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Edition 2016

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Plot No 7 to 10, Sector 126, Noida, Uttar Pradesh 201301, India

Phone: +91-120-4990111

E-mail: research@nasscom.in

Published by NASSCOM

Designed & Produced by

MKM CREATIVE

Email: mkmcreative@gmail.com

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FOREWORD



R Chandrashekhar Chairman, NASSCOM



Pari Natarajan CEO. Zinnov

India is maturing as a start-up hub with the number of new start-ups expected to grow by 8-10%. Investors and start-up founders are getting cautious and focusing on profitability, thus optimizing spends. Since 2011, there has been a noteworthy growth in the number of technology start-ups, with India expected to cross 4,750 by the end of 2016. Given this momentum, India may host over 10,500 start-ups by 2020, employing over 210,000 people.

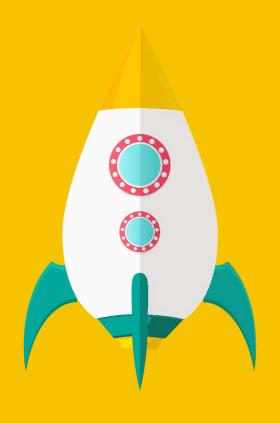
Multiple indicators point to the fact that this ecosystem continues to remain attractive. The total funding is estimated to reach nearly USD 4 Bn in 2016. Initiatives taken by the Indian government, growth in academic incubators, rise in the number of start-ups funded in 2016, ongoing interest from investors, and growing digital consumer base will continue to drive the start-up landscape.

Several start-ups are leveraging emerging technologies such as Cloud, Big Data & Analytics, Internet of Things, and Machine Learning to establish some of the best in class technology start-ups. This maturing ecosystem is contributing to the Indian economy in multiple ways. In addition to employing 100,000 people and enhancing the lifestyle of citizens, start-ups are creating innovative technology solutions that address key problems that India as a country face-around education, healthcare, financial inclusion, energy/ utilities etc.

The third edition of NASSCOM-Zinnov report titled "Indian Start-up Ecosystem Maturing – 2016" is a compilation of facts, trends, and best practices on the Indian tech start-up ecosystem. This report identifies the current scenario and emerging trends that define the ecosystem, factors that are impacting its growth, and highlights the role played by investors, incubators/ accelerators, and the government.

We hope this report is useful to you and we welcome your feedback and comments at research@nasscom.in

Mr. Pari Natarajan CEO, Zinnov Mr. R Chandrashekhar Chairman, NASSCOM



Acknowledgement

This report has been co-developed by NASSCOM and ZINNOV MANAGEMENT CONSULTING through a comprehensive four month study to understand the Technology Product & Digital Start-up Landscape in India.

The preparation of this report has been facilitated by a number of organizations and people who have extended great help to the research team. We wish to sincerely thank all of them for their valuable contributions without which this report would not have been possible. Mentioned below are the names of the research team members that developed this report.

NASSCOM

- Sangeeta Gupta
- Achyuta Ghosh
- Manishree Bhattacharya

ZINNOV MANAGEMENT CONSULTING

- Praveen Bhadada
- Rajat Kohli
- Mohit Gupta
- Sweta Shanker
- Rahul Katyal

Table of Content

Objective



This report analyzes

- Current scenario and emerging trends that define the Indian startup ecosystem
- Gauge India's position as a global start-up hub that is becoming attractive for investors, start-ups, & corporates
- Role played by Investors, Incubators/ Accelerators, Government of India



What is a start-up as per our definition?



Start-ups: Intellectual Property (IP) backed technology product/ platform/ eCommerce/ aggregators using digital platform for customer engagement only considered











India Start-up Landscape - 2016

Quick Facts



Total Tech Start-ups

4,750+

Up by 10-12% YoY

3rd Largest Start-up Ecosystem



New Tech Start-ups²

1400+

Up by 8-10% YoY

Linear Growth in 2016



Major Start-up Hubs²

Bengaluru, Delhi-NCR, Mumbai account for ~70% of start-ups

Up by 3-5 PP# YoY

Top 3 Metropolitan Cities Continue to Lead



Customer Segments²

B2B: 36-40% B2C: 60-64%

B2B up by 2-4 PP# from last year

B2B Start-ups Gaining Prominence



Funding²

USD 3.8-4 Bn

Down by 20% to 30% YoY

~650 Start-ups Funded

Up by ~8% YoY

Cautious but Healthy Investment Scenario



Vertical Focus²

eCommerce start-ups ~USD 1.8+ Bn funding

Health-Tech, Fin-Tech, Edu-Tech
USD 400 Mn+ funding

Investors Looking Beyond eCommerce





750+

Cloud, Big Data & Analytics, IOT, ML/ Al Start-ups

Major Focus on Cloud and Analytics



Incubators/ Accelerators³

140+

Up by 40% YoY

Rise of Incubators/ Accelerators





80+

Up by ~23% YoY

Start-ups acquiring Start-ups for Inorganic Growth





18-22%

(overall)

B2B: 12-16% B2C: 20-25%

B2B Start-ups More Likely to Survive

*Established, registered product technology start-ups only

Notes: 1. Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016 3 Extrapolated based on data recorded till Aug 2016, 4. Mortality rate spread across 5 years; Calculated based on tech start-ups founded from 2011 to 2015; Source: Zinnov Start-up Database; PP – Percentage Points

Executive Summary

Unstoppable Indian Entrepreneurs

In the midst of several debates and contentions over the bursting of start-up bubble, the Indian entrepreneurial spirit is ever rising, with the landscape evolving in a way like never before. Most people will say the environment is stochastic – the question is which industry is not? With ups and downs in funding, revaluations and de-valuations, and emergence of new sectors, India is at a very crucial juncture, chalking out its own growth trajectory. **As thought leaders highlight,**





India is paving its own growth path - learning from its successes and failures. The global best practices and success KPIs are necessary, but important it is to adjust as per Indian landscape. We have unique and ever-changing market dynamics. Less than 10% of India lives in tier 1 cities. In fact, India has such huge discrepancies in income levels, it is fair to state that India is not 1 single market – but many markets (customer segments) put together. On the brighter side, we have one of the largest manpower; the government is growing strong on digital initiatives; our biometric system is the world's largest, and so on, which is prompting the Indian Tech Start-ups to foray in its own unique ways!

It will be fair to state that the ecosystem is maturing, and that the year of 2016, and the next 2-3 years henceforth, will be the years of rationalization, sustainability, and the unique evolution of the sector. How the industry is shaping-up, and where it is leading to – are some of the questions that we have been able to address in our 4-month NASSCOM-Zinnov rigorous study. The findings are exciting like never before.

Landscape Key Highlights (2016)

- Total start-up base to cross 4,750+, up by 10-12% YoY
- 3 main geographical clusters: the leaders (NCR, Bengaluru, and Mumbai), the emergents (Chennai, Pune, and Hyderabad), the aspirants (Kolkata, Kochi, Jaipur, Chandigarh, Indore etc.)
- Leaders harbour ~70% of start-ups; emergents ~20%; and aspirants ~8%

The Start-up Landscape

Standing at third globally, the Indian start-up base is expected to witness a YoY growth of IO-I2%. But India is slightly behind on other indices such as the corporate tax rate (post 3 years), time taken to set up a new business, and the number of incubators/accelerators. However, important would be to note that the government is going aggressive in its start-up agenda (>I3 states/ UTs already have established start-up policies), and the ecosystem is witnessing a 40% YoY growth in the number of incubators/accelerators. This implies that in the next couple of years, the focus would be to provide start-ups with adequate resources and knowhow, to establish profitable, scalable and sustainable businesses.



Based on the maturity of the ecosystem, India has 3 main geographical clusters: the leaders (Delhi-NCR, Bengaluru, and Mumbai), the emergents (Chennai, Pune, and Hyderabad), and the aspirants (Kolkata, Kochi, Jaipur, Chandigarh, Indore etc.). Clearly, the leaders harbor ~70% of the total start-ups. Bengaluru leads both in the number of start-ups (1300+) and overall funding (~35% of total funding). The emergents (with 20% of start-ups) have a fair distribution of funding among themselves, yet are flourishing in their own unique ways. The aspiring cities, though small, are noteworthy, because a) B2B start-up numbers in these cities surpass the B2C numbers (indicating more business product start-ups); and b) they are able to thrive despite the not-so-supportive environment (sluggish internet, lack of incubators etc.). The tier 2 and tier 3 start-ups are relentless, trying to innovate in their own limited capacity.

Funding Key Highlights (2016)

- Total Funding USD 3.8 4.0 Bn, down by 20-30% YoY
- Number of funded start-ups 650, up by 8% YoY change in VC's fund allocation strategy – more number of investments, diverse portfolio, lower ticket sizes
- B2B generates I/4th of the total funding its growth outpacing that of B2C
- Key VCs/Corporates raised more than USD 2 Bn funds for future disbursement
- Positive way forward for seed and early stage start-ups, occupying 85% of companies funded
- Successful exits More than 70% of the acquirers are start-ups (including unicorns) themselves
- Mortality Rate: 18-22%, spread across 5 years (only for established tech product start-ups incorporated 2011 to 2015)

Funding Trends



Overall funding has been a little sluggish. But that is just an iota of the entire story. Important is the change in the strategy of fund allocation for better ROI and risk diversification. Focus on B2B companies, more number of small ticket-size investments, mixed portfolio of companies – are the current key characteristics. So, while the total funding is expected to witness a 20-30% decline this year, the number of start-ups funded and the number of start-up deals are expected to rise by 6-8%. Angel investments are on the rise, with a 20% increase in the number of active investors this year.

B2B funding growth outpaces B2C's, generating I/4th of the total funding. This segment has witnessed growth both in the funding amount, as well as the number of companies receiving funds - indicative that the ecosystem is expected to churn out several business-ready Hi-Tech products (Enterprise, Cloud, IoT, ML/AI, Robotics) in the next 2-3 years. Acquisition is also rampant this year, mostly directed towards increasing market share and building technological capabilities.

Growth Sectors

While eCommerce and Aggregators have become mature;
Fintech, Edutech and Healthtech are emerging verticals.

Ecommerce leads, with 180+ new additions this year. But the focus of Indian thought leaders is Fintech - enabling India to transact easily, and become financially agile – a sector that can't be ignored when incumbents like Goldman Sachs looks for investments. Edutech is one of the fastest growing verticals, with 3X YoY growth in funding. Focus is shifting towards providing quality education, with greater reach to tier 2, 3 cities.

The healthtech start-ups, on the other hand, are relentless, with 100+ start-ups founded just in 2016 (more than edutech and fintech). Cost-effective solutions, preventive health, and home healthcare to drive the growth of this vertical, but is in need for solid government support and systematic data capture, for a successful foray.

Enabling Ecosystem

The number of incubators and accelerators have also witnessed a 40% YoY growth in 2016, with 35 new additions under the 'Start-up India Stand-up India' initiative. Tier 2/tier 3 cities are gaining traction, with 66% new incubators established. The incubators and accelerators are currently technology-driven, and do not seem to limit their focus to specific industries. While opportunities are many, some of the key hurdles faced are mismatch in expectations, limited time period for incubation, and the tedious/unstructured process of evaluating applications – something that the ecosystem is trying to mitigate. It will also be fair to say that the Central Government is proactive, with aggressive growth plans. Providing a funding corpus of USD 1.5 Bn, tax exemptions, and enabling environment, the government is providing significant fillip to the start-up ecosystem.

Last but not the least, talent environment is dynamic at the moment. The total talent base has risen by 18% YoY. We see emergence of student start-ups, experienced professionals starting up B2B businesses, marginal rise in women entrepreneurs, and overall changes in hiring trends.



Outlook

Overall, we are maturing and this year is the year of rationalization - defined by change in focus, realignment of funds, realignment of strategy, and development of clear road-maps, to establish a successful and sustainable start-up ecosystem. Future will be about pragmatic investments, profitability of businesses, rise of India models, and rise of tier 2/tier 3 start-ups embarking the journey to solve Indiaspecific problems.

The report goes into the length and breadth of every aspect mentioned above, highlighting key take-aways, and best practices.

Section I: Indian Start-up Landscape

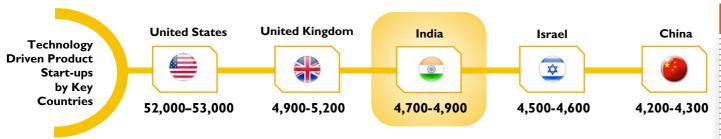
Key highlights

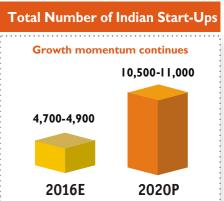
- India, the 3rd largest start-up ecosystem globally
- 4750+ total tech start-ups in 2016
- ~1400 new tech start-ups incorporated this year
- ~I 00K talent employed in start-ups
- Bengaluru, NCR, Mumbai account for ~70% of the total start-ups
- USD 3.8-4.0 Bn funding in 2016



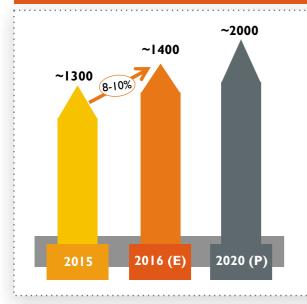
Indian Tech Start-up Ecosystem – An Overview

Indian start-up base, standing 3rd globally, expected to grow by 2.2X till 2020



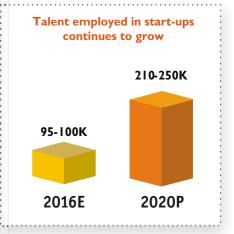


Number of Indian Start-ups Founded - 2016



- Overall tech start-up base in India expected to cross
 4750, having grown at 10-12% YoY
- I 400 new start-ups expected in 2016, up by 8-10% from last year. Indian start-up ecosystem is becoming prudent with both investors and start-up founders focusing on profitability and optimizing the overall spend
- Fast maturing ecosystem, government initiatives, rise in funded start-ups & academic incubators, and growing digital consumer base, will continue to drive the start-up landscape in India

Total Talent in Indian Start-ups



Note: P = Projected E = Estimated; I. Presented numbers for 2016 based on data from Jan-July 2016, 2. Global growth rate based on data for US, UK, India, Israel, and China. Source: Zinnov Research & Analysis, Yourstory, CrunchBase, Angellist, Deal curry

Factors Driving the Start-up Ecosystem

2016

The Consorted effort of Industry, Academia, Government & Media to drive the ecosystem

DRIVERS FUELING THE GROWTH OF START-UPS IN INDIA



Ease of Doing
Business

2014



Central Govt. Action Plan

Govt. of India launched Action Plan for encouraging start-ups by giving them benefits such as self certification, patent filing fee rebate, tax exemption

State Govt./ UT Start-up Policies

13+ States/UTs have formulated state level start-up policies with key features such as incubation of start-ups, funding support, mentoring support



Entrepreneurship Focussed Education System





Entrepreneurship Courses

College curriculum includes courses like introduction to entrepreneurship, product development

Academic Incubators

30+ new academic incubators, both for technical & management institutes, have started to venture student start-ups

Placement Team Support

Institutes like IITs/IIMs giving an option to student entreprenuers to sit for a deferred placement, if their start-up venture fails



Industry Facilitation





Corporate Accelerators

Companies like Microsoft, Target provide accelerator program for start-ups that involves mentoring, networking opportunities

Intrapreneurship Culture

Corporates like Google providing opportunity to its employees to pursue their ventures

Funding Support

USD 3.8-4.0 Bn funding by various investors
6 to 10% more start-ups got funding







Media Buzz, Awards

Success stories of start-ups (YourStory), awards (NASSCOM ET Start-up awards) & start-up fests

University Events



Start-up founder talks, mentoring sessions, thought leadership

Notes: Deals worth USD 2.01 Bn already closed by end of Q2-2016 Source: Zinnov Research & Analysis, Yourstory, CrunchBase, Angellist, Deal curry

Legend: Low Focus



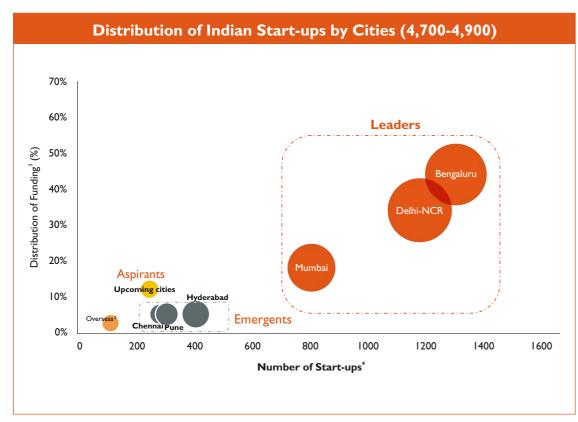






Start-up Geographical Clusters

Presence of three clusters – Leaders, Emergents, and Aspirants, with Leaders harboring ~70% of start-ups





Harbor ~70% of the total start-ups

- Financial Institutions (RBI), Stock Exchange (NSE, BSE)
- MNC/start-up headquarters
- Home to Angel Investors/VCs
- Top educational institutes like IIT, IIM
- Better connectivity internet, rail, air



Harbor ~20% of the total start-ups

- Home to many IT firms, engineering, medical & management institutes like IIT-H, ISB, AFMC
- Leveraging the advantage of available talent
- · Emerging as next major hub
- Presence of state-level initiatives/policies
- New incubators coming up



Harbor 8% of the total start-ups

Although limited corporate/industry support, upcoming cities like Kochi, Kolkata, Jaipur etc. the advantage of low operational cost, cheaper workforce, along with the support from Central Govt., are aspiring towards developing their startup ecosystem



Number of Start-up funding deals³

Notes

1. Upcoming cities (Kochi, Kolkata, Jaipur, Chandigarh, Indore, Bhopal, & Kanpur, etc.), 2. Overseas start-ups ((USA, Canada, Singapore, Germany, etc.) include the ones founded by Indians and catering to the India market, 3. Presented data is based on funding received by start-ups in till Q2- 2016, 4. Estimated based on a sample of 1750+ companies formed from 2011-2016

Sources: Zinnov Research & Analysis, Yourstory, CrunchBase, Angellist, Deal curry

Start-up Geographical Clusters – The Leaders

While Delhi-NCR continues to be the eCommerce hub, Bengaluru – the Silicon Valley of India, and Mumbai – the emerging Fin-tech hub



Silicon Valley of India

Biggest investment destination in 2016, accounts for more than 40% of overall funding

eCommerce Hub

 More than 30% of total eCommerce start-ups are based in NCR

Emerging Fin-tech

 More than 30% Fin-tech funding raised by Mumbai based start-ups





B2B B2C

Bengaluru

1300+

HealthifyMe

@ Docs App

35-40% 60-70% **Delhi-NCR**

UrbanClap 1175+

innerChef

25-35% 65-75% Mumbai





30-40%

60-70%



USD 1,250-1,350 Mn

USD 950 -1,050 Mn

USD 650-750 Mn

Funding Amount² in 2016



Incubators/Accelerators

20-30



15-20



10-15







Technology Focus Areas

- **Enterprise SaaS Solutions**
- Big Data & Analytics
- Electronic Health Record (EHR)





- **Enterprise SaaS Solutions**
 - Supply Chain (Logistics)

Big Data & Analytics



- Big Data & Analytics
- Machine Learning/ Artificial Intelligence



Notes: 1 Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Aug 2016; Source: YourStory, Trak.in, Zinnov Analysis

Start-up Geographical Clusters – The Emergents

Receiving similar funds, while Hyderabad becomes Cyberabad, Pune - an emerging Health-Tech hub, and Chennai – the B2B storehouse



Infotech advantage - Cyberabad

- Presence of technology MNCs like Microsoft, Google, Facebook
- Largest incubation center T-Hub

Emerging Health-Tech hub

- 4 out of 10 funded start-ups are health-tech
- Several tech companies like Infosys and Syntel have their healthcare vertical headquartered

B2B dominance

• 55-60% start-ups are focusing on B2B with more than 45% product startups among them











Funding Amount² in 2016

USD 200 - 300 Mn

USD 100 - 200 Mn

USD 100 - 200 Mn



Incubators/Accelerators²

10-20



5-10





Pune







Chennai



Technology Focus Areas

- Health-Tech Cloud Solutions(EHR)
- Inventory Management Solution



- **O** DUKKADSHOPS
- Internet of Things (IoT)
- Health-Tech Cloud Solutions



- LiveHealth
- SaaS Solutions
- Big Data Analytics



chargebee

Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Aug 2016; 3. Kolkata is also emerging as new start-up destinations, housing around 30-50 start-ups Source: YourStory, Trak.in, Zinnov Analysis

Start-up Geographical Clusters - The Aspirants

Harboring 8% of the start-ups, upcoming cities showcasing innovation, skills, and evolving as an early stage hub



ALTHOUGH LIMITED SUPPORT, UPCOMING CITIES ARE EVOLVING AS AN EARLY STAGE HUB

- India's first PPP model technology incubator, 'Start-up' Village with capacity of 10,000 start-ups
- 70-80% start-ups are focusing on B2C with more than 50% aggregators among them
- Multiple support programs such as RAIN & partnership driven incubators
- Less rental & operation cost, cheap workforce













B2B

Funding Amount² in 2016

<USD 350 Mn



Incubators/Accelerators²



4-5



3-5





Technology Focus Areas

 Internet of Things, Robotics

50-60%

More than 70% are Hi-Tech



- Fin-tech, Edu-tech solns
- More than 50% are Aggregators



- Cloud based Edu-Tech solutions
- More than 65% are eCommerce



Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Aug 2016 3. Kochi, Kolkata. Jaipur, Indore leading cities based on the overall start-up ecosystem in these cities (# of start-ups, funding deals, incubators/ accelerators, etc.); Source: YourStory, Trak.in, Zinnov Analysis

Section 2: Funding Trends

Key highlights



- ~8% growth in number of funded startups¹ in 2016
- **USD 3.8-4.0 Bn** funding in 2016, down by **20-30% Yo**Y
- 25% share of B2B fundings in 2016, up from 18% last year
- USD 175 Mn funding raised by Hike (highest funding raised in 2016²)



Notes: 1. Estimates based on average deal size and number of deals (extrapolated based on number of deals in first two quarters). Deals worth USD 2.01 Bn already closed by end of Q2-2016., 2. Presented information is based on data available till Aug 2016

Start-up Funding Overview

Amidst subdued funding, a 6-10% YoY growth in the number of start-ups funded

Total Funding in Start-ups

USD 4.9 Bn

USD 3.8 Bn-4 Bn¹







2015

2016 (E)

Investors & Founders cautiou; spending judiciously with focus on profitability

Number of Start-ups Funded²







2016 (E)

Proportion of small ticket sized B2B funding increased as compared to B2C

Number of Funding Deals²





680

2015

650

2016 (E)

Investors keen on funding companies with sustainable unit economics & scalable model

KEY TAKEAWAYS

Number of deals up, whereas ticket size reduced by 20-25%

- Indicative of the risk diversification appetite of investors
- Average ticket size reduced from USD 8 Mn to USD 6 Mn in 2016

More interest around seed investments

- Accel Partners, Reliance Jio, Kalaari Capital, Blume Ventures etc. raised ~USD 2 Bn corpus for deployment in seed and early-stage start-ups in 2016-17
- Investors are trying to mitigate risks by investing smaller amounts in multiple companies

B2B funding growth outpacing that of B2C

- B2B funding growing at 18-22%, whereas B2C witnessing a decline of 25-30%
- Average ticket size for B2B (~USD 4 Mn) remained unchanged; however, B2C (~USD 7 Mn) reduced by ~30%

Fin-Tech and Edu-tech **Gaining Traction**

- 70% of Fin-tech funding in B2B start-ups, highest across all verticals -majorly driven by financial lending & online payment start-ups
- Edu-tech start-ups to raise USD 170 Mn+ funding, up by 3X from 2015

Notes: I. Estimates based on average deal size and number of deals (extrapolated based on number of deals in first two quarters). Deals worth USD 2.01 Bn already closed by end of Q2-2016. 2. Extrapolated based on data recorded till Aug 2016. 3. Based on multiple rounds of funding in start-ups funded in H1-2016

Sources: Trak.in, YourStory, VCCircle, Zinnov Analysis

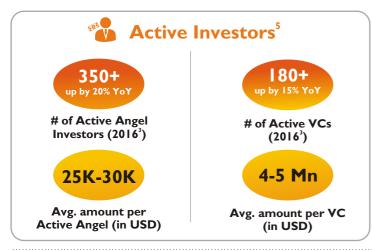
[&]quot;The decrease in funding doesn't mean that the interest has gone down but more of rationalization has set in. Overall, the interest will remain in the next couple of years." - Investor Speak.

Investor Landscape

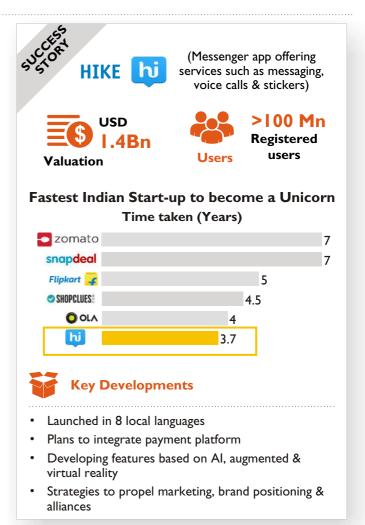
Indian start-ups continue to remain attractive among investors, raising more than USD 2 Bn corpus for future disbursement

Leading Investors in India, 2016

Top VC Firms	Investors	Investments (USD Mn)		Key Verticals
	Tencent	Hike (175)		Media-Tech, Health-Tech
	Sequoia	Byju (125)	Oyo (100)	eCommerce, Edu-Tech
	Tiger Global	Shopclues (100)		eCommerce, Media-Tech
	Abraaj Group	Big Basket (150)	-	eCommerce
	Harmony Partners	Swiggy (50)	-	eCommerce, Aggregators
Top Corporate VCs	Softbank	Oyo (100)	Housing (15)	Real Estate, Media-Tech
	Chan Zuckerberg (Facebook)	Byju (50)		Edu-Tech
	Microsoft Ventures	Helpshift (23)	-	Hi-Tech/ Core Technologies
	Micromax	Transerv (15)	-	Fin-Tech







Notes:1: highest single investments made by leading investor along with a group of investors, 2: Fund raised till September 2016; 3. Presented data is from Jan-Aug 2016; 4. To calculate average investments, single investments worth >USD 100 Mn have not been considered Sources: Deal curry, Yourstory, Trak.in, Zinnov Analysis

Funding by Customer Segment (B2B/ B2C)

(100)

Health-Tech

(110-120)

B2B segment generates 1/4th of the total funding – its growth outpacing that of B2C

Funding Split by Customer Segment (B2C/ B2B)



(175)

eCommerce

(1500-1600)

Top Funded

(USD Mn)

Top 3

Funded

Trends

Verticals

(USD Mn)

B2C

(150)

SHOPCLUES

(100)

Edu-Tech

(150-160)

Rapid shift to niche category

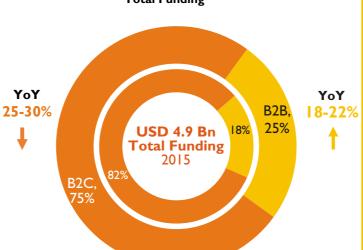
ups focused on personalized solutions, online courses & tutoring

specific verticals

marketplaces with focus around

>40% of total Edu-Tech funded start-





W

B₂B



- eCommerce enablers facilitate eCommerce with end to end service offerings such as reduced delivery time, increased penetration in tier 2/3 cities, innovative payment options etc.
- Fin-Tech funding growth owing to emergence of digital payments & financial lending start-ups



B2B's YoY share increased from $18\% \rightarrow 25\%$

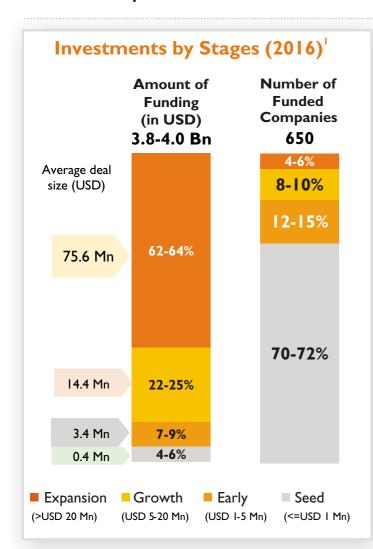
B2B requires less capital investments, low customer acquisition cost & product differentiation

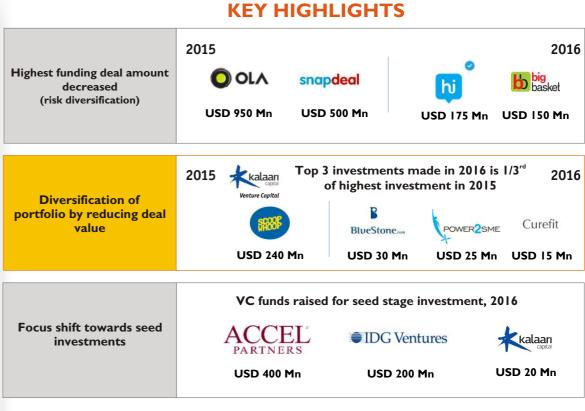
Notes: Extrapolated on the basis of funds raised by end of Q2-2016 Sources: Trak.in, DealCurry, VCCircle, Yourstory, Zinnov Analysis

start-ups

Analysis by Funding Stages

Positive way forward for seed and early stage start-ups, occupying 85% of companies funded





Ups and downs happen in every industry. India opportunity has not really shrunk. VCs are just readjusting their strategy. At the same time, angel and seed funding are going up big time. Focus on technology, stronger unit economics, significant addressable markets, and long-term business models – are what investors are seeking

- Investor Speak

Notes: Extrapolated on the basis of funds raised by end of Q2-2016 Sources: Trak.in, DealCurry, VCCircle, Yourstory, Zinnov Analysis

Alternate Funding Scenarios

Due to subdued funding, bootstrapping and crowdfunding gaining attractiveness among start-ups



Bootstrapping



Crowdfunding



Peer to Peer **Business Lending**

Operate on a limited budget incurring optimal expenses

- Avoiding unnecessary expenses Avoid office rent in beginning; utilize home space for meetings & discussions
- Staying lean Try to do coding, product development, sales & marketing on your own
- Look for free & low cost resources Take support from low cost freelancers Find free marketing sources and techniques Avail discounts for start-ups, free hosting services

Raise small amount of money from a large number of investors

- Avoid accumulating debt or give up equity
- Free PR/ Marketing Tool Introduce start-up's overall mission and vision to the market Easy way to reach various channels incl. media
- **Proof of concept** Get market validation at an early stage
- No hidden cost Minimal fee charged to raise funds. Easier than getting a bank loan or raising funds from VCs

Verified borrowers can seek unsecured personal loans with competitive interest rates

- Quick and easy application process with competitive interest rates
- · Entire funding process is digitized and transparent Captures and processes over 200 parameters about borrowers digitally
- Low late payment fees and no prepayment fees

Illustrative Examples



- Indibni, 2013, Jaipur
- Design company
- Processed orders in 50+
- 2015, Bengaluru
- Auto repair & maintenance
- Revenue 5 lakh per month



Illustrative Examples

SECTOR QUBE

- 2011. Kerala and US Raised over USD 125K through crowdfunding
- IOT product, MAID
- 2015, Pune
- Online Visitor Registration App
- Raised money through crowdfunding

Digital

Gorkha

A lending platform

2013, NCR

Example

- Nominal fee charges
- Over 6K lenders and 26K want to be borrowers

Faircent enables P2P lending to both individuals and businesses

Sources: YourStory, Zinnov Analysis

Mergers & Acquisitions (M&A) Landscape

Indian unicorns and start-ups on an acquisition spree – ~60 M&As already executed successfully in 2016





M&A TRENDS









Increase Market Share "We definitely expect to see more consolidation this year driven by a few factors — acquisitions that are complementary and synergistic; consolidation to take out competition; consolidation of cap tables; and acqui-hires."

- Investor Speak

Source: Deal Curry, News Articles; Notes: 1. Data presented is from Jan-Sep 2016

M&A - Break-up by Reasons

Scale Quikr's consumer services

More than 50% of the M&As to increase market share and build technological capabilities



Online Classifieds

M&A Use-Cases (Illustrative Examples)



% of Acquisitions in 2016



business

ZAPLUK

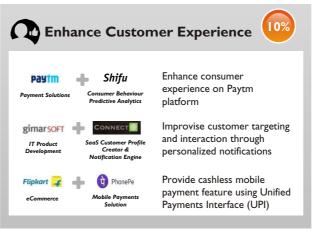
XHiree

(Recruitment Portal)







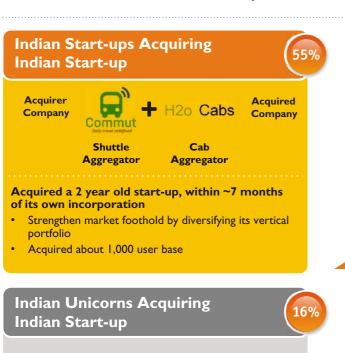




Notes: 1. Data presented is till September 2016 2. Customer segment of the acquired company 3. Acqui-hire is buyout of a company for its talent pool Source: Deal Curry, News Articles, Zinnov Start-up Database, Zinnov Analysis

M&A – Break-up by Acquirer Category

More than 70% of the acquisitions by Start-ups and Unicorns





Global Corporates Acquiring Indian Start-up²



Acquired Company

eCommerce | Fashion & Lifestyle **Marketplace Marketplace**

To strengthen its online fashion & lifestyle business

- Addition of Jabong's 1,500 international brands, strengthening its fashion segment
- Continue its dominance in Indian eCommerce market



To build solutions in Machine Learning & Artificial Intelligence, "Conversation as a Platform"

• To build technology capabilities on chat bots & intelligent agents

Indian Corporates Acquiring

Retail

Conglomerate

delivery model for business expansion

Microsoft

Technology

Company

To leverage FabFurnish's online platform and

Merged offline Hometown (furniture retail unit) with

Helps positioning of Future group in online retail

Acquired

Company

Acquired

Company

Online Home &

Furnishing Portal

SaaS Messenger

Indian Start-up

online Fabfurnish

Acquirer

Company

· Acqui-hire Wand labs team to develop Microsoft's engineering & platform group

Notes: 1. Data presented till September 2016 2. Start-up founding team are Indians Source: Deal Curry, News Articles, Zinnov Start-up Database, Zinnov Analysis

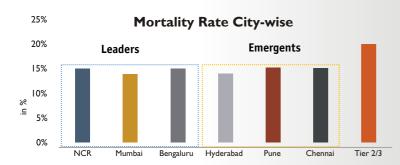
Acquirer

Company

Start-ups Mortality Landscape

While overall mortality is an industry pain-point, B2B's mortality lower than that of B2C

Indian start-ups have an overall mortality rate of 18-22%*



Tier 2/3 cities have maximum mortality rate due to lack of VC funding, and incubation support, which leads to either shut down or relocation

We had to go to Bengaluru at least thrice a month to meet VCs which is why we preferred to relocate to Bengaluru itself.

- Start-up Founder Speak

No. of Failed Start-ups (with Founding Year)

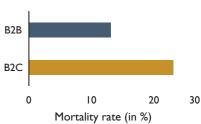
0 ,					
Founding Year (2012)					
~160					
Founding Year (2014)					
~250					
Founding Year (2015) ~120					

Key highlights



B2B start-ups have lower mortality than B2C

More stable due to better unit economics, less funding requirement, and increase in investor's interest





High discounts led to high cash burn; were not focussed on operations & logistics costs

Majority of Food-Tech start-ups facing stability issues

- Logistics is a low margin process which imposes burden on unit cost
- Lack of experienced talent leads to high growth, high risk phenomenon





Funding challenge for eCommerce firms

- · Reduction in funding ticket size
- Cut throat competition from established unicorns like Flipkart, Amazon, Snapdeal, Shopclues

DONE BY NONE

A fashion eCommerce firm shuts down due to lack of funding

Sources: LinkedIn, Company Websites, YourStory, Zinnov Analysis

^{*} Mortality rate spread across 5 years. Calculated on a sample of ~3000 tech product start-ups founded from 2011 to 2015

Section 3: Key Evolving Verticals and Technology Focus Areas

Key highlights

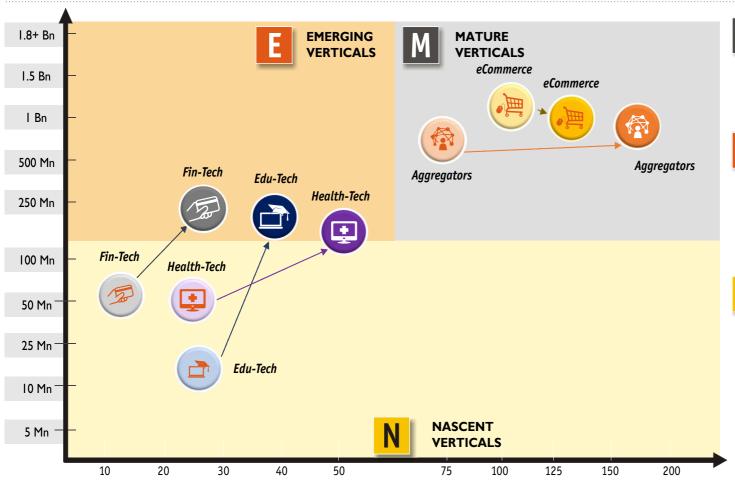
- eCommerce and Aggregators leading the space, more than 180+ new start-ups² in 2016
- Edu-Tech is the fastest growing vertical in terms of funding with 3x YoY growth
- Significant disruption in Health-Tech and Edu-Tech with 100+ & 40+ new start-ups² respectively
- Cloud, IOT & ML/Al are the core technologies disrupting almost every vertical



Notes: I. Estimates based on average deal size and number of deals (extrapolated based on number of deals in first two quarters). 2. Extrapolated based on data for ~1750 start-ups recorded till Aug 2016

Vertical Comparison – 2016 over 2015

Fin-Tech and Edu-Tech, racing ahead with the promise of cashless economy and quality education





MATURE VERTICALS

- Established start-ups that have been disrupting the market leaving limited scope for new entrants
- Companies backed by deep-pocketed investors



EMERGING VERTICALS

- Start-ups already challenging the status quo and partnering with incumbents to offer future solutions
- High interest from investors
- Growth in the number of new startups in 2016



NASCENT VERTICALS

Start-ups that have started gaining traction

X-Axis: No. of Start-ups that received funding in 2016

Y-Axis: Start-up Funding Amount I (in USD Mn)

Lighter color represents 2015 scenario

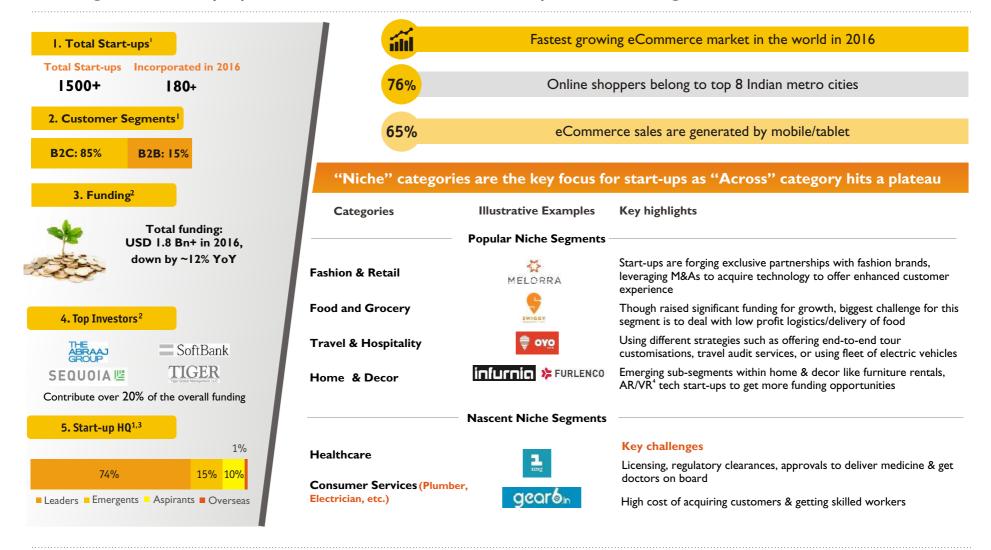




Notes: I. Based on the funding amount received by tech start-ups in 2016

eCommerce Start-ups - Quick Facts & Emerging Use Cases

Leading the start-up space; 85% of eCommerce companies offering B2C solutions



Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016 3 Leaders: Bengaluru, NCR, Mumbai; Emergents: Hyderabad, Chennai, Pune; Aspirants: Upcoming Cities/Tier-2/3 Cities, 4. AR = Augmented Reality, VR = Virtual Reality; Source: NASSCOM report, Zinnov Analysis

eCommerce Start-ups – Top Trends & Success Factors

Vertical defined by marked M&As, focus on 'Niche' markets, and increasing use of technology

KEY HIGHLIGHTS

Leveraging M&As For Business Expansion

- √ 50% of total M&As involved eCommerce firms
- ✓ Key reasons for M&As is to expand customer outreach and get access to better technology







Strengthen LogiNext's last mile delivery platform, Sprintr





Strengthen its business in Delhi-NCR, Bengaluru and expand in tier-1 & 2 cities

Movement Towards 'Niche' Markets

 eCommerce firms are focusing on more niche segments such as fashion, health, food, travel, consumer services



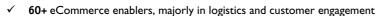
Living rooms, bed rooms furniture shop



Baby boys & girls clothes shop



Rise of eCommerce Enablers¹







Multi channel inventory management



Enables apps, processes, content & portals to go multilingual in real-time

Reinventing Business Models

Solution for Staying Competitive

snapdeal

Cirrus-own private cloud platform

Benefits

- Caters to fast growing demand for crunching Big Data to build personalized experiences for consumers
- · Cost effective than public cloud in long run

"Snapdeal is putting Cirrus as core competitor against AWS, Google cloud, Microsoft Azure"

Snapdeal to spend USD 35 Mn on rebranding activities in 2016

Flipkart 🚅



exclusive licensing

· Flipkart is entering into exclusive licensing agreements with brands like Provogue, Swiss Military, Carlton London and Chemistry

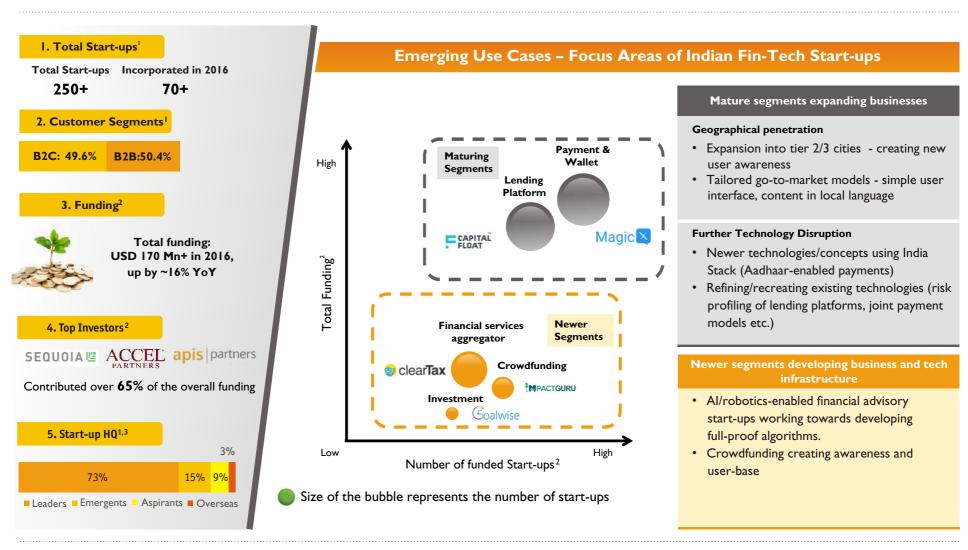
SHOPCLUES going rural

- · Partnerships with Store King and Payworld to reach 300,000 offline, small stores in rural India
- Digitize merchants with mobile merchant banking, auto management solutions

Notes: I. eCommerce Enablers support eCommerce players in business related operations like supply chain management, logistics, inventory management, predictive analytics, etc. Sources: YourStory, Zinnov Start-up Database, Zinnov Analysis

Fin-Tech Start-ups - Quick Facts & Emerging Use Cases

Continues to grow strong with expansion into tier 2/3 cities; 70+ start-ups founded in 2016



Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016 3 Leaders: Bengaluru, NCR, Mumbai; Emergents: Hyderabad, Chennai, Pune; Aspirants: Upcoming Cities/Tier-2/3 Cities; Source: NASSCOM report, Zinnov Analysis

Fin-Tech Start-ups - Top Trends & White Spaces

Enabling India to transact easily, and become financially agile – a whole new era of paperless, and cashless economy

KEY HIGHLIGHTS

Collaborative Approach

Start-ups are collaborating with technology companies, accelerators and financial institutions for co innovation purpose

Companies

Financial institutions

Accelerators











Dominating B2B Space

~70% funding received by start-ups offering B2B solutions



- ✓ Received a funding of USD 25 Mn in Jan'16
- Provides ATM services to large banks in the country



Rural Financial Support

- ✓ Start-ups are working on financial inclusion with the help of partner banks to provide services to low income groups in unbanked rural areas
- ✓ Leverage payment, wallet service while using Big Data & Cloud technology



/a

Tablet banking platform



Use mobile wallet for transactions

"You need the right set of talent to develop end-to-end robust solutions. Initial products launched in the Fin-Tech space had been quite simple. The next generation products will be enabled by AI, machine learning, AR/VR, and requires good tech infrastructure."

- Start-up Founder Speak

OPPORTUNITIES

- Developing product and services, closely aligned with government's vision and support system like Aadhaar enabled payments
- Customized value added offering for rural areas
 Microfinance, lending etc.
- Robo-advisory & Blockchain could gain prominence over the next couple of years



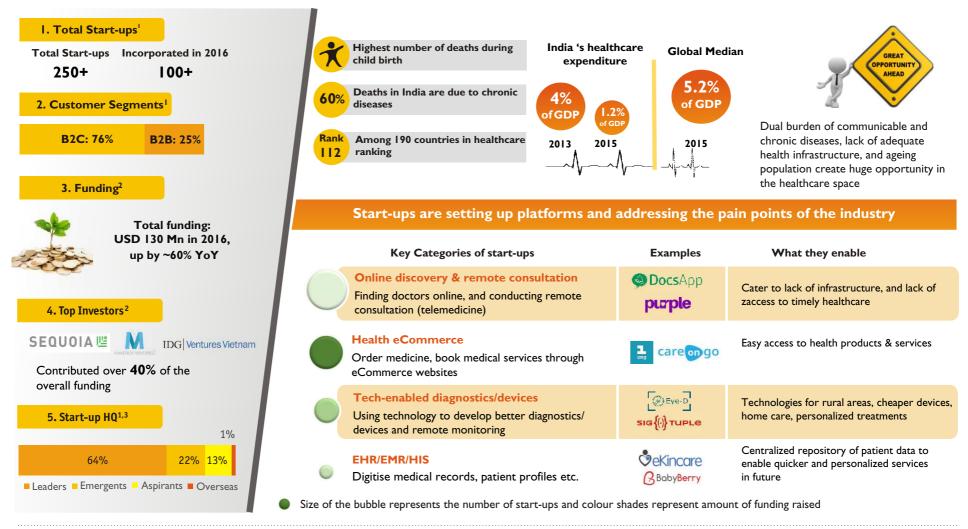
- Address data security/cyber security, and regulatory compliance policies
- Generating user base/awareness

CHALLENGES

Sources: YourStory, Zinnov Start-up Database, Zinnov Analysis

Health-Tech Start-ups – Quick Facts & Emerging Use Cases

Helping India in delivering better health services - with 100+ start-ups founded in 2016



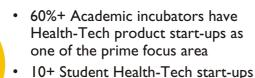
Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016 3 Leaders: Bengaluru, NCR, Mumbai; Emergents: Hyderabad, Chennai, Pune; Aspirants: Upcoming cities/Tier-2/3 Cities; Source: Zinnov Analysis, WHO's Global Healthcare Expenditure Database

Health-Tech Start-ups – Top Trends & White Spaces

Cost-effective solutions, preventive health, and home healthcare to drive growth of start-ups

KEY HIGHLIGHTS

Key Focus Among Academia



have been incubated

medprime

- Venture started by IIT-B student
- Portable product that can be used on field for healthcare diagnostics, stores data in digital format, and allows realtime sharing

"Investment will continue to happen as the fundamentals of the sector are very strong."

- Blume Ventures

OPPORTUNITIES

- Blue ocean in providing rural healthcare access
- Academic partnership can drive research in product development
- Home healthcare
- High investor support





Product that automatically analyses images of blood, reduce travel cost & improve rural accessibility

 Start-ups are targeting affordable products, catering to the rural population of India



Movement Towards Preventive Mindset



- Start-ups are offering personalised preventive healthcare solutions to clients while using genetic assessment
- Companies like Xcode Life are going a step ahead in decoding genetics, and providing personalized offerings



Identifies patient's health risks through health records, and provides personalized preventive care



- Highly regulated market
- Capital & research intensive
- Funding currently
 eCommerce focused, need
 more traction in other
 innovative areas
- Lack of systematic data capture

CHALLENGES

"Though challenges are there, people in the industry are working hard to get through them."

- Investor Speak

Sources: YourStory, Zinnov Start-up Database, Zinnov Analysis

Edu-Tech Start-ups – Quick Facts & Emerging Use Cases

One of the fastest growing verticals, with 3X growth in funding



SEQUOIA SOFINA

Contributed over 50% of the

overall funding

5. Start-up HQ1,3

62%

Gross enrolment ratio, higher education (%)

Citizens to be provided skill trainings by 2022 Mn

Emerging Use Cases - Focus Areas of Indian Edu-Tech Start-ups

Proportion of Edu-Tech Start-ups	Key Technology Used	Challenges/Opportunities	Illustrative Examples
eLearning (~42%) K12, Online Courses, eCertifications	Cloud, Big Data/ Analytics	K12 eLearning is saturated Opportunity in online certifications	BYJU'S simplifearn
Test Prep (~25%) Competition Prep like JEE, CAT	Big Data/Analytics	Offline Incumbents such as FIITJEE, TIME dominate this market	⊘ toppr embibe
Marketplace (~18%) School/ Coaching Centre Aggregator	Analytics	Differentiation & localisation of services needed for growth	Vedarttu EduKart
Edu ERP Systems (~10%) Student Database Management, School ERP System	-	Large number of schools and other educational institutions represent significant B2B opportunity	cloudEMS penpencileraser
eMentoring (~5%) Career Counselling, I-on-I Mentoring	ML/Al,Cloud	ML/AI being leveraged by a few players, representing a whitespace	Professional Knowledge & Career Guidance

20% 16% ■ Leaders ■ Emergents ■ Aspirants ■ Overseas

The Indian Edu-Tech market is highly fragmented, with not a single provider owning more than 2-3% of the market



We face dual challenge, first competition from offline rivals and second availability of free online content

Start-up Founders Speak

Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016; Amount contributed by lead investors alongwith a group of other investors 3 Leaders: Bengaluru, NCR, Mumbai, Emergents: Hyderabad, Chennai, Pune, Aspirants: Upcoming/Tier-2/3 Cities 4. To be trained under the PM's 'Kaushal Bharat, Kushal Bharat' initiative; Source: NASSCOM report, Zinnov Analysis

Edu-Tech Start-ups - Top Trends & White Spaces

Focus is to provide quality education, with rural and semi-urban accessibility





Quality eLearning Through Partnerships

30%+

E-Learning start-ups are partnering with national, international universities & industries

UpGrad partnered with IIIT Bengaluru and to offer Analytics course

imobule offers eLearning modules around Maths, English and other subjects on tablets

Adopting PC Tablet and Mobile Way 15%+

Focussing on tablet and mobile based solutions to cater students and working professionals





Rural Accessibility

Start-ups are leveraging technology & solar power to create online content in local language, thus, benefitting students in rural areas

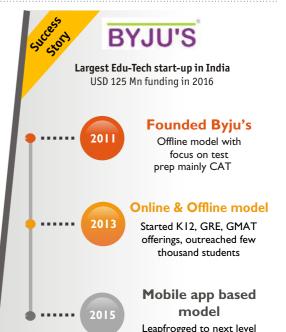
ConnectEd Technologies provides e-learning platforms to offer vocational training & quality education in rural Maharashtra

Expansion In Tier 2 Cities 16%+

arivanza, based out of Coimbatore provides Edu-Tech platform to build courses online

Edu-Tech start-ups are based out of Tier 2 cities like Coimbatore, Vidyanagar, Nagpur etc. But Tier 2 is still a blue ocean for Edu-Tech, as none of tier 2 has emerged as a hub





"They are a content company and have a chance to leverage that through teacher-assisted video learning. It's a more scalable model now."

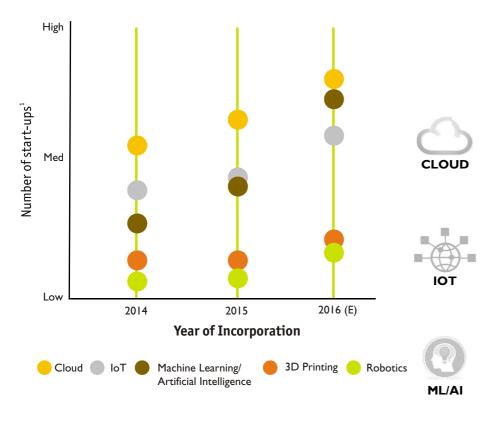
Investor Speak

through mobile platform, reaching

about 2 Mn students

Core Technologies - Quick Facts & Emerging Use Cases

Cloud, IOT, and ML/ Al start-ups foray successfully in the Indian terrain



Reasons for growth of core technologies

Reducing price, scalability, offer customised solutions, effective customer targeting, improve process efficiency

- Cloud market in India is expected to reach USD 10 Bn by 2020, growing at a CAGR of 35%
- Over 80% of the 250+ cloud start-ups offer SaaS solution and ~95% of funding to cloud start-ups was received by those providing SaaS solutions²
- The IOT market in India is expected to reach USD 15 Bn by 2020
- Out of nearly 150+ IOT start-ups, 60% have emerged during the last three years
- Healthcare and manufacturing are the two key verticals using IOT solutions
- Artificial Intelligence market is estimated to reach USD 5 Bn by 2020, growing at a CAGR of 54% between 2015 and 2020
- Out of nearly 135+ ML/Al start-ups, over 50% have emerged in the last two years

CLOUD Highest Number of Start-ups (250+)

ML/AI Highest YoY growth (125%)



3D Printing & Robotics

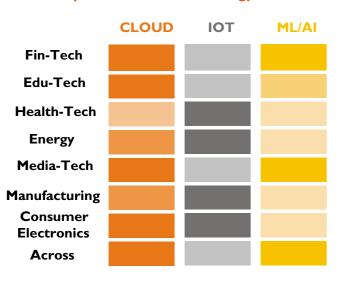
 More than 90% of 3D printing start-ups have emerged in the last three years Manufacturing is the key vertical using Robotics. More than 30% of the Robotics startups focused on manufacturing vertical

Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016; Source: NASSCOM report, Zinnov Analysis

Core Technologies - Top Trends & White Spaces

Manufacturing, Energy, and Fin-tech witnessing significant technology disruption

Most prominent new technology focus areas-2016





CLOUD

A cloud-based platform for community learning and study material exchange

Edu-Tech

WING20

Energy

ALTIZAN

Industrial IOT product for

monitoring

Manufacturing



Real time dashboards using cloud platform for measuring flow, temperature etc.

Fin-Tech



Cloud based SaaS applications to efficiently manage loan portfolios

"India's competitive advantages will help Indian SaaS companies see strong growth and create USD 50 Bn in value over the next 10 years," Investor Speak



IOT

Health-Tech



Product for visually impaired while manufacturing and remote integrating smart phone & camera

Consumer Electronics



Integrated wearable android connected device for health monitoring

- Manufacturing and Energy are the early adopters of new technologies
- Followed by Fin-Tech, Health-Tech & Edu-Tech verticals

% of start-ups using technology





ML/AI

The commitment from our investors validates the belief in the growth story of Altizon as a leading innovator in the Industrial IoT space." Start-up cofounder

Media-Tech



Al platform for Contextual **Text Mining, Social Media Monitoring**

Fin-Tech



Natural Language Processing powered Intelligent Chat **Bot Platform for** Banks

Edu-Tech



Algorithm driven semi-automated career planner planning & mentoring

"As robotics and artificial intelligence continue to improve, in the future bots will surely replace most conventional jobs." Start-up cofounder

Sources: YourStory, Zinnov Start-up Database, Zinnov Analysis

Start-ups Solving India Centric Problems

Start-ups are leveraging technology to address decade old India centric problems

Start-ups are targeting different India specific problems by leveraging technology and innovative approach













Solving Energy Problems

Smart monitoring, energy analytics platforms, smart transportation, solar energy

Providing Quality Education

Online education platforms, mentoring, rural accessibility

Improving Health Access

> Access to healthcare. affordable diagnostics solutions

Making India Cashless

Digital payments, wallets for transactions

Financial Inclusion

Inclined with Pradhan Mantri Jan-DhanYojana scheme for comprehensive financial inclusion

Easy Loan **Accessibility**

Alternate lending, financing

ALTIZAN

Provide IOT solution for

BYJU'S

medprime

ft cash

CAPITAL FLOAT

clean energy

K12, competition coaching like CAT, GMAT

Portable product that can be used on field for healthcare diagnostics

Mobile platform for cashless transactions for micro merchants

solutions with Yes Bank

Provides prepaid payment

Online SMB lending platform

Impact

Cloud solutions for operational efficiency, predictive maintenance, smart grid and connected health industries

Impact

Providing tabletbased quality education to 2Mn+ students

Impact

Portable product that can be used on field for healthcare diagnostics, stores data in digital format, and allows real-time sharing

Impact

Enabled 2.000+ merchants

Impact

Served 3.00.000 customers per month and each remits an average of INR 4,000 by EZdhan service

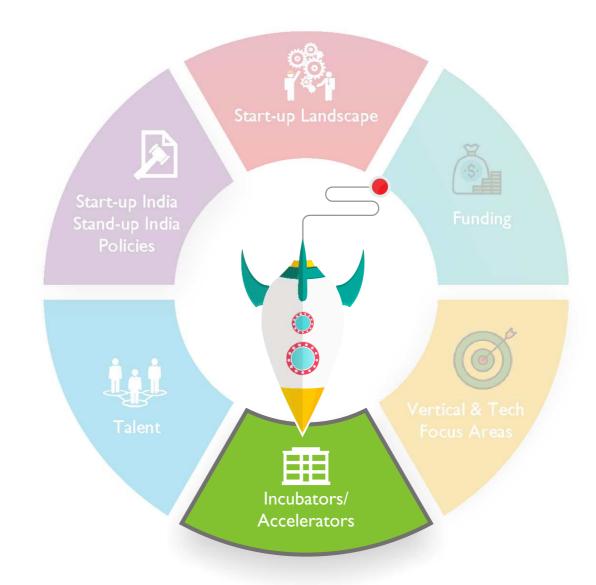
Impact

Disbursed INR 500 crore in 2 years Plans: INR 2.000 crore in 2016

Section 4: Incubators and Accelerators

Key highlights

- 140+ incubator & Accelerators across India
- Over 40% YoY growth over 2015 with 40 new additions this year
- Corporate Accelerators continue to enter Indian market to leverage talent



Incubators and Accelerators - Quick Facts

With impetus from Government and Corporates, witnessing 40% YoY growth

140+

Accelerators/ Incubators (Over 40% YoY growth in 2016)



~30 new academic incubators established under the 'Start-up India Stand-up India' initiative



Bengaluru, NCR, and Mumbai continue to be the leading hubs, with 40%+ incubators/ accelerators located



Tier 2/Tier 3 cities seeing traction, with 66% of new incubators established



Corporate Accelerators also seeing growth (~35% YoY)



Incubators/Accelerators have a **technology** (Cloud, Big Data/Analysis, and ML/AI) focus, and not particularly verticals.



Notes: Incubators provide seed funding, incubate ideas, help in product development whereas Accelerators help start-ups having at least one version of the product in scaling up the business. Source: Zinnov Research & Analysis

Key Characteristics of the Incubator/ Accelerator Ecosystem

Academic incubators contribute more than 45% of the ecosystem, propelling more student entrepreneurs

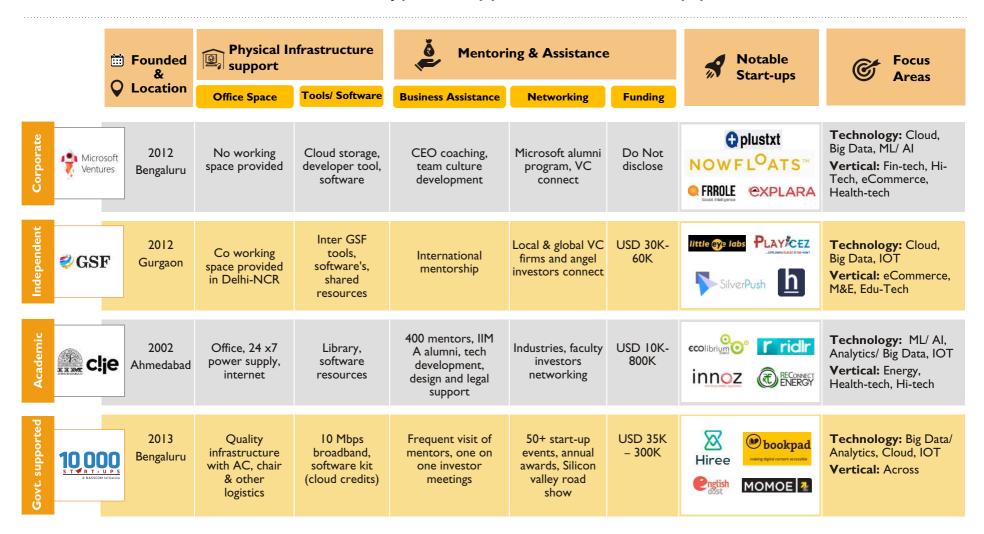
Incubator/ Accelerator Ecosystem in India

Corporate Independent **Academic Govt. Supported** PayPal* **Incubators** other be Microsoft CISCO Ventures **GSF** Accelerators Pitney Bowes ORACLE. Incubator focussed **Accelerator focused** Company focused Idea focused Key • Typical duration of 15 weeks to 6 months • Typical duration of 6 months to 3 years **Aspects Key Technology Focus Areas Key Verticals Key Technology Focus Areas Key Verticals** ML/AI Ad-Tech Analytics ML/Al Manufacturing
 Energy Edu-Tech Big Data/ Analytics Fin-Tech Retail • 3d Printing Hi-Tech Internet of Things (IOT) Cloud · Health-Tech Health-Tech • Shared resources, developer tools Office space, research labs, library Key Co-creation/co-innovation Start-up boot camps/ e-summits **Offerings** Alumni support Client-specific solution Investor connect/ VC Sessions Faculty & industry mentorships Business mentorship

Notes: Incubators provide seed funding, incubate ideas, help in product development whereas Accelerators help start-ups having at least one version of the product in scaling up the business. Source: Zinnov Research & Analysis

Key Characteristics of the Ecosystem - Deep Dive

Incubators/Accelerators differ in the type of support and mentorship provided



Source: News Articles, Company Websites

Challenges and Opportunities

The ecosystem enablers are industry agnostic, with more focus on technological innovation

Opportunities

Technology is the Core Focus

Major Focus on Big Data/ Analytics and Cloud, followed by Core technology such as Internet of things (IOT), 3D manufacturing, ML/AI

Although Industry Agnostic, Focus More on BFSI

Most prominent industry vertical among the incubators, followed by Retail, Media and Entertainment, Edu-tech, Manufacturing

Co-innovation/ Co-product - An Opportunity Area

Incubators / Corporate Accelerators collaborate for co-innovation and co-product development that can help in solving customers' problems

Challenges



Challenges

Mismatch in Expectations

Differences observed in business ideas/ models as compared to on-field execution - increasing challenges for incubators/ accelerators

Limited Time Period for Incubation/ Acceleration

3-4 months to incubate/ accelerate start-ups – time period not sufficient for a start-up to scale operations

Evaluating Start-ups is a big challenge

Volume of start-up applications quite high - making the process tedious and time consuming as compared to the US where benchmarks are well defined



Source: News Articles, Company Websites

Section 5: Rising Talent

Key highlights

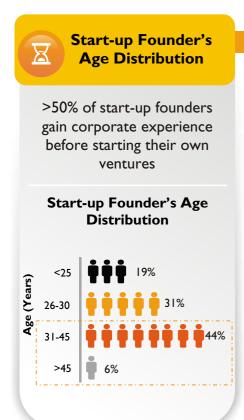
- Proportion of B2B founders increase with age - have at least 6-7 years of industry experience
- I in every 10 entrepreneurs is a
- Start-up ecosystem continues to attract talent from start-ups, traditional industry & investors



Start-up Founders – Demographic Insights

Experienced professionals exploring the B2B space, while younger generation more drawn to B2C businesses

Demographic Overview

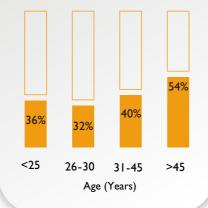




Proportion of B2B Start-ups

% of B2B start-ups increase with founder's age as it demands specific domain expertise

Proportion of B2B Start-ups





Educational Qualification of Start-up Founders

Every 2nd Entrepreneur has an Engineering/ MBA background

Founder's Educational Qualification





Student Start-ups

Student start-ups to grow with increasing support from incubators & accelerators



Total Student Start-ups in 2016



YoY Growth Rate

35 new institutional incubators planned under government's 'Start-Up India' initiative

Median age of start-up founders has reduced marginally from 32 years in 2015² to 31 years in 2016²

Notes: Analysis based on a sample size of >1750 Start-ups Sources: LinkedIn, YourStory, Zinnov Analysis; 2. Median age for 2015 calculated on the sample of 700 start-ups and for 2016 calculated on the sample of 4000 start-ups

Women Led Start-up Ecosystem

Share of Women Entrepreneurs up by 1%, backed by dedicated accelerators and investors



Key Highlights-Women Entrepreneur Ecosystem



Women Entrepreneur Share



Top Focus Areas



Women Entrepreneurs in Start-up Landscape 2016

1 in 10 entrepreneurs is a woman



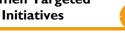


















empoWer Ist Indian Women Start-up Accelerator Program

Tech Start-ups Incubated

Other **Accelerators** Catalyst for Women Entrepreneurs





eCommerce predominantly into Fashion and Lifestyle, Food & Grocery & Consumer Services



of women based start-ups present in Health-Tech. Media-Tech & Hi-Tech Verticals



Dedicated Investors



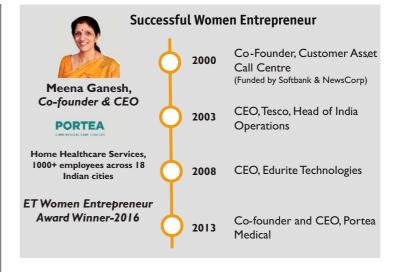
India's 1st VC Fund focused on Women Entrepreneurs-2015)



Total Corpus



India Angel Network invested ~USD I Mn in 4 women based start-ups Info Edge (India) Ltd invested ~USD 2 Mn in 2 women based start-ups



Other Illustrative **Examples**





Falguni Nayar

Key Challenges



Work-Life **Imbalance**



Demands Frequent Travelling & Networking



Swati Bhargava

Lack of Investors Focus

Notes: Analysis based on a sample size of >1250 Start-ups, 1. % of start-ups with women as founder or co-founder, 2. includes 'Others include graduate, science post graduate etc., Professional Courses includes Doctors, Journalist, CA etc.; Source: Zinnov Product/Digital Start-up Database

Start-up Talent- Hiring Trends

While eCommerce employs over 65% talent, emerging verticals are catching up

Hiring Shifts from B2C to B2B

- Employee base in less labour intensive B2B start-ups expected to grow by ~30% in 2016, while overall start-up talent expected to grow by ~18% YoY in 2016
- New hirings by eCommerce companies expected to reduce by 50% due to resource optimization & increasing cautiousness among founders

START-UP HIRING TRENDS

Demand of Non-Technical Professionals

 Start-ups in search for seasoned professional for HR, Finance, Corporate Affairs & Legal functions

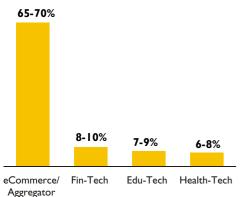
"New-age employees require a lot of new-age practices and the key for these practices is sustainability. There is a need for matured and adoptable professionals in all facets of a start-up, including finance and HR"

Shikha Taneja, Senior HR Director, ShopClues.

Mode of Recruitment

- >70% hiring through internal referrals & employee networks
- Required skills include innovative mindset, risk taking attitude, crossfunctional expertise & flexible to working hours

% Employee Share by Vertical





Talent from all Industrial Facets contribute significantly to the Ecosystem



Senior start-up executives striding entrepreneurial path

Curefit

Former Chief Business
Officer- Flipkart



Founders arising from traditional professions



Dr. Charit

Founder
DM Cardiology



Investors turned founders



Rajesh Sawhney
Co-Founder

Founder- GSF Accelerator



Industry veterans joining start-ups



Flipkart 🙀

Nitin Seth Chief Administrative Officer Former Director - McKinsey Knowledge Centre

Senior Executives, Experts, Investors & Industry Veterans are developing strong start-up ecosystem with rich technical & business acumen

Source: Belong (Bengaluru), Data recorded during Nov, 2015 to April, 2016

Section 6: Start-up India Stand-up India Policies

Key highlights

- Action Plan declares 19 guidelines such as self certification, tax exemption, patent fee rebate
- 13+ states have developed start-up policies to develop state level ecosystem



Start-up India Stand-up India - A Central Government Action Plan

Funding corpus of USD 1.5 Bn; tax exemptions coupled with other initiatives to boost the start-up ecosystem

To meet the objectives of "Start-up India" initiative, Central Government announced an Action Plan that addresses all aspects of the Start-up ecosystem



Specified **19** guidelines for start-ups

I see start-ups, technology and innovation as exciting and effective instruments for India's transformation.

Shri Narendra Modi Prime Minister of India







To foster innovation and to promote start-up ecosystem, NITI Aayog plans to set up 100 incubation centres across the country



New Atal Incubation Centres Area of incubation

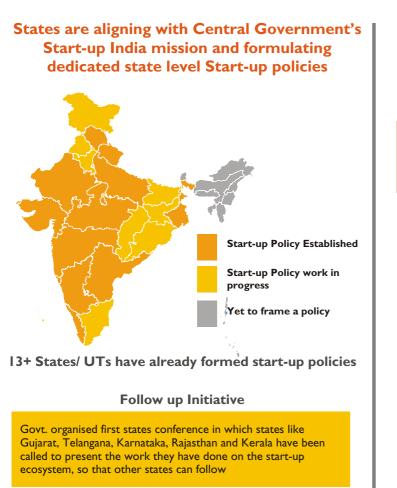
Manufacturing, transport, energy, health, education, agriculture, water and sanitation **Funding**

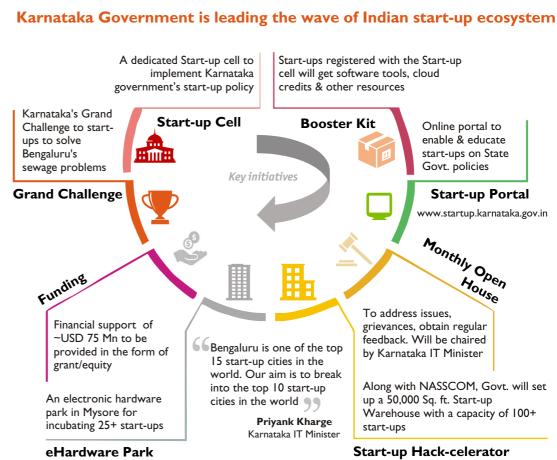
USD 1.5 Mn (INR 10 crore) will be provided to set up a new center over a period of five years

Source: Action Plan start-up India report

Start-up Policies – By States/ UTs

>13 states/ UTs with already established start-up policies - the ecosystem grows at grassroots level





[&]quot;*" - Funding is for incubation support and start-ups



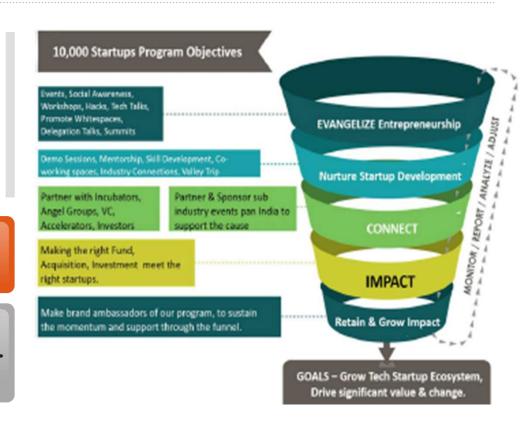
About 10,000 Start-ups

10,000 Start-ups is an initiative by India's premier IT industry body NASSCOM to scale up the start-up ecosystem in India by 10x through incubation, funding and support for 10,000 technology start-ups in India over the next ten years. The program's vision is to:

Foster entrepreneurship and build entrepreneurial capabilities at scale

Strengthen support system for tech startups

Impact 10,000 tech Start-ups on F.A.M.E. model by 2023



To meet these objectives, the program brings together key stakeholders of the ecosystem including start-up incubators / accelerators, angel investors, venture capitalists, start-up support groups, mentors and technology corporations. We operate as the knowledge base of start-ups' working models, vertical interest etc. From 15 partners initially, we've grown to a network of 70 partners today. The program is supported by foundation grants and corporate partnerships.

Our Four Pillars



Our F.A.M.E Model

FUNDING

From seed capital to growth capital, the 10,000 Startups programs helps the startups shortlisted in its program to raise money from a wide range of investors- angels, micro VCs and Government funds.



ACCELERATION

By applying to the 10,000 Start-ups program, startups can work with the top accelerator programs - going through the 10,000 startups program gives you a wider selection of opportunities to choose from and a quicker route to get accepted into any of these programs.

MENTORING

We conduct focused group workshops for the shortlisted companies on Product Management, Go-to-Market Strategy, Pitching and Industry Insights from the experts.



ENTERPRISE CONNECT

Shortlisted startups under the program get opportunities to showcase their product to top executives of India Inc across industries and explore strategic partnerships, alliances, M&As or just pure business.

NASSCOM Incubation Network (Start-up Warehouses)

Start-up Warehouses are designed for start-ups ecosystem creation and enhance support for technology start-ups in various states of India. The warehouses offer space for dozens of technology start-ups at a highly subsidized cost, in the heart of the city.

The co-working space allow technology start-ups to work for 6-12 months during which it will facilitate demos and pitches by start-ups to investors, large corporates, other accelerators/incubators and individual mentors. It also provides a large event place for hackathons, regular talks and workshops to sharpen the skills of start-ups on go to market, scaling up, global technology trends, and other learning & development needs.

10 START-UP WAREHOUSES

- Bangalore
- Chennai
- Kochi

- Hyderabad
- Mumbai
- Kolkata
- Pune
- Vizag
- Gurgaon/Noida
- 211 start-ups have been incubated across warehouses with more than \$20 mn funding raised.
- Over 250 events conducted across warehouses including investor and industry connects, workshops and hackathons

Top Gun Start-ups from 10,000 Start-up Warehouse

Admission Table, SlideRule Labs Inc, AdNabu, Eclinic247, Urbanpiper software india pvt. Itd, EnglishDost - BlueHat, TechBoulder Technology solutions Pvt Ltd, Gigatable Technologies Private Limited, Uncanny Vision, Medikoe, Vidgyor Media Technologies Pvt. Ltd., Cooey Technologies Pvt Ltd, Stelae Technologies, LIMITLESS, Changer Mints, Eazycoach, Seenit, IManageMyHotel, Zophop, Shoppinpal, Bookpad, Ridingo, Bakfy, Findulum Techlabs Pvt Ltd, Abhiman Technologies Private Limited, NativeBeta, OptimizedBits, SmartPocket, Applop

NASSCOM 10,000 Start-ups Programs





10,000 Start-up Konnect aims to bring together funding partners, mentors, enterprise tech industry network and 10,000 shortlisted start-ups for the purpose of win-win partnerships. These connect events enable start-ups to interact with bigger contemporaries and pitch their idea and products.

The Indian start-up ecosystem witnessed the largest Start-up Konnect session with over 200 shortlisted startups engaging with over 100 investors, 150 accelerators/incubators partners and industry experts across 6 cities earlier this year.

NASSCOM Industry Partner Program (NIPP)



NIPP focuses on market validation and early customer development for start-ups. The program on innovative mature technology ventures to test their solution, pricing model, and marketing strategy, also do a proof of concept for sustained engagement between large corporates. NIPP member companies include Societe Generale, All State, CA Technologies, Wipro, HDFC, SAP, Sony, Walmart Labs, Hitachi, Accenture, Axis Bank, UBS, ICICI Dell, Motorola, Goldman Sachs, Swiss Re, Citrus Pay, Banca Sella, DB, Ford, Fidelity, Payoneer, Unilever.

Some of our impacted startups from this program are CustomerXPS, VuNet Systems, WhatFix, Implantaire, CRMNext, Mobiotics, Vymo & Uniphore, Imaginate, The Decision Labs, Lets Endorse, Uniken Lightmetrics, Uncanny Vision

Innotrek

Innotrek – It's a global connect access program, that gives the brightest tech start-ups a chance to go to Silicon Valley, get access to global VCs and connect with some of the biggest and most renowned tech giants of the world.

Hosted by NASSCOM 10,000 Startups, the third edition of Innotrek 2016 commenced on May 02, 2016. It showcased 39 promising startups working through diverse domains like consumer tech, e-commerce, IOT & Cloud, Fintech, Mobile, Multimedia etc.

The week long immersive program provided an opportunity to the tech startups to engage and interact with global giants and encouraged them to gain disruptive knowledge from the top entrepreneurs, besides learning the ropes to scale up globally and forming alliances for competitive advantage.

In a bid to provide maximum exposure and knowledge-sharing, the program kicked off with workshops and discussions by industry experts covering topics such as legal, fund raising, term-sheet hacks, biz dev and sales, product management among others. Some of the speakers included Julie Zhou, Facebook; Geoff Baum, Startup Advisor; Anil Advani, Inventus Law; Sumit Gupta, Piazza Venture Labs; Dinesh Katiyar, Accel Ventures; Ashish Gupta, Helion VC; Ash Lilani, Saama Capital; Ankur Jain, Inclusive Capital; Vera Shokina, Managing Director, Silicon Valley Bank; David Emerson, Harvard Angels; Jim Connors, SandHill Angels; Indus Khaitan, Sequoia.

With NASSCOM Product Conclave organised for a day, the startups were exposed to potent sessions with Valley investors and corporate executives. The highlight of Innotrek 2016 came in the form of campus visits to tech industry powerhouses - Apple, Google, Facebook, Amazon, IBM and Microsoft where the startups met the product leadership and development teams, and gained insight on platform capabilities.

With over 46 speakers, 19 sessions, 7 panel talks, 39 startups over 7 days, Innotrek 2016 ended on a high note.

Events & Impact





We conduct events where our network of investors and enterprises come to hear our companies pitch. These events have been attended by over 200 investors and press from leading publications like Economic Times, Times of India, Business Standard, Financial Express and more. Prior to each Konnect session, our staff and mentors work with each start-up extensively to refine their pitches. Throughout the session we provide access to numerous top-tier investors, angels, corporate representatives, and press. This is essential for fundraising, publicity, and corporate partnerships.

Impacting Startup Landscape



Started in April 2013, 10,000 Start-ups now has 10 warehouses across India. It has successfully organized 800+ high impact events in 22 cities which were attended by 35,000 attendees. It has impacted 1350 start-ups out of 2276 shortlisted startups from 13,800+ applicants. Out of the impacted start-ups, 300 start-ups have received funding while others have received mentorship from influencers, accelerated and enterprise connected.

Our program is supported by our partners Google for Entrepreneurs, Amazon Web Services, Microsoft Ventures, Kotak Mahindra Bank, IBM, Digital Ocean and Facebook.



Global Start-up Ecosystem Comparison

Quick Facts

Parameters	India	United States	United Kingdom	Israel	China
Global Innovation Index	33.61	61.40	61.93	52.28	50.57
Total Number of Start-ups	4,600-5,000	52,000-53,000	4,800-5,400	4,500-4,600	4,200-4,300
Time taken to set-up a new business (days)	15-30	4-8	4-6	10-15	30-40
Corporate Tax Rate	34% (3 years'exemption for Indian start-ups)	39%	20%	26%	25%
Number of VC Firms	300+	800+	NA	200+	NA
Number of Angel Investors	1,800	300,000	18,000	600+	NA
Number of Incubators/ Accelerators	140+	1,500+	50+	130+	2400+ (1600 in the last 2 years)
Number of Unicorns	9	95+	7+	2	30+

Total # of start-ups highest across the United States with 52,000 to 53,000 start-ups.

Nearly 5,000 new start-ups incorporated in 2016

United States also has the highest number of angel investors – 300,000. Nearly about USD 24.1 Billion was invested last year with ~80% of this funding invested in seed and early stage start-ups

China ranks #1 in number of incubators and accelerators across the world due to government driven initiatives.

Source: I. The Global Innovation Index ranks the innovation performance of 128 countries and economies around the world, based on 82 indicators. This edition explores the impact of innovation-oriented policies on economic growth and development.

Other Verticals

Quick Snapshot

	Total Start-ups	Incorporated in 2016	B2B vs B2C Proportion	Funding (in USD Mn)	Top Investors	HQ split
Media Tech	150-200	75-90	25-30% 70-75%	40-60	Tiger Global, IDG, Unilazer Fund	Leaders: 74% Emergents: 10% Aspirants: 16%
Core Technologies/ Hi-Tech	700-800	150-200	75-85% I 5-25%	240-270	Omidyar Network, Stanford Angels, Accel Partners, Kalaari Capital, Inventus Capital	Leaders: 55% Emergents: 20% Aspirants: 25%
SCM & Logistics	150-170	15-25	60-70% 30-40%	100-150	Alpha Capital, Sherpa Capital, Nyca Partners, Thomvest Ventures	Leaders: 82% Emergents: 8% Aspirants: 10%
Food Tech	300-400	50-60	5-10% 90-95%	600-700	Harmony Partners, RB Investments, Abraaj Group, Zodius Capital, Lightspeed Venture Partners	Leaders: 70% Emergents: 12% Aspirants: 18%
Manufacturing	110-140	15-25	70-75% 90-95%	15-25	Matrix Partners India, Idein Ventures	Leaders: 54% Emergents: 20% Aspirants: 24%

Notes: I Based on startups funded in 2016 and overall number of startups.2. Presented data for funding and number of start-ups funded from Jan-July 2016 3. Leaders: Mumbai, NCR, Bengaluru, Emergents: Hyderabad, Pune, Channai; Aspirants: Tier-2 Cities.; Sources: Zinnov Start-up Database, Yourstory, Vccircle, Trak.in

Successful Bootstrapped Start-up

Case Study - Zerodha



Identified disconnect between broking firm & traders

Zerodha went live for retail trading in August 2010 30, 000 clients contributing to USD 600-750 Mn on various exchanges daily



Avoided office renting, started from home

Strategy (2010-2013)

- Zero money spent on advertisement, newspaper inserts, google ads etc.
- Focused on product development for both desktop & mobile (customer centric solutions)
- Prioritised client satisfaction, got the advantage of word-ofmouth advertising by our clients



Strategy (2010-2013)

The company made a profit of ~USD 9 Mn on revenue of about ~USD 17 Mn in 2015-16

Winner Bootstrap champ



66 As a low cost broking business, it was imperative that we kept our operational costs low. 99

Zerodha Team

Sources: YourStory, Zinnov Analysis

Project Scope and Research Methodology

An amalgamation of secondary research, and in consultation with industry thought-leaders - to decode the Indian Start-up Ecosystem

Introduction

The start-up report evaluates the current scenario of Indian start-up ecosystem and gauges India's position as a global start-up hub. This report analyzes emergence of new verticals such as Fin-Tech, Health-Tech & Edu-Tech along with the adoption of technologies like Cloud, Big Data/ Analytics, Machine Learning/ Artificial Intelligence, IoT etc. and recent investment trends.



Technology Product/
Digital Start-up
Landscape in India



Incubators/
Accelerators



Investment trends



Growing start-up talent



Vertical & Technology Focus Areas & Whitespaces



Start-up Policies & Support Ecosystem in India

The report will help Indian as well as global stakeholders (start-ups founders & employees, investors, government, regulatory bodies, incubators, accelerators, students) in identifying key growth areas, drivers, policies and start-up support ecosystem

List of Data Sources

Public Sources:

- NASSCOM 10,000 Start-up Database
- YourStory
- CrunchBase
- Angel List
- LinkedIn
- VCCircle
- Start-up Websites
- Trak.in
- Investor Websites
- Media Articles

Zinnov Repository:

 Zinnov tech product start-up database

Expert Discussions:

- 30+ Technology product companies/ start-ups
- 20+ Interactions with VCs, Angel Investors, and Incubators/ Accelerators

Definitions 1/2

Start-ups, Investors, and Incubators/ Accelerators

Start ups Intellectual Property (IP) backed technology product/ platform/ eCommerce/ aggregators using digital platform for customer engagement only considered

- Incorporation Year: Companies incorporated in 2011 and beyond
- Founder: Founding members should be of Indian origin
- Headquarters: Company headquartered in India OR outside with product development centre largely in India
- Product: Intellectual Property backed technology product OR technology platform OR eCommerce OR Aggregators considered

Investors

- Investment by firms such as Venture Capitalist (VC) Firms, Corporate VCs
- Angel Investments by individuals in their personal capacity
- Investments by incubators & accelerators



• Incubators help start-ups in idea development, developing prototypes.

They typically offer:

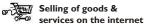
- √ Office space
- ✓ Research Labs
- ✓ Library
- ✓ Start-up boot camps/ e-summits
- √ Alumni Support
- ✓ Faculty & Industry Mentorships

- Accelerators support start-ups in building prototypes, scaling by providing help for fundraising, brand building, customer growth. They typically offer:
 - √ Shared resources
 - ✓ Developer tools
 - √ Co-creation/co-innovation
 - ✓ Client-specific solution
 - √ Investor Connect/ VC Sessions
 - ✓ Business Mentorship

Definitions 2/2

Verticals and Technology Focus Areas

eCommerce



Across, Fashion & Lifestyle, Grocery, Home Décor, Industrial, etc.







Aggregators



Provide product/ services from multiple sources

Travel & Transport, Food, Coupons, Events, Real Estate





eCommerce Enablers



Support in several business related operations

Supply Chain Management, Logistics, Inventory etc.





Fin-Tech



Enables financial services and payments through technology

Payments, Crowdfunding, Financial Lending, Financial Service aggregator







Edu-Tech



Provide learning solutions & services through technology

eLearning, Course Tutoring & Training, Test Solutions, Marketplace





Health-Tech



Provides technology platform for solving healthcare problems

Electronic Discovery, Electronic Health Record. eCommerce







Hi-Tech/ Core Technology



Technology software and hardware products for business operations

Cloud, Big Data/ Analytics, IOT, ML/ Al. 3D Printing, Robotics









Technology enabled companies supporting food industry

Hyperlocal Food Delivery, Restaurant aggregator, Deal Search

Food-Tech



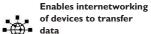




Verticals



IoT (Internet of Things)



Physical Devices, Smart Sensors, Wearables, Industrial Automation



SenseGiz

COUEY

Cloud



Helps in data storage and accessibility over the internet

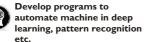
Software as a service, Infrastructure as a service, Platform as a Service







Machine Learning/ Artificial Intelligence



Data to text, Predictive Analytics, Image Recognition, Decision- Making









3D Printing



Technology enabled 3D modelling to create solid objects

Printers, Prosthetics, Prototype





Robotics



Designs & manufactures robot for industrial application

Industrial Automation





Big Data & Analytics



Provide solutions to collect and analyze

Business Intelligence, Marketing Analytics, Workflow Management







NASSCOM®

Plot No 7 to 10, Sector 126, Noida, Uttar Pradesh 201301, India; Tel: +91-120-4990111 www.nasscom.in research@nasscom.in









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