.

The BOARD, since its inception, dynamically adapted its offerings while traversing the learning curve and also drawing from experiences across the world has narrowed down these approaches mapping them to the nation's unique cultural and social ethos. These include intellectual stimulation and awareness programs to sensitise the society, training programs, programs encouraging opportunity and problem identification to generating solution in terms of the IP generation, seed support programs for developing the prototype and most importantly the programs facilitating the commercialisation of the developed technology.

In the last five years, the board's offerings have quintupled in terms of numbers of the programs supported & budget expenditure. The board had paid out ₹200 Crore (\$26.2 Million) in the last one year itself and a total of about ₹1000 Crore (\$131 Million) had been out-paid since the inception of the board and programs have been redesigned and relaunched in 2016 under NIDHI umbrella to further diversify & strengthen the Incubators through TBI program in realising the Startup India dream along with the augmented funding, fabrication facilities, prototyping grants and fellowships. This being said, the study mainly focuses on the last 5 years only

[1] PRAYAS stands for PRomoting and Accelerating Young and ASpiring technology entrepreneurs

[2] EIR is abbreviated for Entrepreneur in Residence program

[3] SSS stands for Seed Support System

A SNAPSHOT VIEW

Snapshot of Incubation activities as on 31st March, 2020 since inception



153

Incubators



3681

Current Incubatees



1992

IPR Created & Patents Filed



113

Incubatees acquired by third parties



₹ 850 Cr.

Cumulative Valuation of Incubates acquired by third parties



₹3.24 Crore

Average amount of external funding raised (during incubation) by the startups
Count includes only those startups who raised funding)

Snapshot of Incubation activities in the duration 2014-2019



2889

Graduated Companies (2014-2019)



₹27262 Cr.

Revenue Generated(2014-2019)



65864

Direct Employment Generated(2014-2019)
(True potential of job generation is more)



₹ 35208 Cr.

Cumulative Valuation of both graduated and incubated companies (2014-2019)

Incubator Count

0 18

The data above represents the cumulative absolute figures of the respondent TBIs; For the non-respondents, it has been assumed that they don't have anything to report and hence figure zero has been taken for the respective entries (please see annexure:B for detailed information & elaborate explanation). The data shown above is slightly under reported.

NIDHI STATISTICS



27

TBIs supported with NIDHI- Accelerator
(417 companies supported with ₹20.8 crore)



20

TBIs supported with NIDHI- PRAYAS
Program under which 401 PRAYASEES have
been supported



12

TBIs supported with NIDHI- EIR Program
under which 221 EIR have been supported

SEED SUPPORT SYSTEM (SSS)



₹133 Cr.

Fund Disbursed to TBIs



49

TBI's Supported



11

New TBI's added last year



366 Companies

Seed Funded



₹20.7 lakh

Average Fund/Start-UP



₹19 Cr.

Average Valuation at
which beneficiaries raised
additional funding



5X of seed
fund

Angel, VC & Other Investment
(Subsequent funds raised by
beneficiaries)



Fivefold increase
- from ₹2Cr/TBI
to 10Cr/TBI

Fund
disbursement:
300% increase in
last four years.

PRAYAS
9 50

EIR
9
15
20
25
30
33

Seed fund
2,500,000 167M

PIONEERING EFFORTS

BY NSTEDB, DST TO FOSTER ENTREPRENEURSHIP ECOSYSTEM IN THE COUNTRY

- First govt. agency to establish institutional mechanisms (through STEP/TBI) to support technology based entrepreneurship.
- Enabling Innovation Ecosystem Policy Frameworks
 - Service Tax exemption to both incubators and incubatee
 - Permission to hold equity by DST supported incubators (not for profit legal entities) i.e. Converting govt. Grants to Equity Subscription
 - CSR Funding for incubators
- Innovative Partnership Models leveraging the strengths of diverse stakeholders
 - First govt agency to offer programs in PPP mode for scouting & supporting innovation (starting with Intel)
 - First govt. agency to partner & create SEBI registered PPP innovation fund
 - Unique Partnership with department's own divisions and other departments of central government.
 - First govt. agency to partner with international government (bilateral) & multilateral agencies.
- First to support Training & Capacity building of incubation managers
- NSTEDB backed TBI's were first to get support from (multilateral) international developmental agencies (like UNDP, infodev,)

NSTEDB PROGRAMS

NSTEDB has targeted its program offerings to nurture and establish a comprehensive and inclusive ecosystem inclined towards aiding and encouraging the new venture foundation, sustenance and growth. This document, for assessment purposes, distinctly identifies and categorises the multitudinous initiatives of the BOARD into the following ecosystem sub-components (or fronts). Initiatives may straddle one or more fronts and have both backward and forward integration relationships within the ecosystem.



Innovation Ecosystem- Nurturing & Energising startups through TBI

Front - I: Capacity Building & Training Programs -
Entrepreneurship Development

Front - II: Innovation Scouting & Support - PPP Programs

Front - III: National Initiative For Developing And Harnessing
Innovations

Front - IV: Internationalisation & Market Access

Front - V: Sprinkled Efforts to Support Innovation



CENTRE OF EXCELLENCE
SUPPORTED BY DST GOVT OF INDIA





UNIVERSITY ECOSYSTEM -
NURTURING STARTUP
THROUGH INCUBATION

NURTURING STARTUP THROUGH INCUBATION

STEP/TBI/CoE (henceforth referred as TBI) are ecosystem institutions that are one stop solution for the start-up's in their early vulnerable years. TBI's support is invaluable in supporting and nurturing a start-up by providing access to critical resources during their most vulnerable stage in their lifecycle.



Physical Work Space



Accounting



Research Infrastructure



Legal support



IP Development support



Networking



Mentorship support



Access to Finance

TBI's assume the role of an implementing agency for the diverse govt. schemes and programs. Apart from that, they also have the freedom of an autonomous entity to effectively support startups with commercialisation and marketing assistance.

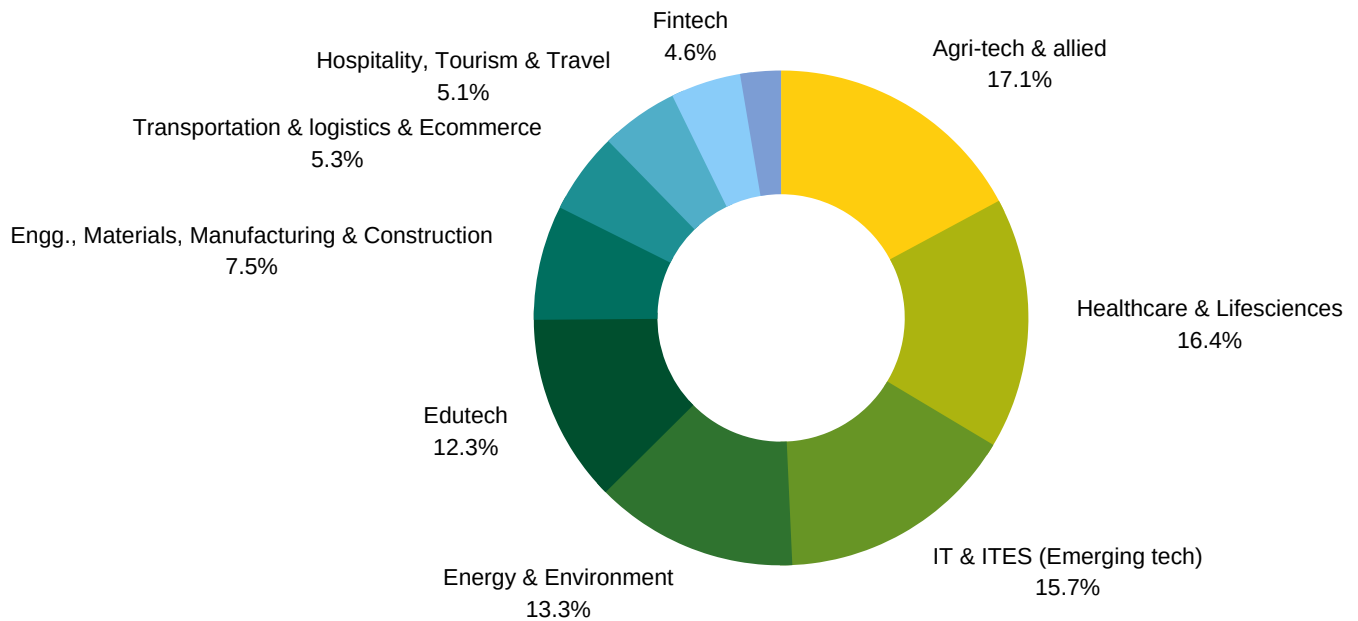
TBI

Objectives

- These institutions were envisioned with objectives to create jobs, wealth and business through promoting new technology/knowledge/innovation based startups
- They accelerate the process of technology commercialisation (academia to industry/society) through establishing a vibrant startup ecosystem(network) among all the stakeholders.
- They provide cost effective access to the the business development and value added services mentioned above.

TBI DISTRIBUTION

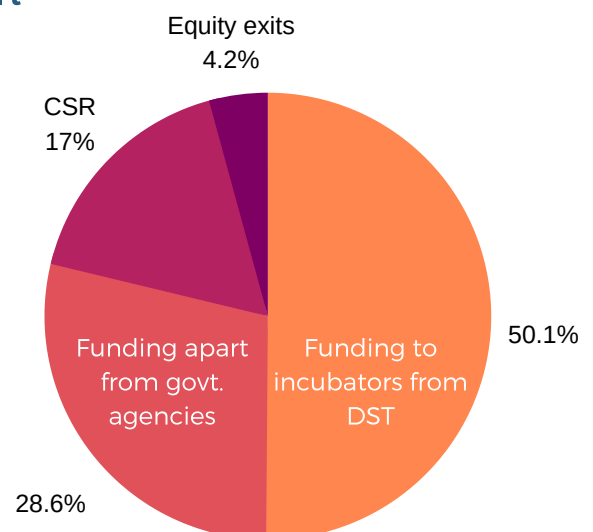
Thrust Area specific



FUNDING TO INCUBATORS

DST: Frontline promoter for Incubation support

Funding received by Incubators	₹ Cr.
From DST	413
Total Funding received by Incubator (from other than govt. agencies)	236
CSR funding last 3 yrs	140
Amount earned by Incubators	
since establishment through exits or sale of equity	35



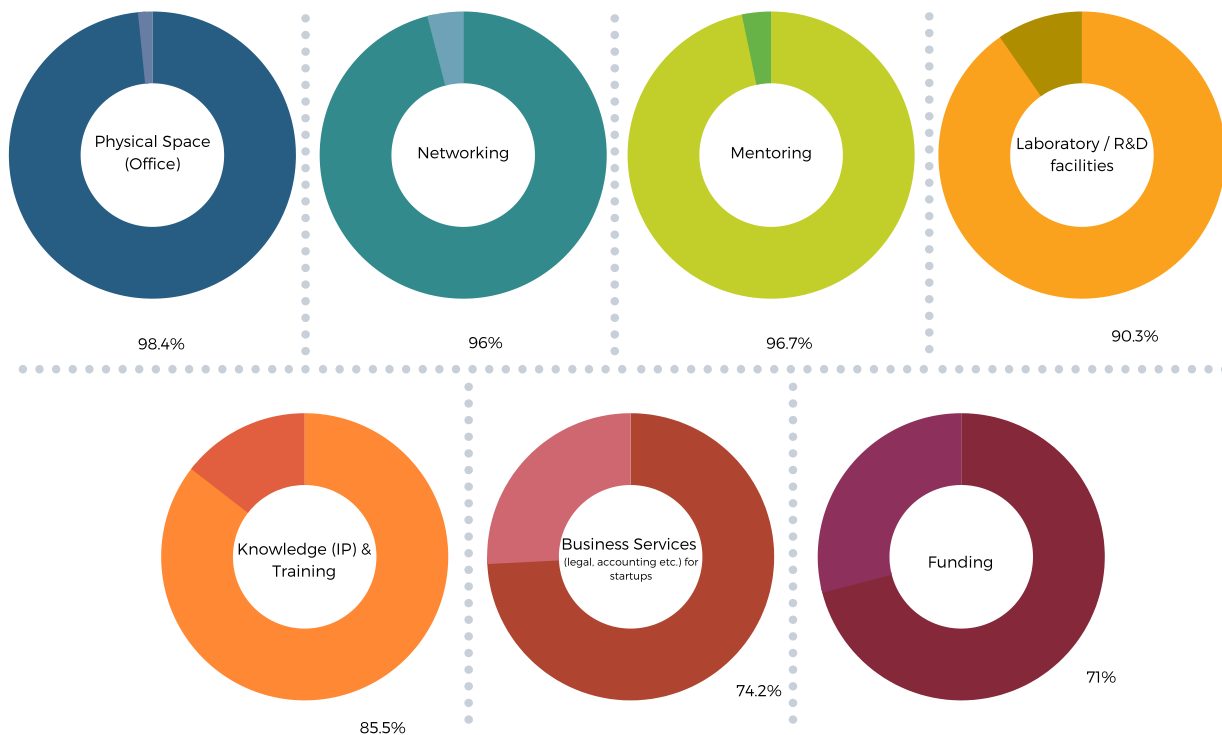
- The funds provided by the DST acts as building block for foundation/establishment of TBI, which have been leveraged or co-joined by other centre governmental dept and state govt (DBT; MeitY; MSME; etc.)
- DST's funding acted as core funding for incubators on which they have been able to source three times (₹1341Cr) of DST's original contribution in the later years from other departments building and expanding the ecosystem to address the growing needs of entrepreneurs and start-up's.

These are the absolute metrics sourced from the supported TBIs about the funds they got till date

##The above pie is accounting only the mentioned sources and the list is not exhaustive;

TBI SERVICES PORTFOLIO

These are the most common services being offered by all the supported TBIs. More than 50% of which are providing all of these services.



IMPACT

- Program output metrics and the incubated firm performance has been highlighted in the 'snapshot view' section of the document. These metrics attempt to capture a holistic socio-economic benefit rather than pure financial return, given that socio-economic return and sustainability are the objective of these programs particularly in the initial phase of their lifecycle
- Therefore, the metrics capture the performance of these ecosystem institutions in terms of socio-economic return and their effectiveness in addressing the survival rate of the start-up's.
- 53 startups from different incubators were surveyed to assess the efficiency of these institutional mechanisms in terms of both timeliness and comprehensiveness of the services. 85% of them found the services provided for meeting their critical requirement as excellent.

SUCCESS STORIES

Roboticswares Pvt Ltd.



A KIIT Bhubaneshwar incubatee company, established to develop real time tracking, monitoring and alert system for automobile industry.

Technology / Product Details and Progress:

- FarEye's machine-learning and IoT powered platform helps global enterprises to solve the complicated last-mile delivery issues on a mobile platform with shrink delivery time by up to 27%, increase courier productivity by up to 15%, eliminate risks by up to 57%, and achieve operational excellence.
- With offices around the globe including California, London, Dubai, Singapore and India, FarEye claims to be present across 20 countries and traction with more than 150 global retailers, CPG companies, and logistics and transportation providers including DHL, Amway, Dominos, Walmart, Johnson & Johnson, and Hilti.

Ecosystem Support & Funding:

- Supported under TIDE Scheme of Department of Electronics and Information Technology (DeitY), Govt with a seed fund of 13 lakhs for product testing and validation.
- Company supported with TDB Seed fund of 10 lakhs for market validation and scale up in 2013
- first angel round with \$500K from Indian Angel Network (IAN). KIIT-TBI took the exit from the company in 2017
- In April 2020, the company raised Series D investment of \$25 million led by M12 (Microsoft's venture fund) with participation from Eight Roads Ventures and Honeywell Ventures. Earlier in 2018 it raised \$9.5 million Series C round from Deutsche Post DHL Group while in 2016 it raised \$3.5 million Series A round from SAIF Partners.

Awards & Recognition:

- Received more than 30 awards national and international awards
- i3 2013 Top Award,
- NASSCOM Emerge 50 2014
- Deloitte Technology Fast 50 winners for 2016
- HR excellence award in 2018
- World Post & Parcel Awards, 2017

Current Status:

- No of Employees: ~300+
- **Total Valuation: Over Rs. 3000 Crore**

Ecofrost Technologies Pvt. Ltd.

Ecofrost is an agri-focused company creating solutions to overcome problems in cold chain infrastructure. The company envisions disrupting the current state of food supply chain in India by empowering farmers, mandi owners and mobile cold chain players with clean technology for a sustainable future.

The product primarily designed for the rural segment serves their needs ideally, as it does not depend on grid electricity and after a 2-year breakeven, leads to over 40% increase in their profits. This innovative product can be suitably adapted for local conditions across the world.

Technology / Product Details and Progress:

- Ecofrost Technologies has designed a pioneering and innovative micro-cold storage product that is powered by solar energy.
- It is an off grid independent system and so apt for remote rural locations
- Very small battery back-up needed: Since the surplus power generated during the day time is used to produce ice (as a back-up for the rest of the day) the need for power storage and hence the need for installation of expensive battery bank is eliminated.

Awards & Recognition:

- The product won Dow Sustainability Innovation Challenge at California Institute of Technology, Pasadena
- The idea won Economic Times-Power of Ideas award from DST, Govt. of India organized by CIIE, IIMA
- The team is the winner of Technology and Sustainable Development Award 2011 at Eureka IIT Bombay
- Micro Cold storage is among world's top 30 business ideas at Stanford's E-bootcamp
- The innovation was a part of the coveted SEED cohort 2012 of Villgro
- The team emerged as the Regional Finalists of Cleantech Open 2012, US
- Power of Shunya- ET-Now
- First prize of Rs 10 lakh -Dupont Power of Ideas- IIM Ahmedabad DST, Dow's Sustainability Challenge- California Institute of Technology

Current Status:

- Successfully tested in a Karnataka farmland
- Raising Rs 5 crore from venture capitalists
- Moved out of campus and started manufacturing and assembly unit in Pune
- No of Employees: ~150
- Total Turnover: Over Rs. 34.50 Crore

SUCCESS STORIES

FlytbaseLabs



Technology/Product Details:

It provides drone agnostic software solutions to automate and scale drone operations. It is the world's first Internet of Drones Platform (IoD), that allows easy deployment of intelligent drone fleets, connected with cloud-based business applications.

Ecosystem support:

Flytbase Labs was a DST Seed investee and resident incubatee company of **Venture Center, pune**. The company was located in dedicated office space and received extensive mentoring support and investors and mentor connects.

Awards & Recognition:

- FlytBase won the Global NTT(Nippon Telegraph and Telephone Corporation) Data Innovation Contest 2019 in Tokyo, Japan.
- Graduated from Cisco Launch-Pad Accelerator Program in 2017 and was awarded the TiE50 Top-Startup award by TiE Silicon Valley.

iMinBit Tech India



Technology/Product Details:

Its core product, Aquvio, Water saving RO filters which are 55% more efficient than contemporary RO filters in the Indian market.

Ecosystem support:

Company was founded by IIT-BHU alumnus in 2015 at MCIIIE.

Awards & Recognition:

- CII Industrial innovation awards 2016-Top 10 promising Start-up. In Top-20 innovative start-ups in Global Cleantech Innovation Programme 2016 for SME in India organised by United Nations-UNIDO.
- Covered under Scheme for Support for Entrepreneurial and Managerial development of SME's Through Incubators
- Invited to Hello Tomorrow Summit in Paris, with the support of the French Ministry of Economy, in October 13-14th, 2016.
- Zoho Challenge International Top 3 Start-ups.
- Top 6 Tech4Raj under INVENT program (Social Impact) organised(partner) by Start-up Oasis, CIIE and RIICO (Government of Rajasthan) 2016-17

SUCCESS STORIES

Ather Energy

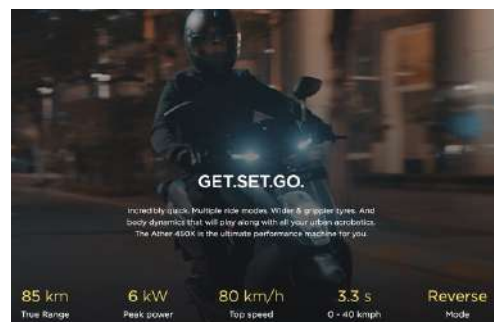


<https://atherenergy.com/>

An IITMIC incubatee, First 'Made in India' smart Electric Scooters & charging Grids for Indian market.

Investments:

- Angel investment by Raju Venkatraman (Medall) & V Srinivas (Aerospike);
- ₹6 cr seed series from Flipkart founders (2014);
- ₹75 cr in Series A by Tiger Global (2015),
- ₹205 cr in Series B by Hero MotorCorp (2016),
- ₹136 cr bridge funding by Hero (Aug'18)
- Team: 200+



<https://docsapp.in/>

- **An IITMIC incubatee**
- 24*7 Online consultation with 5+ Yrs experienced doctors in less than 30min
- Home delivery of medicine
- Home collection for lab tests
- 3000+ lab partners across India
- US\$ 7.2M raised in Series A investment (Dec'17)



<https://planystech.com/>

- **An IITMIC incubatee**
- India's first commercial & indigenous Underwater Robotic Inspection & environmental survey solutions
- Company: health monitoring for safety of structures/infra up to 300m depth
- Investment: ₹14 crore in Series A from Ranjan Pai's MEMG family office, ONGC, Kris Gopalakrishnan & HNIs (2018)

Bridgedots | BRISIL



<https://bridgedots.com/>



<https://www.brisil.com/>

Bridgedots, **MCIIE, IIT-BHU incubatee**, is into development of new technologies with commercial potential in the fields of Industrial Waste, Polymers & Membranes, and Advanced Materials.

Brisil, A spin off company of Bridgedots Techservices P. Ltd., is addressing the problem of rice husk ash utilization.

It supplies silica for all major applications including tires, rubber, toothpaste, paints, plastics etc. Brisil produces industry-specific silica for all major applications.

- Rs. 1 Crore sanctioned by SIDBI
- Rs.5.0 Crore approved by Technology Development Board
- Rs. 5.0 Crore loan approved by State Bank of India
- Annual Turnover – 1.5 Crore; Job created – 15





FRONT- I

**CAPACITY BUILDING & TRAINING PROGRAMS
- ENTREPRENEURSHIP DEVELOPMENT**

CAPACITY BUILDING & TRAINING PROGRAMS



Entrepreneurship Awareness Camp (EAC)

Its a Large Scale Sensitisation Module wherein awareness camps of 2-3 days in the S&T institutions are organised. Around 75 students are sensitised in each such program

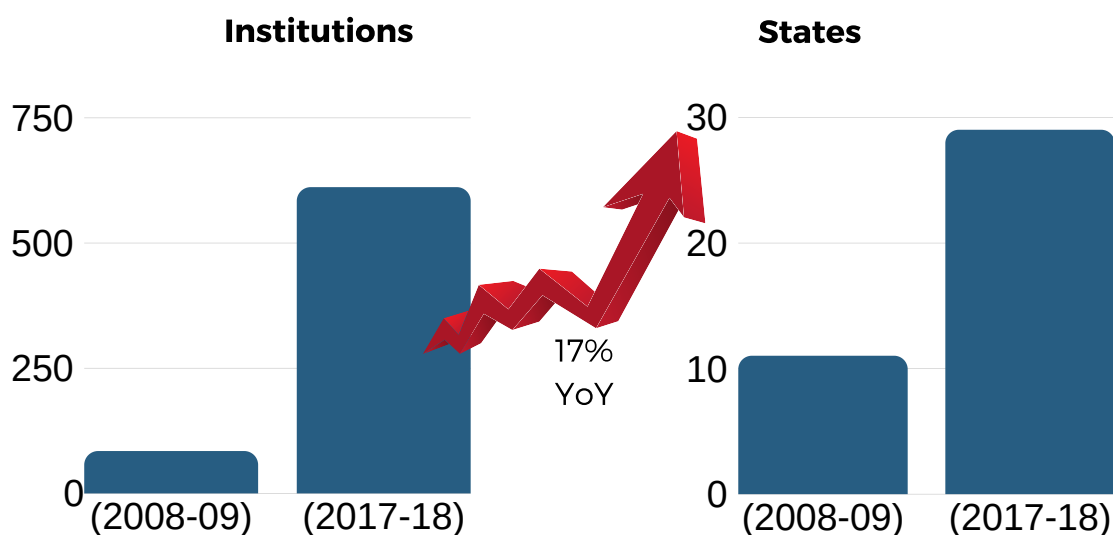


Entrepreneurship Development Program (EDP) Technology Entrepreneurship Development Program (TEDP) Women Entrepreneurship Development Program (WEDP)

A direct and targeted module. These are long duration programs of more than 4 weeks up to 8 weeks regarding techno-managerial business aspects of starting new venture.

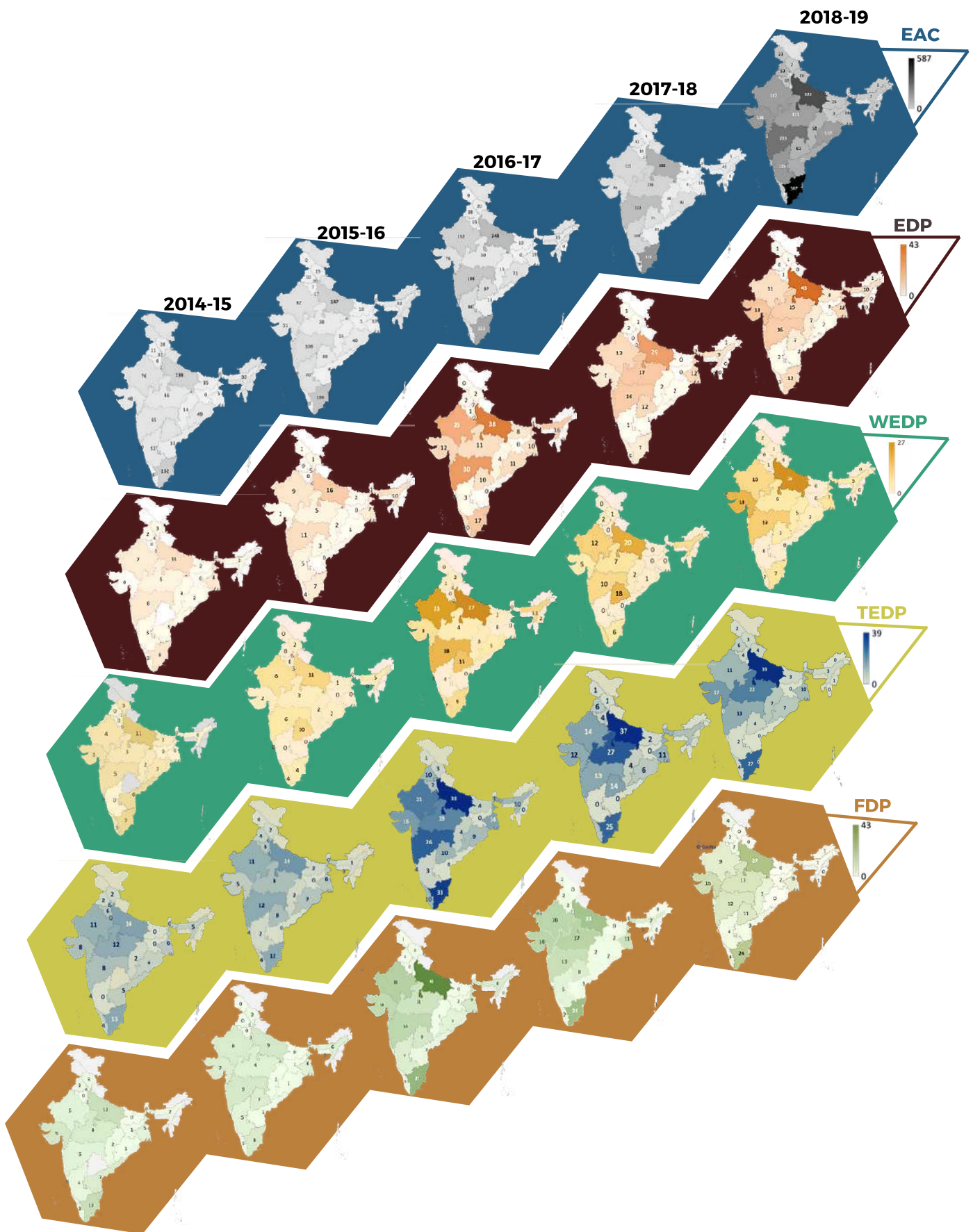
Faculty Development Program (FDP)

A Training the Trainer Module. Faculties who could carry out the entrepreneurial training further, get 2-3 week of training



Capacity Building for nurturing and fostering Entrepreneurial talent & Intent.

PROGRAM DISTRIBUTION



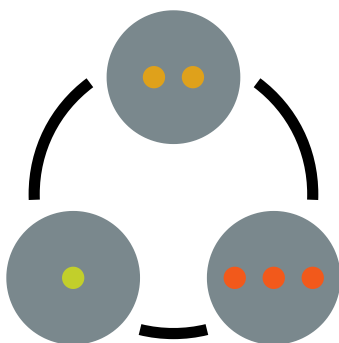
Maps used here are for indicative purposes only and don't represent the geographical boundaries of the nation or states.

PROGRAM DISTRIBUTION & IMPACT



Evenly Distributed

Programs are uniformly distributed after controlling for various demographics and temporal trend across years*.



Phased Manner

The nature of these programs are telescopic in nature with first layer (EAC), initiated and funded in most of the applicant institutions followed by various EDPs (EDP, WEDP, TEDP) converting awareness into tangible output of startup formation and FDP's for capacity building to expand the reach and sustaining the momentum.

IMPACT



EAC

**8.7 Lakh
Students
Sensitized**



EDP

23K



WEDP

16K



TEDP

18K

Individuals Trained



FDP

**14 Thousand
Faculties Trained**

**20,000 +
Enterprises
Started**

**6000 Crore
Revenue
Generated**

**2 Lakh+
Employment
Generated**

*Variation if any in the distribution of the programs across region has been established by controlling parameters like 'college going population (age group 18-23)', college enrolment, total population and no. of educational institutes in the region and per capita NSDP.





FRONT- II

INNOVATION SCOUTING & SUPPORT

- PPP PROGRAMS

INNOVATION SCOUTING & SUPPORT PROGRAMS

- EIGHT ONGOING PROGRAMS IN PPP MODE
- COLLABORATION WITH EMINENT UNIVERSITIES & CORPORATIONS
- GLOBALLY
- DEALING WITH BELOW MENTIONED INTENTS



The National Science and Technology Entrepreneurship Development Board (NSTEDB) of the Department of Science and Technology (DST), has partnered with large US based MNCs and Corporates like Intel, Lockheed Martin, Texas Instruments and Boeing to initiate variety of technology driven and innovation based programs to tap, support and scale up innovative ideas and startups. These Programs are India Innovation Growth Program with Lockheed Martin, Innovate for Digital India with Intel, India Innovation Challenge with Texas Instruments, Plugin the first incubation program for product based startups with Intel in the country. National Center for Aerospace Innovations and Research with Boeing Corp. etc. A brief on each program has been provided in this section.

DST LOCKHEED MARTIN INDIA IIGP 2.0

**INDIA
INNOVATION**

GROWTH PROGRAMME 2.0

SOLUTIONS FOR TOMORROW

<https://www.indiainnovates.in/>

- To identify, award and accelerate innovative new Indian technologies (after right scientific and commercial value assessment) into the global market space.
- IIGP Commenced in 2008 and IIGP 2.0 launched in 2017 with Tata Trust.

Partners



TATA TRUSTS



cile



Features



Entrepreneurship Workshops & Bootcamp



Industrial Immersive Day



Offers Business Assistance



Demo Day



Industrial Connects



Cash Awards

University Challenge

Ideation and incubation of concepts (both industrial and social), sourced from individual students/teams at academic institutions across India.



Open Innovation Challenge

Innovation of concepts (both industrial and social), sourced from the technology community at large across India.



350+

Commercial agreements

\$900+ Million

in economic activity

400+

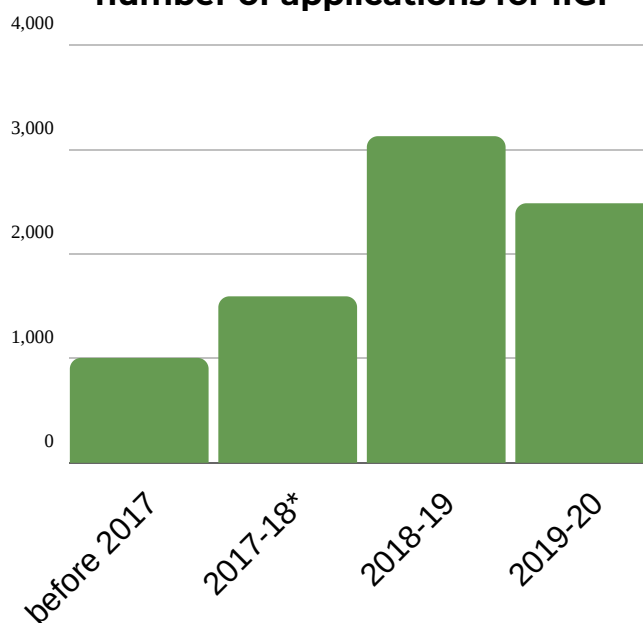
Startups scaling up in the global marketplace

- The program has one compendium of selected technologies (2007-12) and two assessment reports (2007-10) and (2007-15).
- IIGP was concluded in 2016-17 with over total 7000 ideas received & evaluated and over 350 startups nurtured.
- Grants worth ₹ 14.9 Crore has been awarded in IIGP 2.0.
- 9, 15, & 20 Ideas has been identified and awarded in the year 2017, 2018 & 2019 respectively in University Challenge.
- 10, 16, & 16 Innovations has been awarded & facilitated in the year 2017, 2018 & 2019 respectively in Open Innovation Challenge.
- More participation has been received from Tier 2 and Tier 3 cities in 2019 compared to the previous year.

key findings of Impact Analysis by PwC (2017-2019):

- Cumulative External Funding of INR 42.83 Crore (USD 5.6 million) raised by the awardees (x2.8 times the amount of grants).
- 62% of UC awardees and 34% OIC awardees have developed strategic partnerships in India & 10% of UC awardees and 37% of OIC outside India.
- 20% of OIC awardees have engaged in the export; commercial value of exports of these OICs grew by 400% during the programme tenure.
- Thirteen OIC awardees has raised venture capital and angel investment through associations supported by IIGP 2.0 networks.

Figure: Year wise Growth in number of applications for IIGP



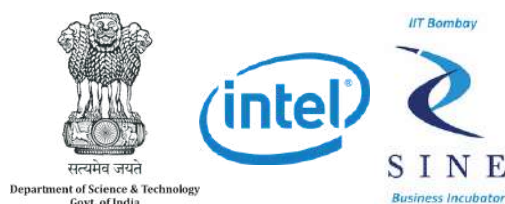
Source: Data is taken from the DST Annual Reports from 2007-08 to 2017-18)

*IIGP 2.0 from 2017 onwards



One year accelerated incubation program to support hardware & electronics systems startups in the country.

Partners

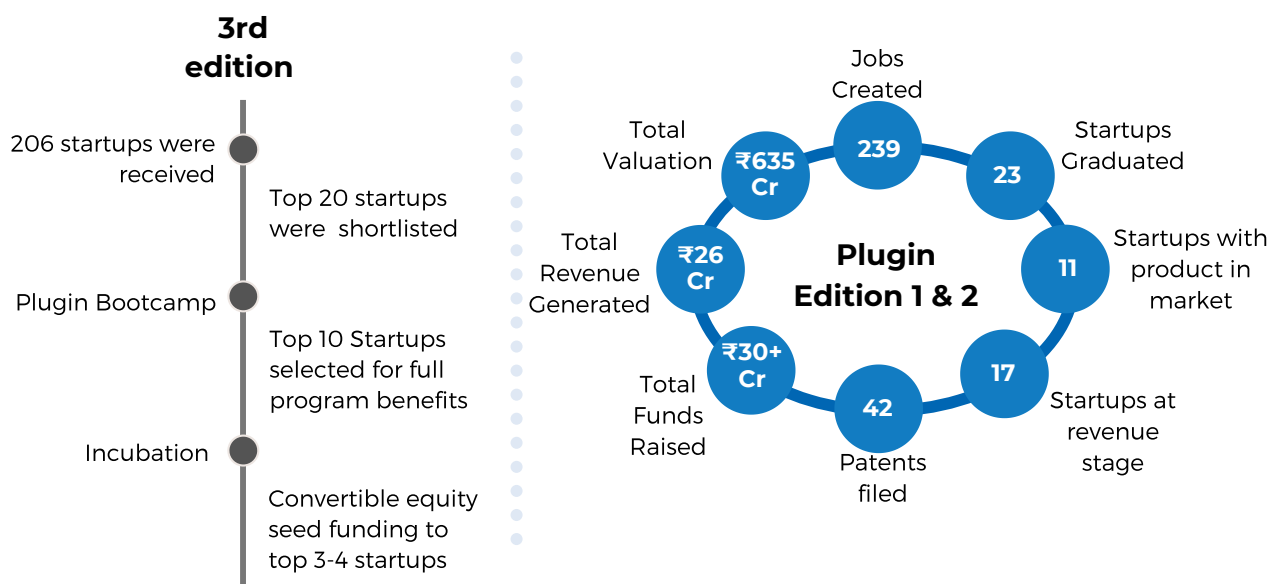


Government-Industry-Academia Collaboration

Features



IMPACT

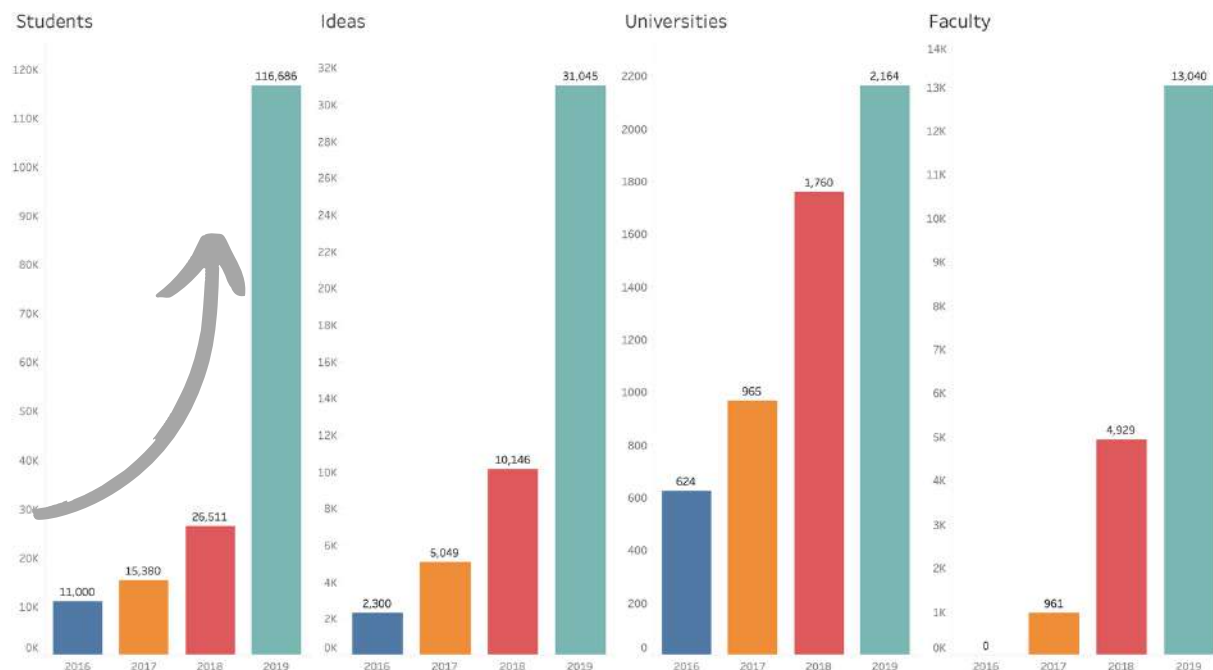
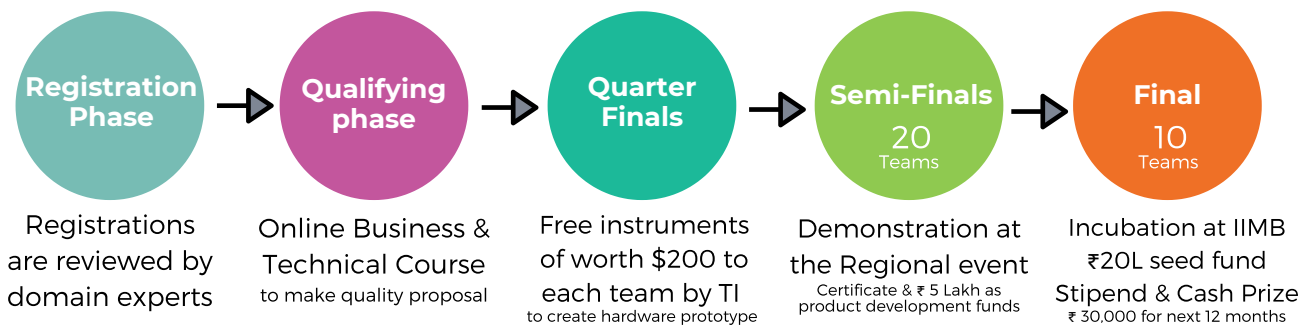


INDIA INNOVATION CHALLENGE DESIGN CONTEST (IICDC)

<https://innovate.mygov.in/india-innovation-challenge-design-contest-2019/>



The program aims to scout, motivate, validate and incubate innovative design ideas (specifically in electronics, semiconductor and embedded system domain) and provide technical support (mentorship and resources from Texas Instruments - TI), business mentorship (from IIM, Bangalore), prizes and funding support from DST& TI.



- 93% of IICDC participants are form Tier 2 and Tier 3 Universities
- Increase from 40.2% women participation in IICDC 2018 to 49.54% in IICDC 2019
- Total 175 Indian patents were filed out of which 2 have been already granted.

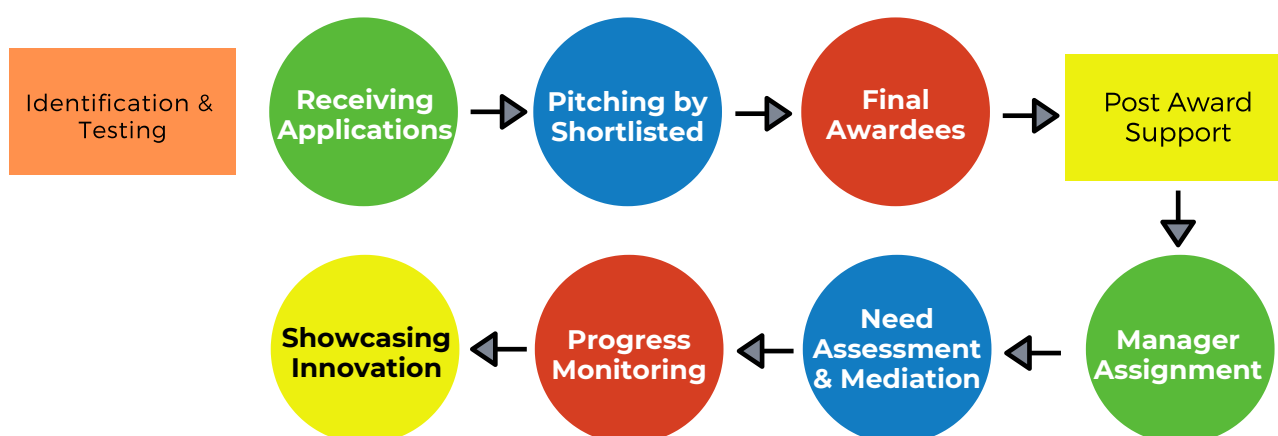
MILLENNIUM ALLIANCE (MA) PROGRAM



Partners



A platform to identify, test, and scale innovations in a unique innovation-driven and impact-focused approach to development by providing funding, capacity building and business development support to Indian social enterprises.



- MA platform has supported 124 social innovation projects
- INR 87 crore has been awarded as grants to the MA enterprises
- The projects supported under the program have impacted 7 Million lives across 12 low-income countries.
- The platform has been able to create 150000+ direct and indirect jobs
- 22 Indian social enterprises are replicating and scaling their innovations in 12 countries in Africa and South Asia namely Kenya, Ethiopia, Malawi, Burkina Faso, Rwanda, Uganda, Tanzania, Afghanistan, Bangladesh, Sri Lanka, Kenya and Nepal.
- MA has supported the replication and scale of social innovations in 22 states of India including low-income state such as Bihar, Uttar Pradesh Odisha, Chhattisgarh, Madhya Pradesh and Rajasthan
- The enterprises supported by MA have been further able to leverage 2.5 times funds from external sources because of their association with the platform and the impact they generated through support received from the platform
- Enterprises supported have further leveraged US\$ 49 million from external sources of funding (from government and private sector).

WOMEN ENTREPRENEURSHIP QUEST PROGRAM (WEQP)

<https://ghcindia.anitab.org/weq-wall/>

- Business plan competition commenced in 2014-15 to promote innovation by scouting and supporting technology based Indian women entrepreneurs.
- A platform to explore the networking opportunities and establish connections with government and other supporting agencies.
- Top 10 startups get an all paid experiential learning visit to Silicon valley.

Partners



सत्यमेव जयते
Department of Science & Technology
Govt. of India



QUALITY NETWORKS

Visits and meetings with key stakeholders in the Silicon Valley ecosystem such as leading technology companies, startups, investors, officials, incubators, accelerators, universities and so on



EXPERT GUIDANCE

Sessions and deep-dive workshops on important business functions, technology trends and growth strategies from industry veterans, mentors, entrepreneurs and experienced professionals.



GREAT INSPIRATION

Directly interacting and hearing from role models in the Silicon Valley. This is also an opportunity for the winners to showcase their business with some of the best in technology.

Till 5th edition

42

Alumni Startups

21

Startups have grown to the next level

75%

Startups witnessed growth since visit#

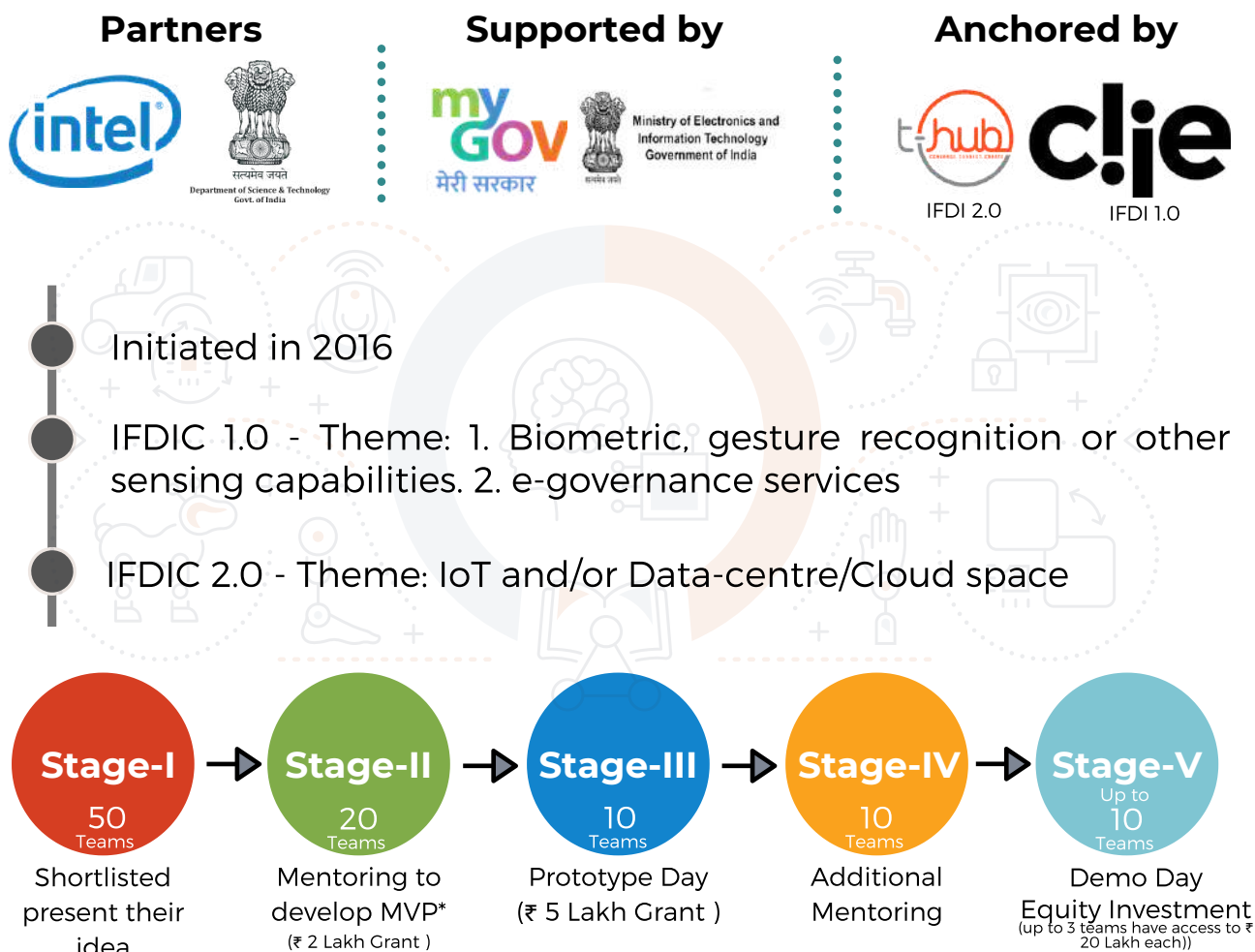


INNOVATE FOR DIGITAL INDIA



<https://innovate.mygov.in/ifdic2/>

To foster local innovation and encourage the creation of intuitive, easy to use and scalable solutions



Features



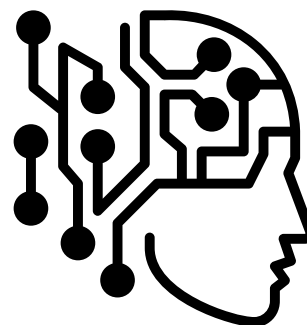
Up to 65 Lakh including Grants



8 week nano accelerator program



All paid visit to Silicon Valley + ₹ 5 Lakh for Scaling



*Minimum Viable Products

POWER OF IDEAS (POI)



<https://www.etpowerofideas.com/>

To provide a launch pad for entrepreneurs to accelerate the growth of their ideas and early stage startups, into successful businesses, through mentoring, guidance, and investment support.

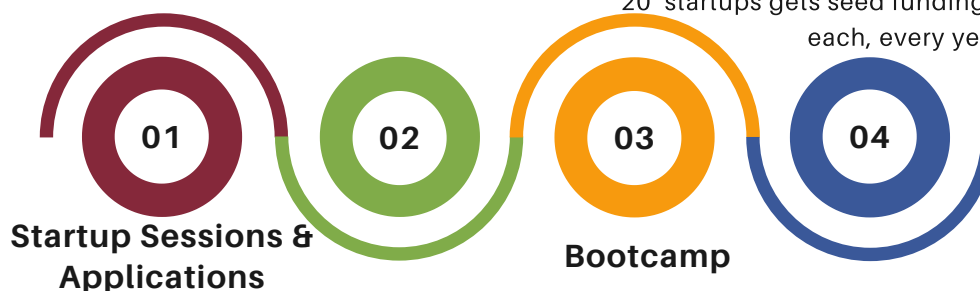


Mentorship Sessions

Top 425+ startups mentored by 250+ experts each year

Awards/Grants & Seed funding

10 startups get awards of ₹2 lakhs each, 40 startups get awards of ₹5 lakhs each and 10 - 20 startups get seed funding of ₹20 - 40 lakhs each, every year.



8 Startup Sessions organised. Average 13000+ registrations and 8000+ applications received each year

Top 75 gets week-long capacity building workshop at IIMA, followed by investment pitches each year.

IMPACT

In total 2 editions
2015 & 2017

16000

Business Ideas
received



850

Startups
mentored &
Accelerated



104

Startups were
Funded



₹16.2 Cr

DST Fund Corpus
for the Program








104 startups funded in 2015 and 2017 include 23 startups that received seed investment worth ₹6.42 Cr. These 23 startups have raised co-investment / follow-on worth ₹37.18 Cr from the market which is 6x leverage of the seed investment provided to them through the program and have created over 285+ jobs.

NATIONAL CENTRE FOR AEROSPACE INNOVATION AND RESEARCH



To provide commercially viable, sustainable solutions by enhancing the Indian aerospace SMEs manufacturing capabilities and hence quality through human resources training & technical support.

Initiator	Supported by			Estd. at
 Department of Science & Technology Govt. of India				
Government	R & D Organisation	Industry	PSU	Academia
An Unique PPP Model Collaboration				

Features



Applied research with six aerospace industry members
Technical support to several Indian Manufacturing companies including Tata Automation LTD, Godrej Aerospace, L&T Heavy Engineering, Bharat Forge Limited and many MSMEs.



Targeted human resources training



Built state-of-art infrastructure.



GENERAL IMPACT

100,000 +
Aspirants &
Business Plans

Sourced, Evaluated, Incentivized & celebrated yearly

**High Revenue
& Employment**

**Additional
rounds of
funding**

**Program
Beneficiaries**

The above positive correlation between 'Whether startup is beneficiary of these programs' and 'Rounds of funding', 'Employment' and 'Revenue' is significant and has been tested over the sample data of 57 respondent startups

SUCCESS STORIES



Incredible Devices Pvt. Ltd.

Catheter Reprocessing Systems - CRS

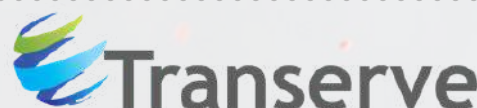
<https://incredibledevices.in/>

- Product: An innovative computer aided catheter reprocessing machine.
 - Fully automatic: Eliminates human error & Quality assurance
 - Tenfold increase in reusability
 - Saves around 99% of device cost
- **IIGP -2016 Beneficiary (SIIC IITK Incubatee)**
- Other Awards won in later years:
 - MIF(Marico Innovation Foundation) Award 2018
 - ASSOCHAM ICT Award
 - CII 8th India Innovation Initiative platinum award
- **Got funded thrice**
 - 2018-19; 2017-2018; & 2018



TRANSERVE TECHNOLOGIES PVT. LTD.

<https://transerve.com/>



- Geospatial technology-based cost-effective SaaS solutions
- Tackle urban reforms and smart city agenda .
- Generates insights from location and Geographic Information Systems (GIS) data.
- Modernises the municipal information systems: Maintaining property records & revenue administration through GIS
- Clients: City Administrations in the states of Maharashtra, Uttar Pradesh and Goa; Other clients - real estate companies, ports, water and sanitation agencies.
- **ET Power of Ideas, 2012 & DST Lockheed Martin Program winner**
- **CIBA, Goa incubated company**; Equity funded in 2015; **Got seed funded in 2013 from CIIE, Ahmedabad**; Got subsequent funding from IL&FS and Omdiyar Network in 2017-18 (₹110 Million)
- Number of Employees: 50
- Revenue Generated: 25 Crore

SUCCESS STORIES



Remidio Innovative Solutions

<https://www.remidio.com/>

- It is a medical device company focused on creating disruptive solutions in Screening & Diagnostic Imaging in Ophthalmology. The product developed with **seed fund support from CIIE** for "Retinal imaging system for reliable screening of Retinopathy of Prematurity (ROP)" has been commercialized on 28th June, 2013.
- Six patents are filed and three are granted.
- Additional funds raised by the Company: A total of INR 39.4 crores.
- Employment generated : 60
- Revenue generation by the Company : INR 6.11 Crores (FY2018-2019)
- Company sells to 15 countries. More than 850 devices have been sold, 7.5 m screened for retinal problem.
- Products in Market: (i) World's First Smartphone Based Non Mydriatic Retinal Imaging Device and Universal Beam Splitter Anterior Imaging Module (AIM)
- Award received: **Received Lockheed Martin Innovation Award** and Wellcome Trust Affordable Healthcare Innovation Award.

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Mad Street Den® is a Computer Vision and Artificial Intelligence Company building the AI architecture of the future. Founded by a Neuroscientist - Designer duo, <https://www.madstreetden.com/> the company's mission is to build models of generalizable intelligence on scale, that can be deployed through meaningful applications across industries to billions of people across the globe.



The company founded by Ashwini Asokan who is Alumni of DST supported Anita Borg program on **WEQP** batch of 2014 and has raised \$ 27.5 Million till date in subsequent round of funding.

.....

Swajal (WEQP, MA)

Swajal is WaterTech firm working on new and innovative technologies to make clean drinking water affordable, accessible and reliable (SIIC, IITK incubatee)




TOTAL WATER DISPENSED
IN LITER
001533012127

TOTAL PLASTIC BOTTLES SAVED
500ML BOTTLES
003066024137


TREES TO OFFSET CARBON EMISSION
YEARLY
000011567387

CARBON EMISSIONS SAVED
IN KGS
000254480107

SUCCESS STORIES



vPhrase Analytics Solutions Pvt Ltd

[POI 15 Winner]

<https://www.vphrase.com/>

vPhrase is an AI based data conversion company which works on reading and understanding any structured data and converting it into natural language reports using Phrazor, its patent-pending NLG (Natural Language Generation) engine. The technology is being used to automate various business reporting and insights generation requirements with current focus on the BFSI space.

Journey till date -

- Scaled from MVP to fully commercialized products and is now serving 15+ paying marquee clients such as HDFC Bank, Abbot, Accenture etc
- Team expanded from 15 to 45 members and MRR (Monthly Recurring Revenue) grew from 5 lacs to 21 lacs
- Raised \$2mn Series A round from US based Hedge Fund Falcon Edge & Bharat Innovation Fund

Dheeyantra Research Labs Pvt Ltd

[POI 17 Winner]

<https://www.dhee.ai/>



Built a conversational AI platform for enterprises that can build IVR, Chatbots & customer conversation solutions in 9 vernacular languages. Uses in-house developed AI NLP engine to completely automate customer interactions for enterprises with easy to build conversational solutions

Journey till date -

- Scaled from MVP to fully commercialized product. Expanded product portfolio by serving BFSI, Hospitality & Education sectors.
- Serves marquee clients such as Syndicate Bank, Royal Sundaram etc.
- Clocking ARR (Annual Recurring Revenue) of ~30 lacs in the short span of 8 months into product launch
- Raised ₹ 1.25 Cr in Seed round and a bridge of ₹ 1.3 Cr, 14 months later.
- Backed by veteran investor Vijay Kedia & Ranga Narayan (ex Quest Global)

SUCCESS STORIES



<https://www.citylity.com/>

Citylity (WEQP)

Citylity is a end to end mobility platform that makes transit more efficient & sustainable. It provides a better mobility experience for citizens.

TrillBit (PoI)

<https://www.trillbit.com/>

Developed technology to send encoded data through ultrasonic pulses (in audible sound data transfer)

Funds raised: INR 65 lakhs



TycjeeJuno Specialty Tyres(PoI)

<http://www.tjtyres.com/>

Manufacturing BPPC Tyre- Burst Preventive Puncture Curative tyre, which is self-balancing. INR 4 Cr as grants from HPCL and GAIL

Cyclops Medtech Pvt. Ltd. (Plugin)

<https://www.cyclopsmedtech.com/>

Diagnostic and rehabilitation products for neuro-vestibular disorders using eye tracking technology.



Rekindle Automations Pvt. Ltd. (IICDC)

<https://www.rekindleautomations.com/>

Demo products to Apollo & Chettinadu Healthcity; Patent Granted; Fully developed product ready for the market

SensoVision Systems (Plugin)

<http://sensoviz.com/>

Quality inspection using machine vision and AI for manufacturing units.







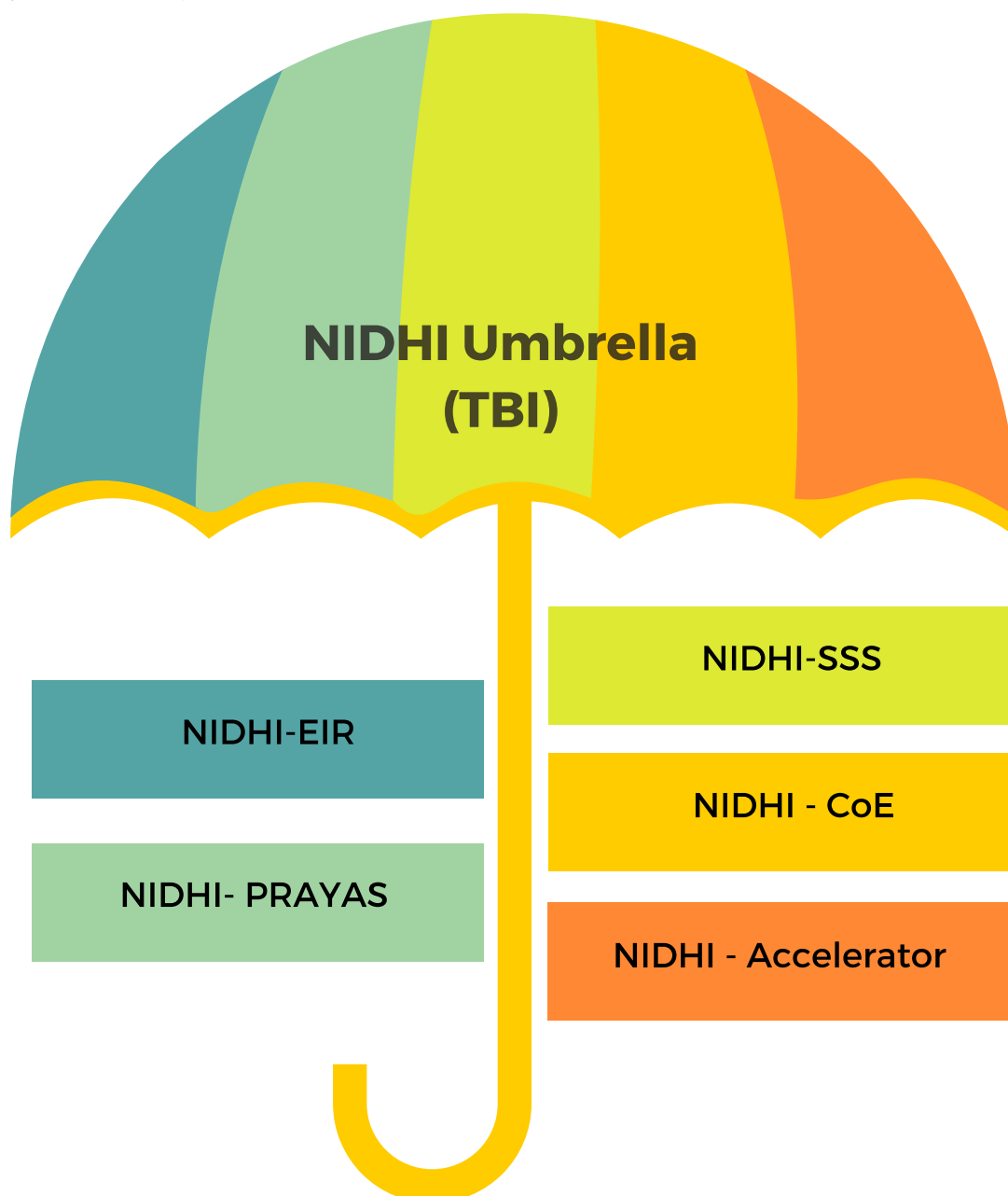
FRONT- III

**NATIONAL INITIATIVE FOR DEVELOPING AND
HARNESSING INNOVATIONS - NIDHI**

PROGRAMS

<http://www.nstedb.com/new-programmes.htm>

These are the follow-on support system for the first and second front beneficiaries primarily to enable productization of ideas.



These programs provide seed fund support to technology development, fabrication, IP creation & protection, proof of concept and prototype development addressing the critical funding gap from – idea to prototype to offset and mitigate the valley of death.

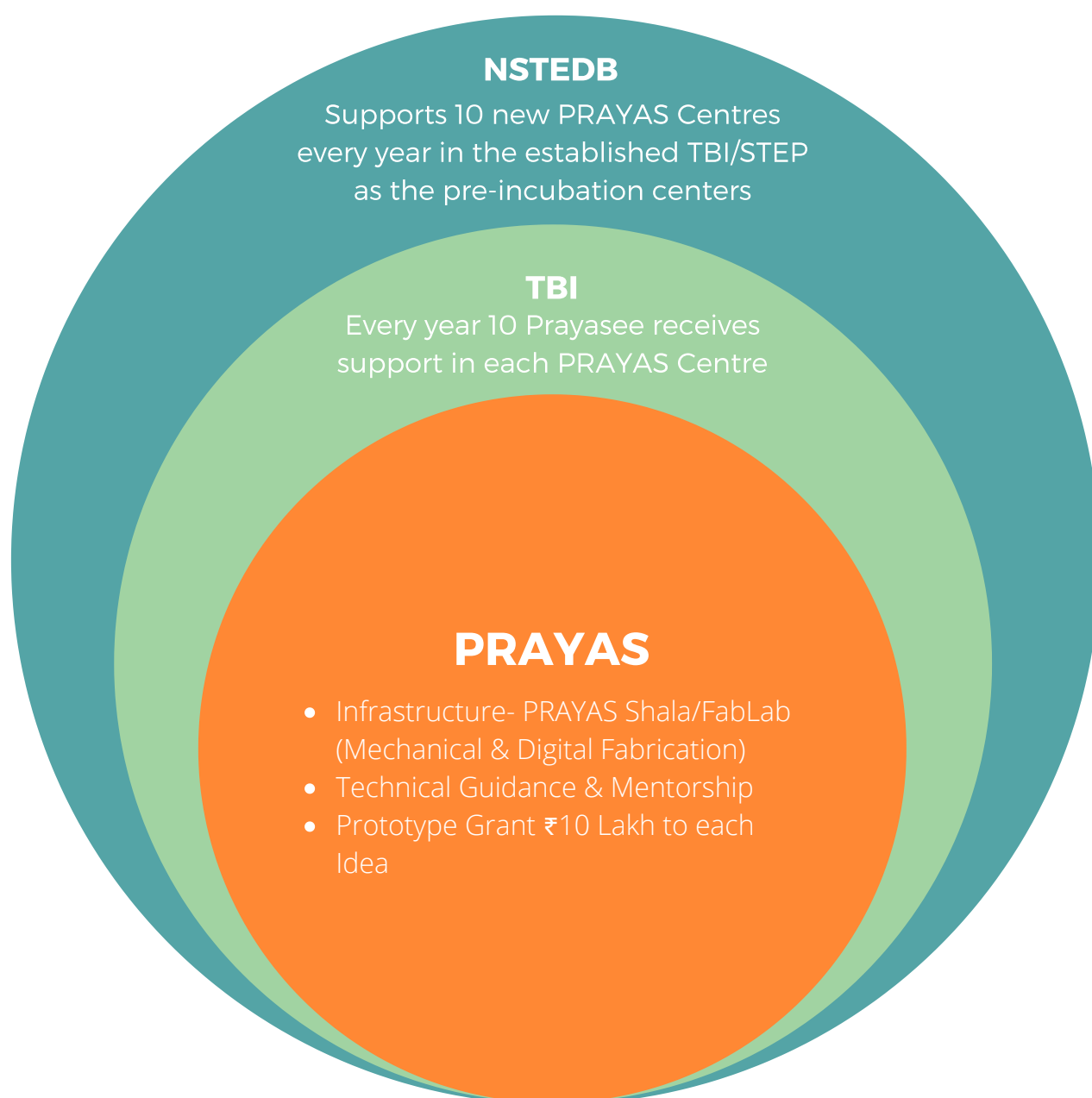
NIDHI - PRAYAS

<https://www.nidhi-prayas.org/>

PRAYAS program specially focuses on youngsters to assist them both technically (fabrication laboratory) and financially (by addressing the idea to prototype financial gap) & thereby ensuring a continuous pipeline of high quality of technology based innovative start-up's to TBI's.

It is focused to build a vibrant innovation ecosystem, by establishing a network between innovators, academia, mentors and incubators.

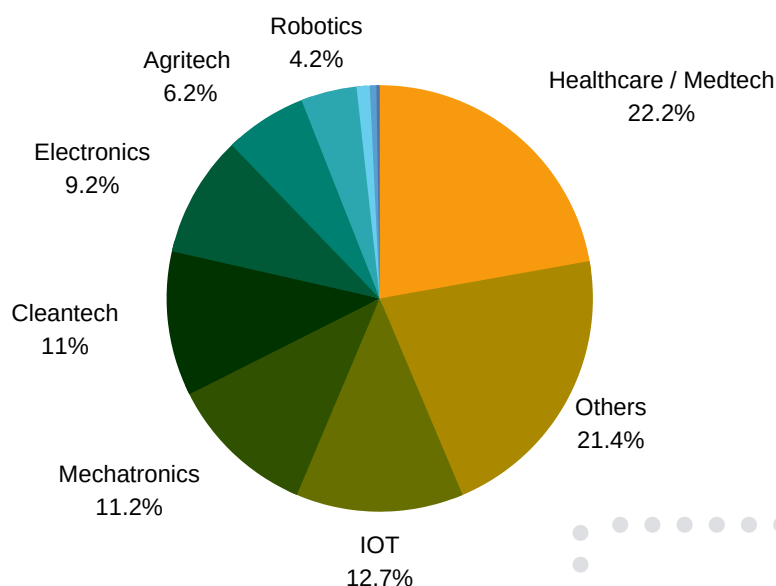
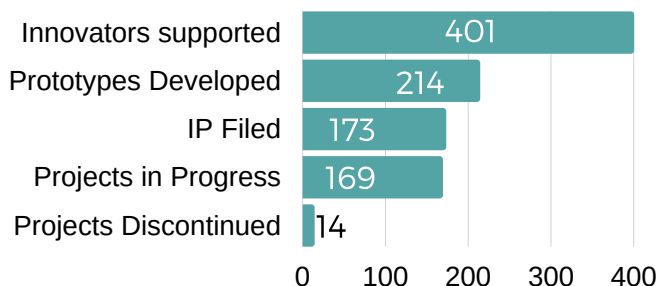
It is positioned as a pre-incubation initiative. The program is implemented by PRAYAS centres (PC) across the country. Each PC gets funding support for a period of five years.



NIDHI - PRAYAS (IMPACT)



401 PRAYASEEs of which 306 Companies Started in 31 PCs



Follow on Funding:

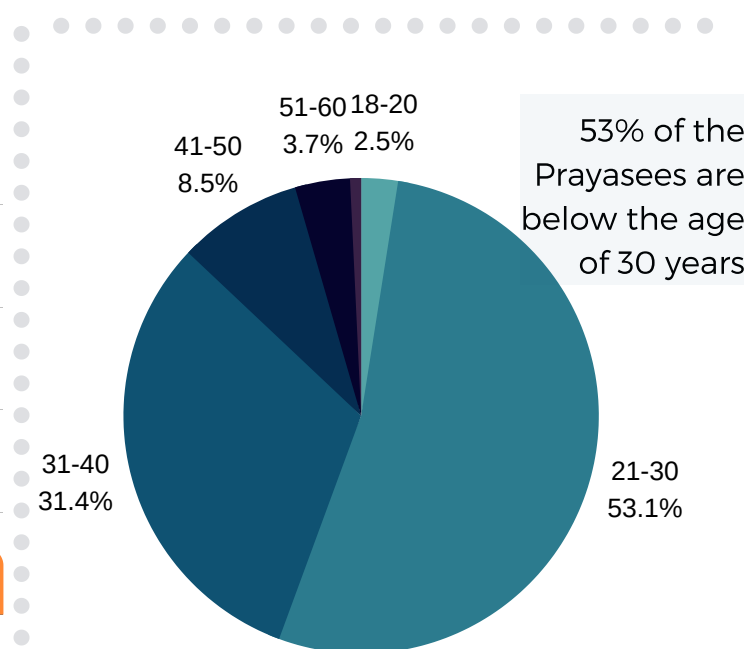
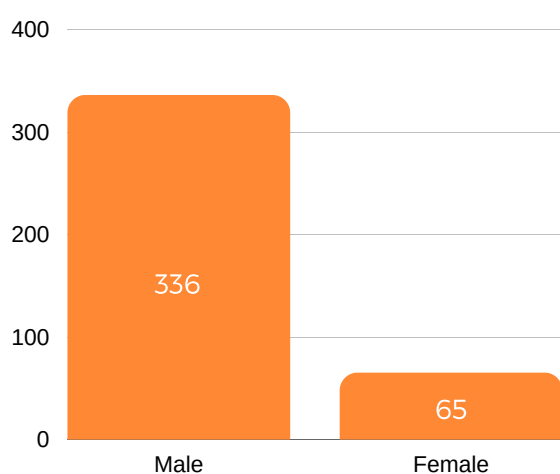
135 PRAYASEEs raised Rs. 78 Crore

Revenue generated:

₹ 20.76 crores by 49 startups

Employment generated:

202 PRAYASEEs - 911 employment



53% of the Prayasees are below the age of 30 years

PRAYAS IMPACT STORY

SquatEase (Sanotion Private Limited)

A Journey From a classroom project to a mass manufactured product to Kumbh Mela

Recipient of NIDHI PRAYAS Grant worth ₹10 lakh from Prayas Centre, STEP, Pune.



Inclined towards change

<https://squatease.com/>

- Product: Redesigned Indian Toilet
- 2016: Idea conceptualised as class room project
- Supported by PRAYAS grant within months
- 2018: Company was setup in collaboration with the World Toilet Organisation.
- October 2018: Product was ready for sale.
- **Awards Won:**
 - Swachh-o-vation
 - Swachh Bharat Puraskaar 2018 by Prime Minister Narendra Modi and UN Secretary General
- Prayaraj Kumbh: Got tender to install 5,000 SquatEase toilets.
- Sold more than 11000 units by May, 2019
- INR. 1 crore + revenue generation in their first year itself (product priced at Rs. 999).
- **No. of Patents: 5**

Nocca Robotics

Solar panel cleaning solution for utility-scale solar parks

Received Prayas Grant from SIIC - IIT Kanpur

Raised INR 12.4 crore from early-stage IAN

Recently they also got CAWACH funding approved.



<https://noccarc.com/>

Datta Labs (<http://datta-labs.com/>)

Development of the Multiple Antenna High Density Ion Generators for Pollution Control

Received Prayas Grant from STEP Pune

Recently they deployed their product for COVID-19 in hospitals in Pune and sold 400 pieces to various clients. Sahyadri hospital has done testing for airborne pathogens and positive results have been achieved as almost all airborne pathogens have been reduced.

SUCCESS STORIES

Chigroo Labs Pvt. Ltd.

<https://cradlewise.com/>



Smart cradle with cutting edge technology for baby monitoring, responsive swinging, sleep scheduling and analytics. The company was incorporated in 2017

- **Awards & Achievement –**

- Received NIDHI-PRAYAS grant by SINE, IIT Bombay
- Funding received from MSME – Rs. 5 lakhs
- Top 100 innovative startups in Elevate 100 competition organised by Govt of Karnataka and received - Rs. 25 lakhs
- Cradlewise is in the top 40 winners at “ The Economic Times Power of Ideas 2017 “ which is in partnership with Facebook, Department of Science & Technology (DST), Government of India and the Centre for Innovation Incubation and Entrepreneurship (CIIE), IIM Ahmedabad
- Selected in Hax accelerator program and raised equity round - \$ 2,50,000

- **Patents – 1 PCT granted and 1 patent granted**

Atomberg Technologies Pvt.Ltd.

<https://atomberg.com/>



- Manufacturer of Energy efficient fans by using BLDC technology (Brushless Direct Current). Cost effective and 65% energy saving compare to ordinary fans. Customers are from both B2B and B2C segment.
- SINE, IIT Bombay incubatee & NIDHI-PRAYAS grant recipient
- Present Status:
 - Funds raised – ₹ 13.75 cr
 - Revenue generated – ₹ 20.00 cr
 - Employee strength – 150+

NIDHI - EIR

<http://www.nidhi-eir.in/>

Entrepreneur in Residence program offers a monthly fellowship of Rs.30,000 per month to each beneficiary identified by the implementing partner Institution (TBI/STEP) for a full year. The early stage startups with only idea, are preferred for the fellowship.

Objectives:

“

- To encourage graduating student to take to entrepreneurship by providing support as a fellowship.
- To provide a prestigious forum for deserving and budding entrepreneurs to pursue their ventures without any additional risks involved in technology-based businesses.
- To create, nurture and strengthen a pipeline of entrepreneurs for incubators.
- To make pursuing entrepreneurship related to a technology business idea more attractive among options available career options.
- To enable creation of new start-ups by entrepreneurs and significant progress towards raising funding or investment.

Expected Outcome

The program is targeting at least 30 % of the support recipients' ideas into start-up companies.

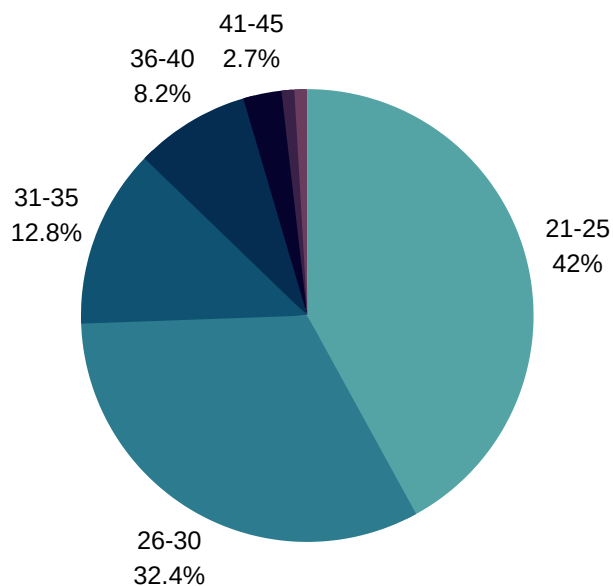
Also, the program is expecting at least 10% of the total beneficiaries be raising funds for their startup within 18 months of program support.

Total 221 EIR recipients

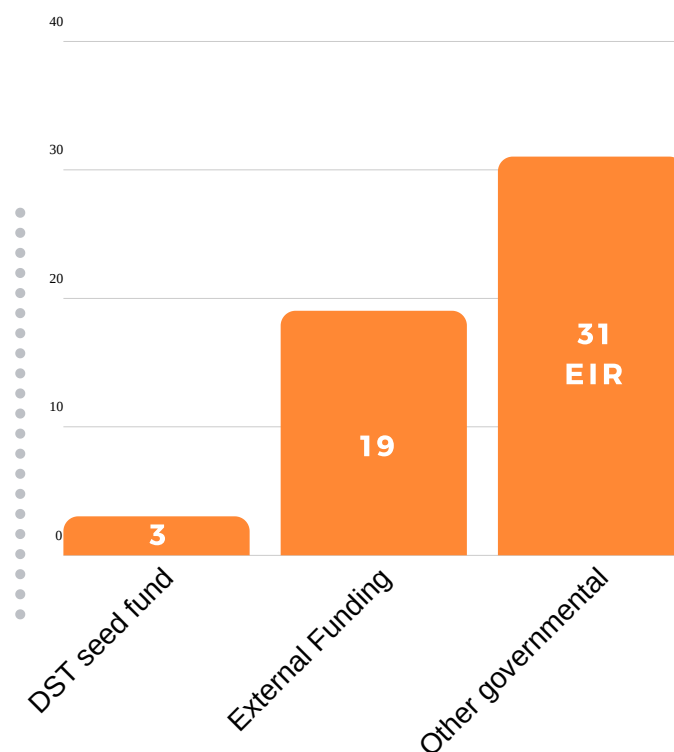
- New venture formed: 156 recipients (70%)
- Raised follow on funding: 51 recipients (32%)
- Follow on funding from external sources: 93% (₹ 15.43 Cr)



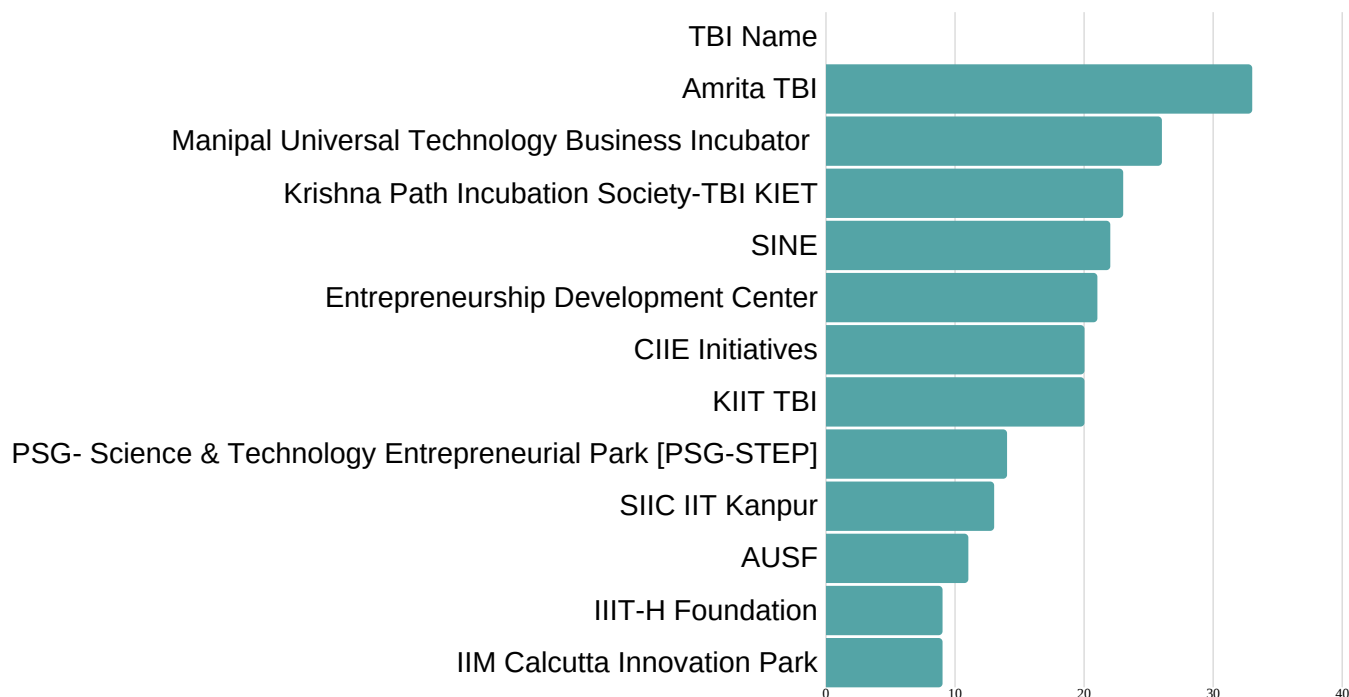
EIR IMPACT



74% of the EIR are below the age of 30 years

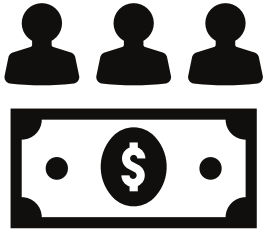


Type of the follow on funding



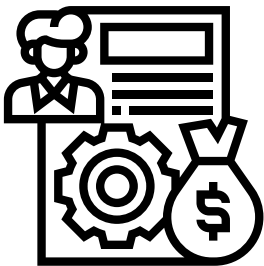
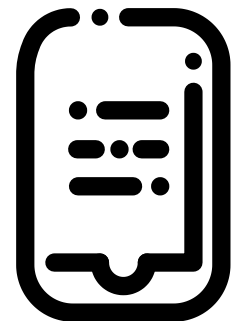
About 18 EIRs supported on average in each TBIs except Amrita TBI, which supports 33 EIR.

NOTABLES



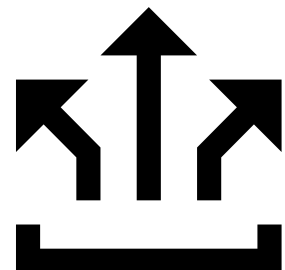
A small sustenance grant and a formal institutional affiliation with a TBI is very valuable in allowing many young people (young scientists and engineers) to explore entrepreneurship as career option.

**Number of Applicants are
10X the number of slots
available contrywide**



**70% of EIR formed formal
business entities much
beyond the expectations of
the program**

**In the first 3 years of the program and 2 rounds of
calls, 32% of these EIRs raise funding (Rs 15.4 Cr) for
their projects/plans. The funding raised is more
than 1.5X of DST's commitment to the entire
program. .**



**So, the NIDHI-EIR program successfully served the purpose of nucleating
startups and empowering budding entrepreneurs**

INDIA INNOVATION FUND



- **India Innovation Fund (IIF)**, a SEBI-registered fund Company, was launched in 2009 with a mission to promote science and technology driven entrepreneurship in India by making early stage investments in ventures that were strong on science and technology IP.
- IIF was the first investor or co-investor in almost all its investee companies.

NASSCOM



The portfolio.

Life Science/Healthcare



Mitra Biotech

This transactional Oncology company enables delivery of personalized, targeted and optimal treatment for cancer patients using technology developed at MIT and Harvard



Shantani

Developed advanced chemical proteomics technology that enables identification and validation of specific target cells for small molecule drugs



conSURE

Novel disruptive technology for management of fecal incontinence in non-ambulatory patients. To benefit patients in India and worldwide

ICT/Digital/Media Tech



SureWaves

Created a cloud-based media grid solution which along with a deployable media at each MSO aggregates and manages local cable TV channel ad inventory and brings it to national advertisers.



Iken solutions

AI-based consumer analytics solution that enables extremely personalised user experience on an N=1 basis (an IIT Bombay spin off).



Vegayan

Integrated software solutions for converged communication networks to enhance their functionality and performance.

Control System



Sedemac

Offers unique solutions to OEMs in the off-highway and 2/3 wheelers industries that deliver best-in-class power quality and fuel efficiency and emissions performance (from a research group in IIT Bombay).

IIF has recently made a successful exit from all the investee companies with approximately 2.4x returns on invested capital.

NIDHI - SEED SUPPORT SYSTEM (SSS)

http://www.nstedb.com/New_Programmes/2018/NIDHISeedSupportSystem.pdf

The NIDHI-SSS disburses fund through TBI to an incubatee and is acting as a bridge between development and commercialisation of innovative technologies/products/services.

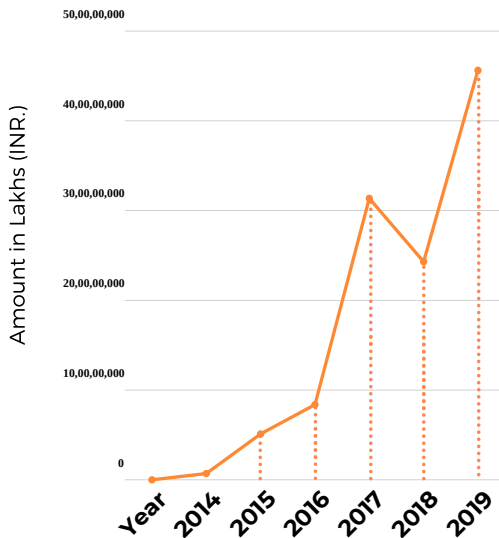
- Seed support program was initiated, in 2016-17 with 11 TBI/STEPs supported in its first year
- Objective of the program is to provide financial assistance to the potential start-ups with promising ideas, innovations and technologies to help them graduate to next level where they can raise investments from angel/Venture capitalist or seek loans from formal financial institutions.
- Program is targeted to ensure seed support to the TBI incubated venture, for helping them commercialise their products/services in the marketplace.
- ₹ 1000 Lakhs (2 round of Max ₹ 500 Lakh each) per TBI/STEP;
- Each startup in Technology Startup can be funded once for 25 lakhs (up to 75 lakh).

The start-ups would be supported primarily on the following from the seed support

- Product development
- Testing and Trials
- Test Marketing
- Mentoring
- Professional Consultancy
- (To attract professors/experts from institutions to work with start ups.)
- IPR issues
- Manpower for day to day operations
- Any other area as deemed necessary and recommended by the Seed Support Management Committee of TBIs

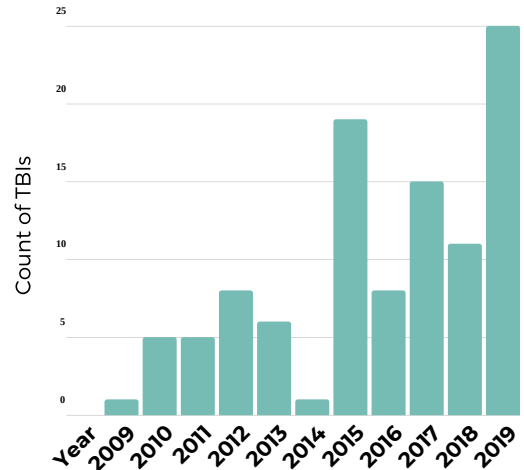
SEED FUND DISBURSEMENT TO TBI

Seed fund disbursement from DST



Almost 4-fold increase in TBIs supported
(4-year floating average)

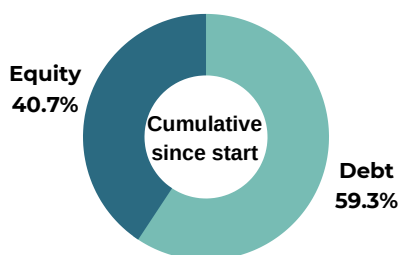
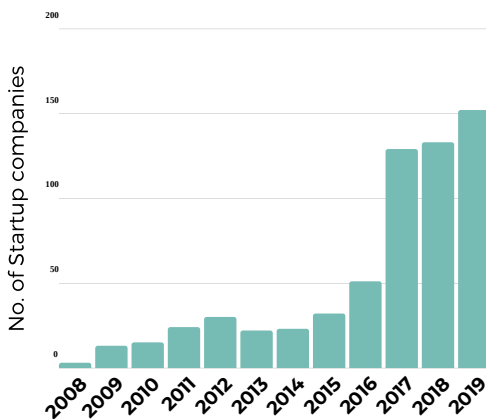
Year-wise Fund Disbursement to TBIs under SSS



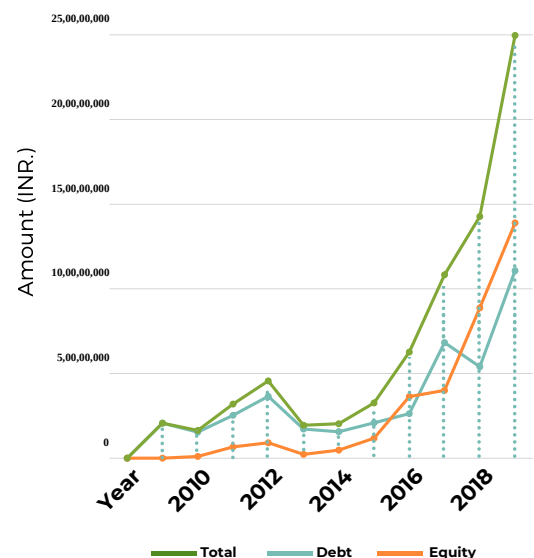
YOY > 73% Post 2014 Cumulative 9 times initial

FUND RELEASED TO STARTUPS

Yearwise SSS Beneficiaries



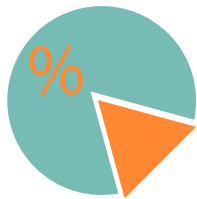
Total Amount released to Start-UPS



AVG. AMOUNT OF FUNDING ₹ 20.7 LAKHS

Equity funding is being preferred by TBI's now counter to earlier trend

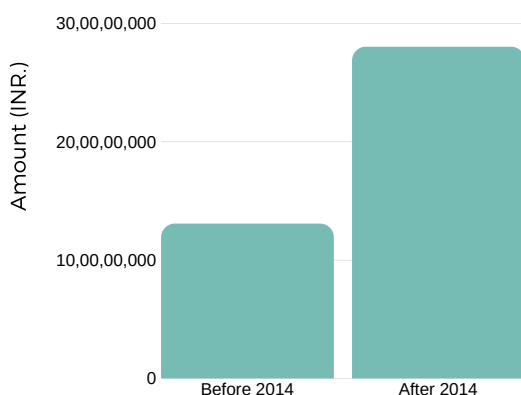
RECOVERY DETAILS



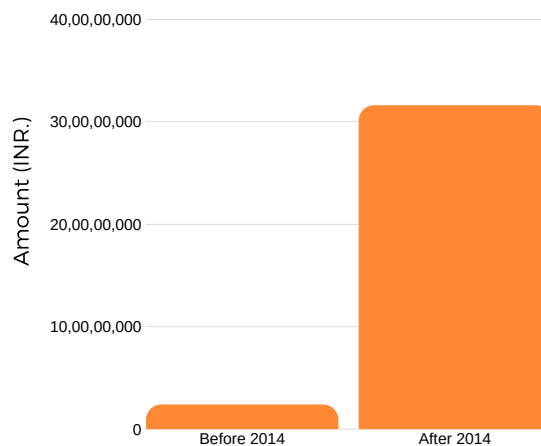
Targeted Debt Recovery Achieved

30% of Loan Disbursed
Majority cases Option exercised to convert Debt to equity on graduation

Debt Funding



Equity Funding



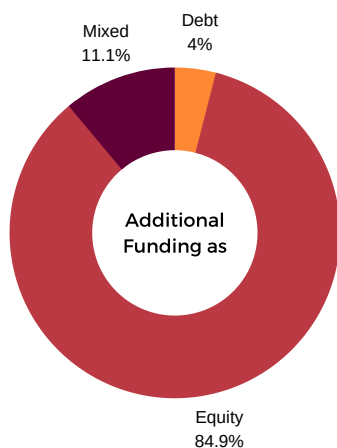
Equity Recovery

95%+ equity funding is three or less year old
9 exits reported till date

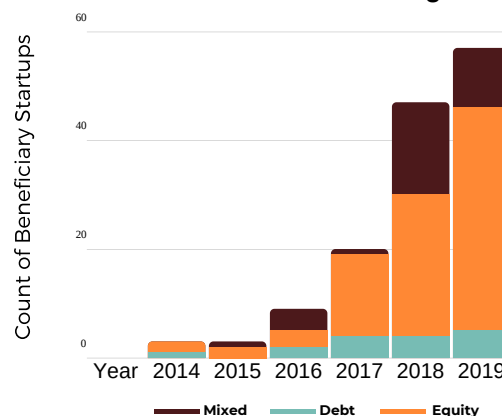
Average Valuation of SSS beneficiary startups has been reported at ₹17.7 crore

ADDITIONAL INVESTMENT RAISED BY BENEFICIARIES

Total ₹381 Cr. was the additional funding obtained from Angel, VC & Other Sources of that ₹318 Cr. was Equity funded.



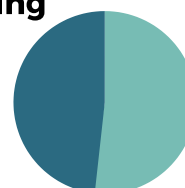
No. of SSS beneficiaries who raised External funding



Share of the SSS Beneficiaries who got Additional funding

There are no statistically significant evidence for the general belief that Equity Seed Funded Companies are more prone to receive additional Investment from Angel & VC's

Debt seed funded
48.2%



Equity seed funded
51.8%

SSS IMPACT STORIES

WIDE MOBILITY

Wide Mobility has built solutions to detect defects in the produce of the Food and manufacturing sectors and aims to focus primarily in the agricultural sector. They received funding in March 2018 when they were an Early-stage venture with this promising idea. Post receiving the investment they have completed the R&D to build and manufacture the machine in Stainless Steel. They have completed demos with industry associates and prospective customers and machine is market ready in just 18 Months. Since the investment from FSSI they have received a grant from Government of Karnataka and they also won the Best women entrepreneur award for Karnataka in the Startup Yatra conducted by Startup India.



MICROCHIP PAYMENT PRIVATE LIMITED



- Aims to solve the mobile payment issues in tier-2 and tier-3 towns in India, where data connectivity may be an issue
- Microchip Payment has a patented payment solutions wherein consumers can pay merchants without access to the internet.
- They have used the seed funding to build the prototype to showcase their solution and get in partnership with banks, regulators and fintech companies.
- The company is currently doing POC with National Payments Council of India and is also currently evaluating partnership to expand in the US and South America.

Additional funding:

- Received a grant from Government of Karnataka and Government of Maharashtra
- Selected by Mumbai Fintech Hub
- The Startup was picked in JioGenNext Program for Startup acceleration.

FRESHBOXX PRIVATE LIMITED

FreshBoxx procures the fresh product directly from the farmer thereby reducing the cycle times, reducing the costs and improving the reliability of the supply. They supply to businesses and consumers in the tier-2 and tier-3 towns in India. They are currently operating in the North Karnataka region – Hubballi, Dharwad, Belgaum. Post investments from FSSI they have explored fruit B2B vertical aggressively from the sourcing from the core source place in bulk and supplying. They have built B2B and B2C app to make the process much easier and transparent with the technology. They have set up a wholesale to retail concept in Hubli to supply to local stores.



SSS IMPACT STORIES

inVOID Technologies



- Founded in 2018, inVOID offers AI-driven SaaS-based eKYC and video-KYC for user onboarding at massively decreased cost.
- It's AI model works even with low bandwidth such as 2G and allows to onboard the users from the remote areas
- Witnessed 250% revenue growth in the last quarter (Apr-June, 2020) amid COVID-19 and RBI's video-KYC decision. inVOID conducts more than 15000 KYCs on a daily basis now compared 6000 KYCs per day in pre-COVID times and works with 50+ enterprises, out of which 30 are Fintech and digital non-banking financial companies (NBFCs) and others in matrimonial, transport aggregation, cryptocurrency exchange, online rental and gaming sector.
- The digital KYC cuts the user onboarding costs and massively leveraged by and also partnered with companies in gaming and cryptocurrency segments.
- Early Incubation and Seed funding by TIDES, IIT-Roorkee and raised subsequent funding from Palaash Ventures summing up to \$50K.
- Award: NASSCOM Emerge 50 Startup of 2019 in the SaaS category.



ROLE OF SSS IN GROWTH OF STARTUPS

5C Network (India) Pvt. Ltd. - Company was doing 20k cases per month with 73 radiologists on its platform before the Seed funding. Today the company is doing about 60k cases per month with more than 120 radiologists on the platform.



Agrisk Data Analytics Pvt. Ltd. (Hummingbird) - Company has onboarded Nestle & IBM as their client. Post the fund infusion it has been able to complete pilots with HDFC Ergo (potential client).

Retranz Infolabs Pvt. Ltd. (SuperZop) - Company was catering to 750 kirana stores prior to seed funding. Post the fund infusion it was able to scale upto 2500 stores across Mumbai.



Rcupe Lifesciences Pvt. Ltd. - Company has completed the design phase and released all the necessary documents for manufacturing. Company is able to secure a test licence from CDSCO. Company has implemented quality management system as per ISO 13485.

Inventigen Technologies Pvt. Ltd. (Onward Health) - Company had 1 fully developed product for mamograms before seed. After fund infusion it has developed 2 new tools and got 1 paid diagnostic center for its imaging tool.



Vyuti Systems Pvt. Ltd. (Cynlr) - Company was able to set up a lab and has ordered equipments for lab testing after the seed fund infusion. They will be in testing phase throughout 2020.

Bellatrix Aerospace Pvt. Ltd. - Company was able to hire top senior talent and move to a new office to set up a core team. They have onboarded 3 new advisors.







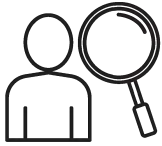
FRONT - IV

**INTERNATIONALISATION
& MARKET ACCESS**

INTERNATIONALISATION & MARKET ACCESS



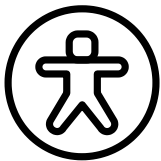
Support to validate product in the international market



Customer Discovery



Proof of concept



Market access to both domestic & international

PROGRAMS

- Indo Canada Bilateral Innovation and Entrepreneurship Program
- Indo Switzerland Bilateral Innovation and Entrepreneurship Program
- Maitri - Indo Brazil Agri-Tech Cross Border Incubation Program
- India-Russia SINE IIT Bombay
- India-Rwanda FICCI
- India-US IIGP-100 Startups , WEQ
- India-UK CIIE-IIMA, Startups funded by British Council / Royal Academy of Engg.
- India-Israel WSP NSRCEL, IIM Bangalore
- India -Taiwan Plugin Program, Startups fully funded by Intel
- Some of PPP discussed in front-II also provide international connect for winner

Programs conceptualized & devised to facilitate the startups(with internationalisation potential) to understand country specific market and law of the land,

Different program components include

- commercial tie-ups
- Technology partnerships
- Mentorships
- Soft lending etc.

MAITRI - INDO BRAZIL AGRI-TECH CROSS BORDER INCUBATION PROGRAM



Program supported by DST and implemented through Pusa Krishi Incubator, at ICAR-Indian Agriculture Research Institute (IARI), in collaboration with Embassy of Brazil, New Delhi. It focuses on promoting agri start-up incubation, start-up exchange and access to global market thereby enabling the social, industrial and economic growth of both countries. The six-month incubation program brings along the five Brazilian and five Indian start-ups selected under the program to be trained in Indian and Brazil.



Objectives

To train entrepreneurs on the incubation and innovation practices

To help Indo-Brazil start-ups explore market in respective countries.

To Familiarise start-ups about opportunities, challenges, and dynamics of other market & to create collaborative cross border partnerships to facilitate cross border trade, technology

Creating a soft-landing platform for start-ups with innovative technologies having market in respective countries.

Educating the start-ups on the trade related aspects in both countries.

Partnerships and collaboration between different organisations in both countries.



Outcomes



Program Schedule

Phase 1: part 1: New Delhi

Start-up underwent a market access program at ZTM-BPD Unit of IARI for seven days and put through an extensive incubation training. They pitched their ideas in front of the investors.

part 2: Hyderabad

Start-up got a chance to interact with ecosystem partners like: incubators, research institutes, business and entrepreneurship-based organisations.

Phase 2: Brazil

They will now visit Brazil to engage with the ecosystem partners and will get access to international market in Brazil through customers, collaborations and networking.

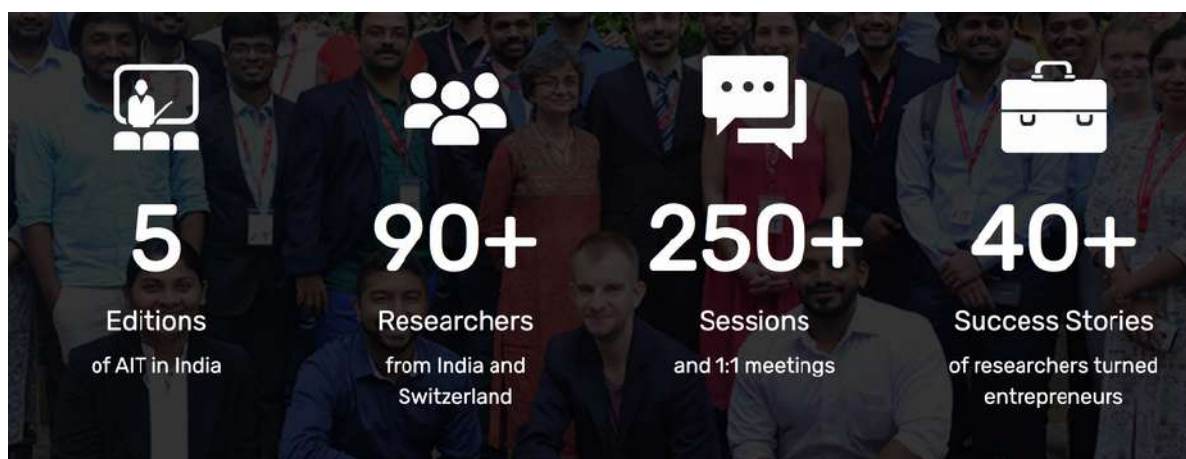
INDO SWITZERLAND BILATERAL INNOVATION AND ENTREPRENEURSHIP PROGRAM

Initiative funded by Department of Science and Technology (DST), Government of India and the Indo-Swiss Joint Research Program (ISJRP) of SERI, Switzerland, to enhance the interaction of academic researchers/ innovators with the industry as well as connect both the countries towards joint research and eventual commercialization.

Unique features

- Two week-long camps are conducted in India and Switzerland in two phases
 - Knowledge Sessions – Through the eyes of established entrepreneurs. Sessions on market-strategy, patent-strategy, introduction to the indian market, etc.
 - Pitches – by the participants. Over and again, to different audiences
 - One-to-one Connects – Ample opportunities to connect with the leading experts in the industry – domain-specific mentors, VCs, corporate R&D and business development heads.
 - Industry Immersion – visits to various accelerators/ incubators and tech-industries to watch entrepreneurship in action and hear from innovation experts.
- Cash Grants of ₹10 Lakh.

IMPACT



23

at Product/Trial stage



10

at Revenue stage



19

raised external funds

SUCCESS STORY

Alfaleus Technology Pvt.Ltd



Technologies Pvt.Ltd is an incubatee of VITTBI and it has developed and launched 'C3 Field Analyser', a VR based Glaucoma screening device. The current gold standard is a Rs.30 Lakhs German equipment, Humphrey's field analyser and it takes 10-15 minutes / eye and the cost is Rs.5000-Rs.7000/eye. The patients (especially elderly) aren't comfortable with the process as they have to rest their chin for the entire duration of testing.

Alfaleus's C3field analyser is a head mounted VR based device that tests the eyes using its customary software and algorithm solving the current challenges. A mobile application helps in the testing and data acquisition process. It just takes 3-5 minutes per eye and the cost would be less than Rs.500 / eye. In addition, the device is portable -Humphrey's is a stationary hospital based equipment (not useful in eye camps and can't be afforded by small clinics / individual practitioners)

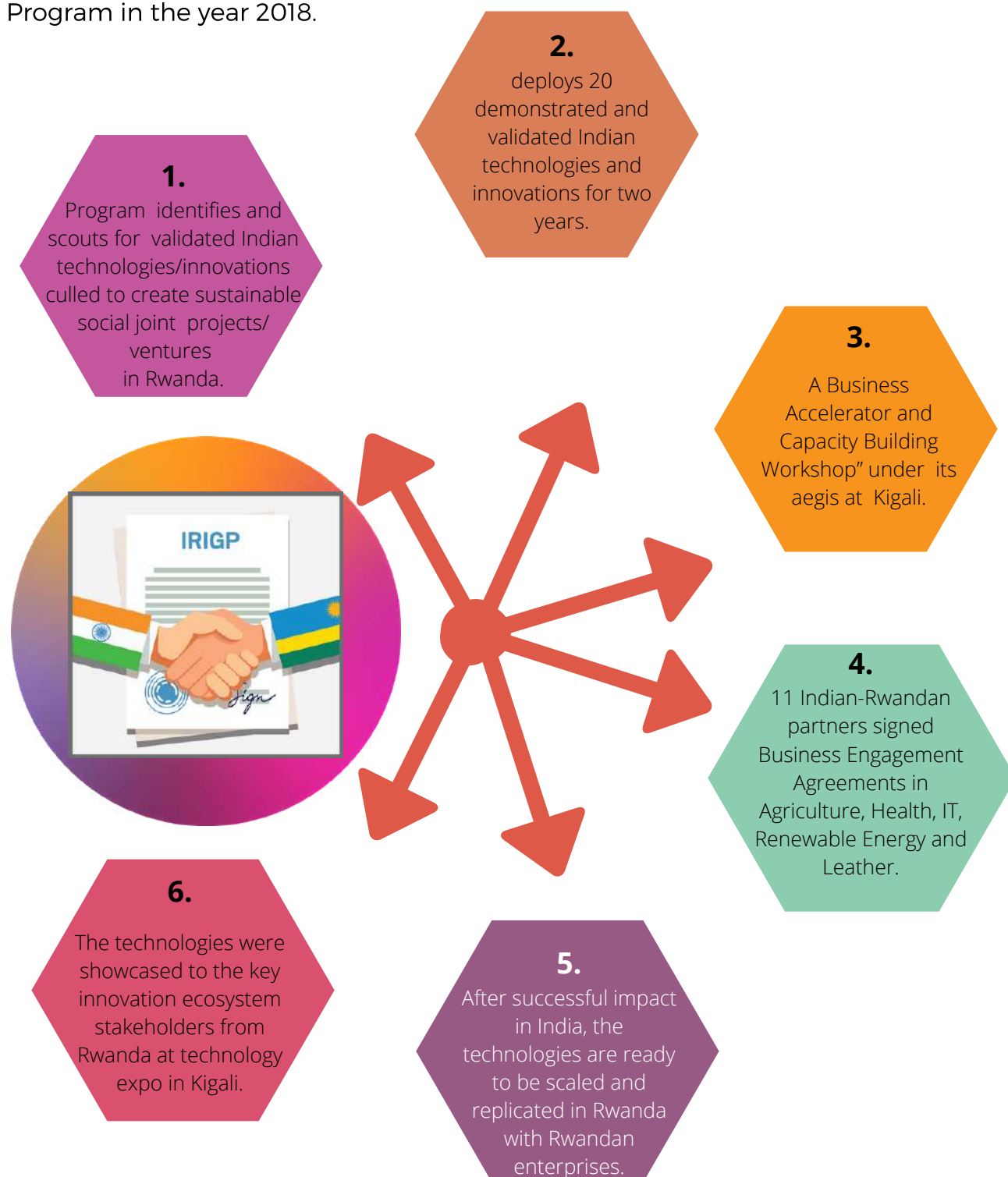
The product was developed in close coordination with Aravind eye hospital in Pondicherry and Prof.Arulmozhivarman. P, Professor-VIT and Dr.R.Venkatesh, Chief Medical Officer of Aravind eye hospital were the technical mentors to Mr.Sandal Kotawala, a graduate of 2018 batch of BTech. Electronics and Instrumentation course from VIT, Vellore.

VITTBI has been providing incubation support and has sanctioned a seed fund of Rs.40 Lakhs for this project.

Alfaleus has won several awards and recognitions in the last one year. Notable among them is the **'Academia -Industry Trtaining (AIT)' award** with a cash prize of Rs.10 Lakhs under a program supported by SINE_IITB, DST and Swissnex.

INDIA RWANDA INNOVATION GROWTH PROGRAM (IRIGP)

Aligning with visionary outreach to African nations – ‘India shares for it cares’, DST for the first time has partnered with FICCI to roll out India Rwanda Innovation Growth Program in the year 2018.



INDO CANADA BILATERAL INNOVATION AND ENTREPRENEURSHIP PROGRAM

It is a market entry / access program aimed at Indian and Canadian growth-stage tech companies interested in exploring opportunities to scale their businesses in the reciprocating bilateral markets.

Unique features

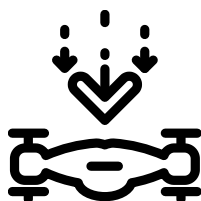
- Mentoring & Special access to industry leaders, Strategic partners
- Peer to peer meeting sessions
- Connection with clients and investors through a dedicated boot camp program, virtual coaching and mentoring and a 2-week outbound market access program.
- This program also opens newer markets for startups on both sides of the border in terms of new clients, talent and capital access.

IMPACT [6TH EDITION BENEFICIARIES]



12

Companies visited
Canada



4

Looking for
soft landing



3

In Process of
setting up abroad



1

started operation

- Trendlyne is in the process of their startup visa program to set up in Toronto.
- Perfect Fit has already made 2 visits to Canada post the program and has set up their company in Calgary and is in the process of applying for PR as well.
- Detect Technologies are in the process of setting up in Houston, USA and will look to incorporate in Calgary within 2 years.
- SIBIA Analytics is currently in the process of setting up in Singapore and are looking to set up in Canada by next year.
- Oizom to start POC's in Canadian airports - Toronto and Montreal. They are also in talks with working with Sidewalk Labs, whom they met in Toronto.
- Wobot Intelligence are looking for potential opportunities of partnering with Envysion as they operate in the same space as them. Was connected to them by Virginia, who is the EIR at VentureLabs in Vancouver.
- Pingal Technologies are in talks with ScotiaBank and RBC of doing POCs, whom they met during the 2-week program.





FRONT - V

**SPRINKLED EFFORTS TO SUPPORT
INNOVATION**

SPRINKLED EFFORTS TO SUPPORT INNOVATION



Seminars & Conferences



Networking events



Other technical & entrepreneurial events in Universities
(such as Techkriti, IIT Kanpur; Eureka, IIT Bombay)



ISBA conferences

EUREKA

- Supporting since 2002-03.
- It is an international business plan competition organized by the E-Cell, IIT Bombay, provides a platform for potential ideas and early stage start-ups to evaluate their plan in the risk free environment of a competition.

TECHKRITI

- It is the Annual Technical and Entrepreneurship Festival of IIT Kanpur with over 20000 participations and over 1000 participants from abroad.
- Event is designed to encourage students and researchers in the student community to act on their talent, ideas and energy to produce tomorrow's leading firms, business start-up services.

TIECON

- Supporting since nine years
- It is a global not for profit organisation focused on promotion and fostering entrepreneurship.
- it has continuously taken the lead and hopes to build on its strength to create an increasingly positive ecosystem for the entrepreneurs and investors.

WOMEN ENTREPRENEURSHIP AND EMPOWERMENT (WEE) MENTORSHIP PROGRAM:

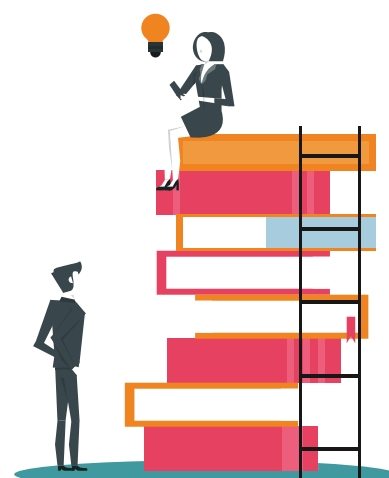


An exclusive, free of cost Mentorship Program of 4-6 months to empower and encourage women entrepreneurs.

Training program includes

- Idea Identification
- Understanding Business Ecosystem
- Scaling the idea
- Understanding value proposition
- Strategic women - women networking
- Technology enablement

Finally starting the business.



IMPACT

- Initiated in 2016
- Completed 4 successful edition

First 2 Edition

Total 60 Women trained



2018-19

Two WEE Programs were conducted. 70 Women trained & 10 awarded



2019-20

Conducted at IIT Delhi; Trained a cohort of 40 women



Top 5

Out of the selected cohort gets awarded for ₹ 5L each in every WEE




Partners of India's First Accelerator for Women in Tech



Other partners in the program includes amazon launchpad, GIZ, Google, Nishith Desai Associates, Quebec, She The People TV, SheEO and Vodafone India.

- Program started in 2017, includes **mentorship support, workshops, case studies, peer networking, industry connect and equity free seed fund of Rs.10 Lakh to each top 3 applicant for both tracks.**

			
Peer Community	Industry Connect	Mentorship	Funding Access
A platform to interact with like minded peers and build your network with fellow entrepreneurs.	Interact one to one with all major corporate CIOs/ CXOs to explore business development opportunities.	Workshops, Sessions, Case Studies and One on One Mentoring by subject matter experts	Seed funds, investor connects, access to other value added resources & professional services to help our portfolio scale up fast.

- This is a **six week long program** in which support is provided to total **30 women each year** under 'technology for businesses' and 'technology for social impact tracks' and concludes through a **demo day**.

IMPACT

				
1107	79	250+	72 Crore	2.5+ Crore
Applications Received	Startups in the Portfolio	Mentors	Funding Raised by the portfolio	Takeaways worth disbursed

IMPACT STORIES

BeePositive++ (WEE)



A socially sustainable start-up that is working on promoting beekeeping, BeePositive++, hopes to contribute towards achieving the government's target of doubling farmers' incomes by 2022. They are creating a country-wide network of Beekeeping Cooperatives on the lines of AMUL. Having developed a CASHLESS model, farmers will be enabled to own and run small Bee-keeping Businesses without spending a rupee! Special focus is given to training beekeepers to scientifically harvest beehive products, besides honey, which have a huge demand globally.

They have already obtained an order from the largest seller of honey in the country and a well-known restaurant chain is using their products. They plan to develop an app which will help in running the logistics of the cooperative, enable beekeepers to connect with their experts for resolving issues related to bee health and smoothen the process of payments and order tracking.

They have been covered in press releases including- Times of India, Economic Times, Amar Ujala, The Tribune, CNBC-Young Turks and NDTV.

GUVI GEEK NETWORK PVT. LTD. (empoWer)



- Guvi is focused on sharing technical learnings in vernacular languages.
- Company provides an online platform for providing different Courses in Vernacular languages for IT based skills and providing Mentorship services for knowledge/job seekers.
- The start-up has till date created more than 1.5 lakh professional software coders (Half of them are women).
- Reached 100,000 users in May, 2018 raising ₹ 15 Crore in 2019.
- One of the eleven women-led start-ups that made it to google's launchpad build.
- Target to achieve 1 Million user by 2020.
- Get ₹ 1 Crore funded from Gray Matters Capital's edLABS.
- Supported by over 60 IT Product Companies &
- 150 industry mentors.
- IITMS RTBI incubated company; ₹5 Lakh debt funded in 2016 & CIIE seed funded in 2019

IMPACT STORIES



REVY Environmental Solutions
Committed for a Greener Earth!

Solutions for the complete process of waste management and has proven competency in transforming waste into re-usable resources. Waste treatment and bio-methane production through Anaerobic Digestion (AD) process is their core area of expertise

The entrepreneur has won multiple awards, including

- Iconic Women Creating A Better World Award during Annual International Women Economic Forum in 2018.
- India Israel Innovation Bridge Water Challenge winner
- Smart fifty- Fifty Solutions to Transform India
- Swach Bharat Grand Program Winner
- 'empower' Beneficiary

Raised equity-free seed fund of \$10,000 from POWERED accelerator (January, 2019)

REMARKS -

CAPACITY BUILDING & TRAINING PROGRAMS

The training programs being well distributed and achieving their objective with more than 20% participants going ahead in establishing start-up's. Majority of these ventures falls in the domain of livelihood entrepreneurship.*

These programs are very limited given the size of the country and following recommendations are proposed to further increase the quality of the offerings & penetration by leveraging technology:

- Create and Develop a digital open source platform, which can dynamically capture, share and disseminate through a WIKI architecture – learning resources and deliver online Self-Paced and/or Live training and capacity building programs by all associated institutions
- The above may be augmented by integrating existing learning platforms offering Massive Open Online Courses (MOOCs), Startup India, 91 spring board, venture centre, Pune, etc.
- EAC's should have more wider awareness and large scale sensitisation through inspirational videos (1-3 Min) to be propagated through social media and instant messenger tools.
- This could be augmented by workshops and competitions.
- All effective open source of learning, WIKI architecture –may be extensively used to create a platform for shared learning resources by all institutions
- Participants to be informed about the various Government programs on Innovation & entrepreneurship for education and entrepreneurship leveraging techniques.
- Certification should be part of evaluation criteria for both entrepreneurs and faculty who have completed modules/courses
- Modules and courses on the platform should be provided academic credit. Innovation Council of MHRD may be engaged in this regard

A representative sample of 4114 entrepreneurial units from 77 institutions has been taken to further analyse the current status of these units started by training program beneficiaries by mapping them to the venture intelligence database. For our interest, the database includes none of these ventures. On further analysis, we found that all of them are micro units & have little or no growth possibilities even after a decade of operations have more or less remained stagnant.

REMARKS

INNOVATION SCOUTING & SUPPORT PROGRAMS

- The programs in this front are having significant impact as the program beneficiaries have comparatively higher revenues, more employment generations & raised more additional funding than non-beneficiaries*.
- Some additional recommendations to increase the horizon of the programs are
 - Indian industry should be actively engaged in innovation scouting & support programs. (active investments, paid pilots testing & validation; & funding wherever possible)
 - Growth of the graduates of these programs should be tracked & they should be invited as speakers in the appropriate forums and their stories should be published through social media as the brand ambassadors.
 - The winners should be encouraged to engage proactively with incubators & take the benefits of appropriate NIDHI programs as per their startup journey requirement.
 - Local, National & Global market access for winners should be an integral component for all innovation support programs.

SEED SUPPORT

- There should be dedicated team to manage the SSS program in each implementing TBI
- SSS beneficiaries should be tracked actively by respective incubators on regular basis.
- The seed support from DST should be leveraged proactively through external investments within first two years since the seed fund disbursement
- In the local level selecting committee, active investors and active mentors should be included with no conflict of interest.
- Efforts to bring more robustness in the seed support implementation by periodically tracking to help them raising follow on funding

REMARKS -

UNIVERSITY ECOSYSTEM: STRENGTHENING INNOVATION & ECOSYSTEM

- All higher education institutions (HEIs) should integrate focused initiatives to support innovation, entrepreneurship & incubation on campuses in line with ARIIA ranking & NEP 2020 of MHRD.
- DST should put more emphasis in promoting incubators which are industry led & domain focused (in PPP mode).
- Similarly Accelerator program should focus on scaling of start-up as post incubation activity & ideally be supported in PPP mode.
- More CSR funds should be infused.
- Hybrid model of Incubation (physical & virtual) be tried out to ensure more inclusiveness and enhance the reach
- New incubators should also focus on being more aligned towards *Atmanirbhar Bharat Abhiyan* with start-up products made in India, made in India and made for the world.

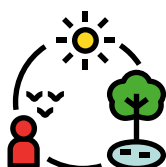
CONCLUDING REMARKS



Given the skills, cultural and behavioural traits among Indians (Opportunity recognition, Skill perception, Risk acceptance, Career status) and Institutional availability (Domestic market, Urbanization, Market agglomeration, Tertiary education etc.), NSTEDB was tasked with developing an entrepreneurial culture and innovative spirit among students. As evident from the report, data and analysis, it has been highly successful in its mission



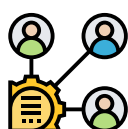
NSTEDB programs has showcased the outcomes & potential of opportunity based entrepreneurship through their variety of the programs.



Indian startup ecosystem is evolving progressively (evident from continuous rise in global innovation index as well as ease of doing business) over last five years through holistic efforts by government including DST to become third largest ecosystem on globe. This necessitates the need to amplify the NIDHI programs on pan India basis to cover the geopolitical area and to make it more inclusive (specifically targeting youth, women & social entrepreneurs).



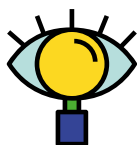
The ecosystem is providing a platform to the aspired youth to leverage their potential to reinvigorate, revitalize and further strengthening the Indigenous ability of the Industries in the given geopolitical landscape.



DST is working with relevant set of stakeholders & is leveraging the collective strengths and supporting in key areas by identifying the pressing needs and addressing the same in an efficient and effective manner.



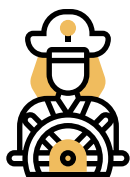
DST strongly emphasizes the **'Industry connect to startup', through 'Mentorship', 'Pilot Testing & Validation', 'Co-development of the Product', 'Go to Market support', 'Internationalization', etc.**



Covid provided enough insights to conclude that the incubator and start-ups can rise to the challenging occasion and play a pivotal role in the AtmaNirbhar Bharat (more specifically by boosting local manufacturing, healthcare, agri-tech, medtech and advanced technologies) not only in metro cities but also in tier-II and tier-III cities.



The testing times such as recent pandemic COVID-19 has given start-ups a confidence as they had contributed enough to serve the immediate needs of the nation given the manoeuvrability of these new ventures. For e.g. Start-ups in solar panel manufacturing turned their knowledge in this domain to successfully manufacturing low cost ventilators in the shortest possible time thus winning many accolades and the nation's gratitude in this times of unprecedented crisis, other start-ups have also been able to leverage their strengths to the sudden demands arising out of pandemic like moving from producing low cost sanitary napkins to low cost face masks i.e. they quickly adapted and used their existent capacity towards immediate need and helping the nation to navigate this unforeseen disruption and in the process addressed a critical need.



The continuation of NSTEDB's programs in this direction leveraging its strengths built over time is critical to position India on the global Economic map with economic, social and technology disruptions in both domestic and global marketplace, this is also evident given its accelerated pace of interventions in the last 5 years.



The assessment concludes that the BOARD's role has been critical in nurturing and sustaining the nation's entrepreneurial ecosystem. The constant innovative approach and effort adopted by the DST team and other stakeholders in successfully navigating the pitfalls in this journey are noteworthy and deserves high appreciation. We conclude from Insights and learnings derived from last five years analysis, coupled with pandemic's learnings that NSTEDB has a greater potential to contribute and deliver to fulfill the national aspirations under startup India, *Atmanirbhar* India with more empowered innovators, start-ups and incubators. With a clear sense of purpose and leveraging the power of collaboration NSTEDB can take Indian startup ecosystem to greater heights.

ABBREVIATIONS

AI	Artificial Intelligence
ASSOCHAM	The Associated Chambers of Commerce of India
B2B	Business to Business
B2C	Business to Consumer
BFSI	Banking, Financial Services and Insurance
CDSCO	Central Drugs Standard Control Organisation
CIIE	Centre for Innovation Incubation and Entrepreneurship, IIM Ahmedabad
CoE	Centre of Excellence
CPG	Consumer Packaged Goods (Companies)
CSR	Corporate Social Responsibility
DPIIT	Department for Promotion of Industry and Internal Trade
DST	Department of Science and Technology's (DST)
EAC	Entrepreneurship Awareness Camp
EDC	Entrepreneurship Development Cells
EDP	Entrepreneurship Development Program
EIR	Entrepreneur in residence
EV	Entrepreneurial Venture
FDP	Faculty Development Program
FICCI	The Federation of Indian Chambers of Commerce and Industry
GAIL	Gas Authority of India Ltd.
HPCL	Hindustan Petroleum Corporation Limited
ICT	Information and Communications Technology
IIGP	India Innovation Growth Programme
INVENT	Innovative Ventures and Technologies (for Development) program
IoT	Internet of Things
IP	Intellectual Property
IPR	Intellectual & Property Rights
ISBA	Indian STEP & Business Incubator Association
ISO	International Organization for Standardization
IVR	Interactive Voice Response
MCIIIE	Malaviya Centre for Innovation, Incubation and Entrepreneurship, IIT-BHU
MHRD	Ministry of Human Resource Development
MNC	Multi National Corporation
MOOC	Massive Open Online Courses
MSO	Multiple-System Operator
MVP	Minimum Viable Product
NIDHI	National Initiative For Developing And Harnessing Innovations
NLP	Natural Language Processing (Branch of AI)
NSDP	Net State Domestic Product
NSTEDB	National Science and Technology Entrepreneurship Development Board
ONGC	Oil and Natural Gas Corporation
PC	PRAYAS Centre
PRAYAS	PRomoting and Accelerating Young and ASpiring technology entrepreneurs
PSU	Public Sector Undertaking
RIICO	Rajasthan State Industrial Development and Investment Corporation
S & T	Science and Technology
SaaS	Software-as-a-Service
SIIC	SIDBI Incubation & Innovation Centre, IIT Kanpur
SINE	Society for Innovation and Entrepreneurship, IIT Bombay
SME	Small & Medium Enterprises
SPV	Special Purpose Vehicle
SSS	Seed Support System
STEP	Science and Technology entrepreneurship Parks
TBI	Technology Business Incubator
TDB	Technology Development Board
TEDP	Technology Entrepreneurship Development Program
TIDE	Technology Incubation and Development of Entrepreneurs
TIDES	Technology Innovation & Development of Entrepreneurship Support, IIT Roorkee
TiE	The Indus Entrepreneur
UNIDO	United Nations Industrial Development Organization
VC	Venture Capitalist
VR	Virtual Reality
WEDP	Women Entrepreneurship Development Program

ANNEXURE: A

List of the supported TBIs

<https://bit.ly/39szHMr>

List of Seed Fund Beneficiaries

<https://bit.ly/2WUBCEt>

List of EIR Beneficiaries

<https://bit.ly/3jHqynF>

List of PRAYAS Beneficiaries

<https://bit.ly/2BtVPJA>

ANNEXURE:B

DESCRIPTION OF METRICS	METRIC	NO. OF RESPONDENT TBI
Total number of graduated companies in duration (2014 - 2019)	2889	124
Presently incubated companies	3681	124
Total turn-over (₹ Crores) of both the graduated and incubated companies (for the duration (2014-2019)	27262	104
The total valuation (₹ Crores) of both the graduated and incubated companies in the duration (2014-2019)	35208	100
Total direct employment generated by both the graduated and incubated companies (2014-2019)	65864	118
Number of Patents developed and filed by incubatees till date	1992	114
Number of Patents acquired from host institute by incubatees till date	148	107
Total amount (since inception of incubator) raised by incubatee companies through external funding during their incubation period	5813	111
No. of companies that raised funding (other than DST Seed fund) during their incubation period till date	1793	118
Total amount of CSR funding received by the incubatees till date *	68	108
Total no. of the incubated companies acquired by third parties till date	113	111
Cumulative value of all such acquisitions	850	97

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