







INDIAN START-UP ECOSYSTEM MATURING Edition 2016

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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.

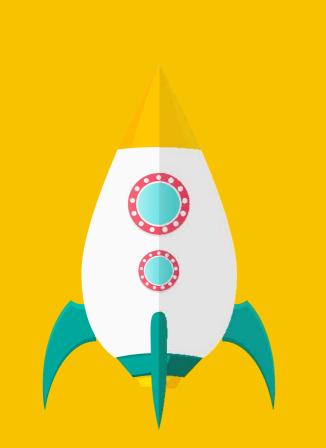
Multiple indicators point to the fact that this ecosystem continues to remain attractive. The total funding is estimated to reach nearly USD 4 Bn in 2016. Initiatives taken by the Indian government, growth in academic incubators, rise in the number of start-ups funded in 2016, ongoing interest from investors,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



Indian Start-up Ecosystem Maturing - Edition 2016

What is a start-up as per our definition?

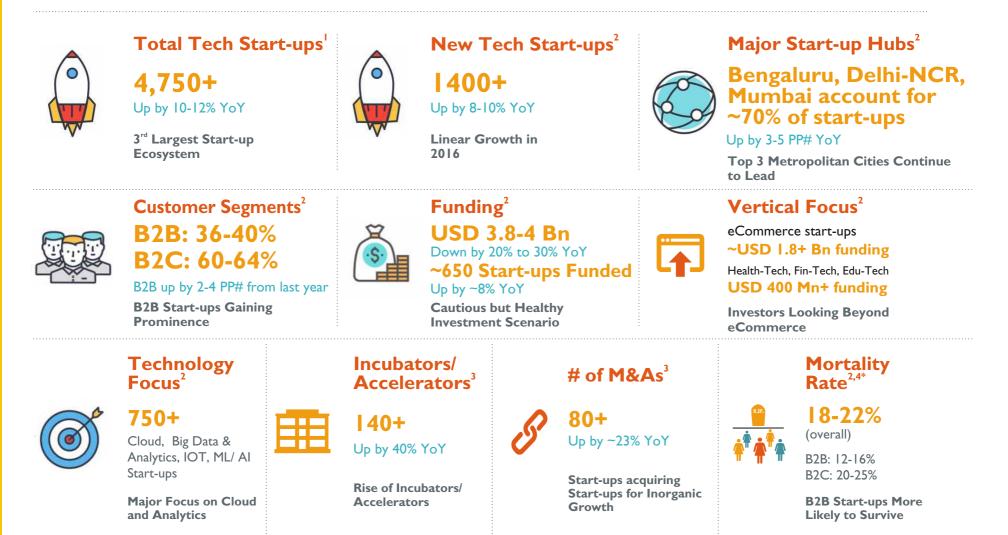




07

India Start-up Landscape - 2016

Quick Facts



*Established, registered product technology start-ups only

Notes: I. 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 10-12%. 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 (>13 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 1/4th 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

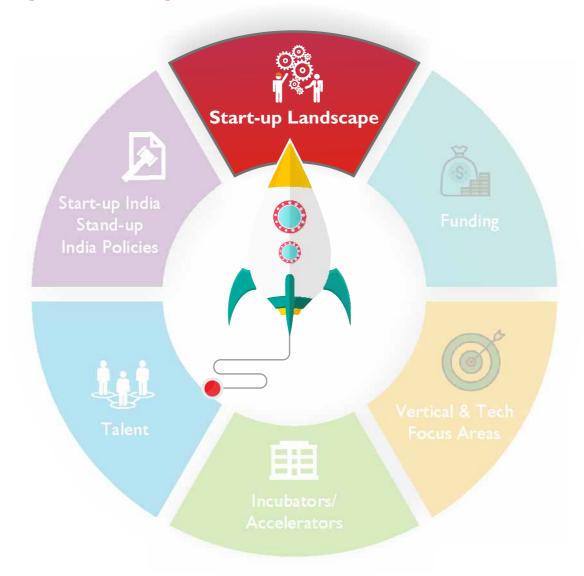
Overall, we are maturing and this year is the year of rationalization defined by change in focus, realignment of funds, realignment of strategy, and development of clear road-maps, to establish a successful and sustainable start-up ecosystem. Future will be about pragmatic investments, profitability 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

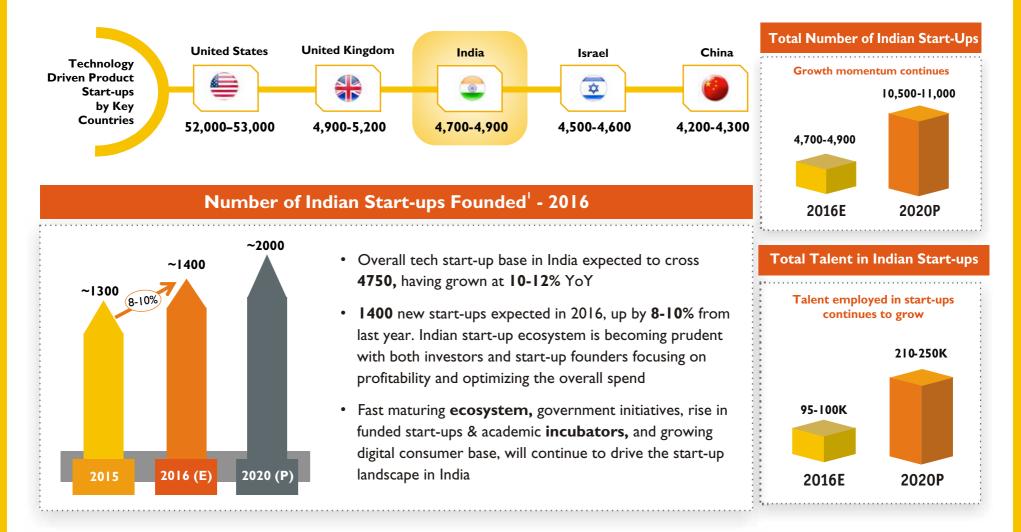


- India, the 3rd largest start-up ecosystem globally
- 4750+ total tech start-ups in 2016
- ~1400 new tech start-ups incorporated this year
- ~100K talent employed in start-ups
- Bengaluru, NCR, Mumbai account for ~70% of the total start-ups
- USD 3.8-4.0 Bn funding¹ in 2016



Indian Tech Start-up Ecosystem – An Overview

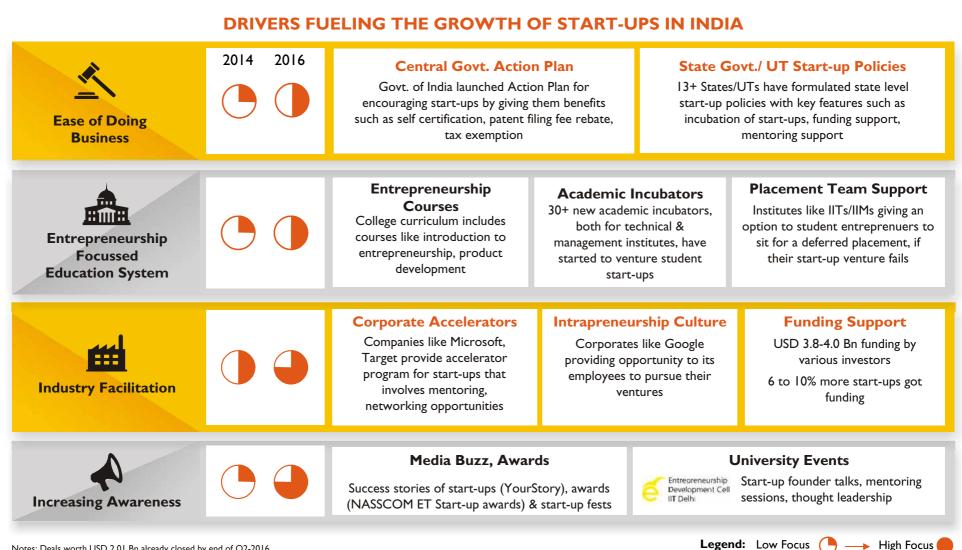
Indian start-up base, standing 3rd globally, expected to grow by 2.2X till 2020



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

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

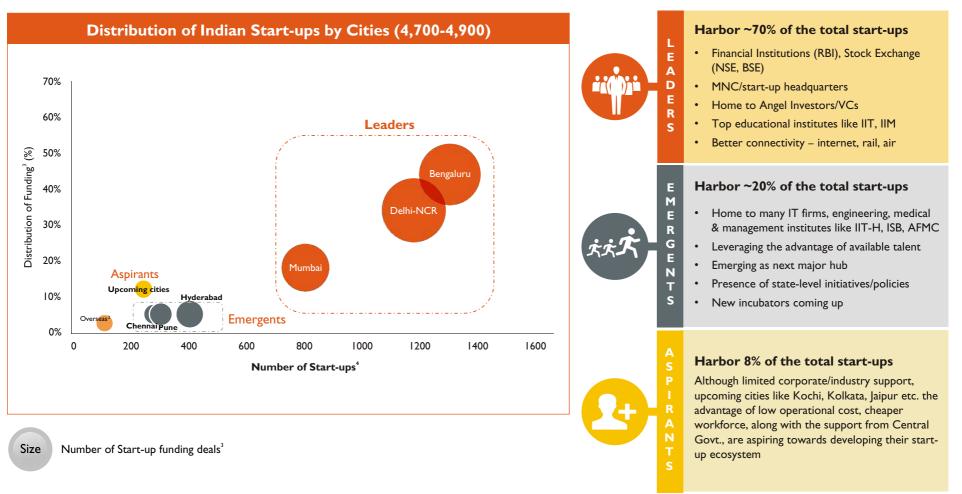


Notes: Deals worth USD 2.01 Bn already closed by end of Q2-2016 Source: Zinnov Research & Analysis, Yourstory, CrunchBase, Angellist, Deal curry

> Indian Start-up Ecosystem Maturing - Edition 2016

Start-up Geographical Clusters

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



Notes

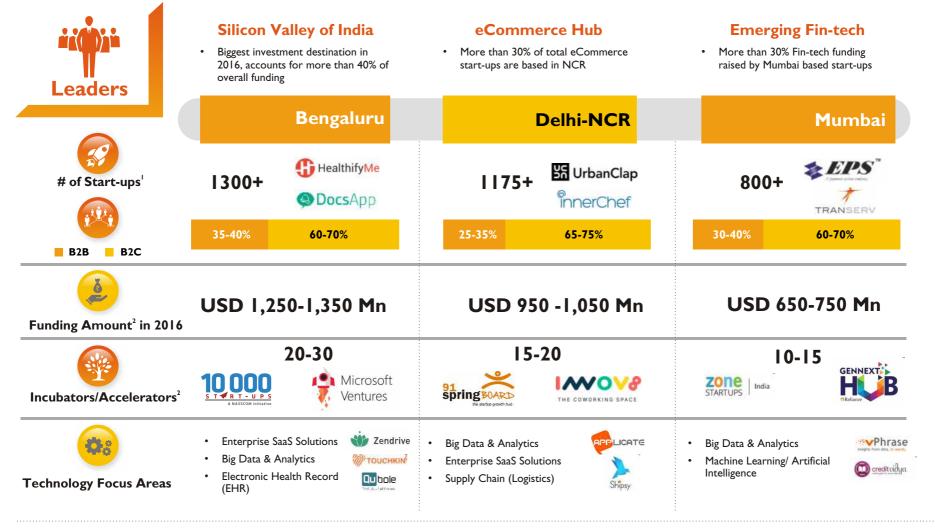
1. Upcoming cities (Kochi, Kolkata, Jaipur, Chandigarh, Indore, Bhopal, & Kanpur, etc.), 2. Overseas start-ups ((USA, Canada, Singapore, Germany, etc.) include the ones founded by Indians and catering to the India market, 3. Presented data is based on funding received by start-ups in till Q2- 2016, 4.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

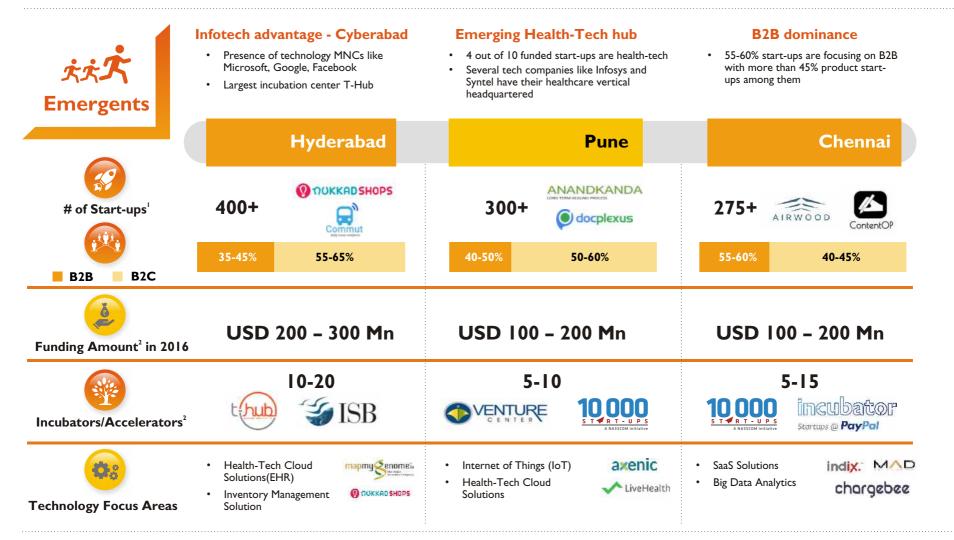
While Delhi-NCR continues to be the eCommerce hub, Bengaluru – the Silicon Valley of India, and Mumbai – the emerging Fin-tech hub



Notes: I 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

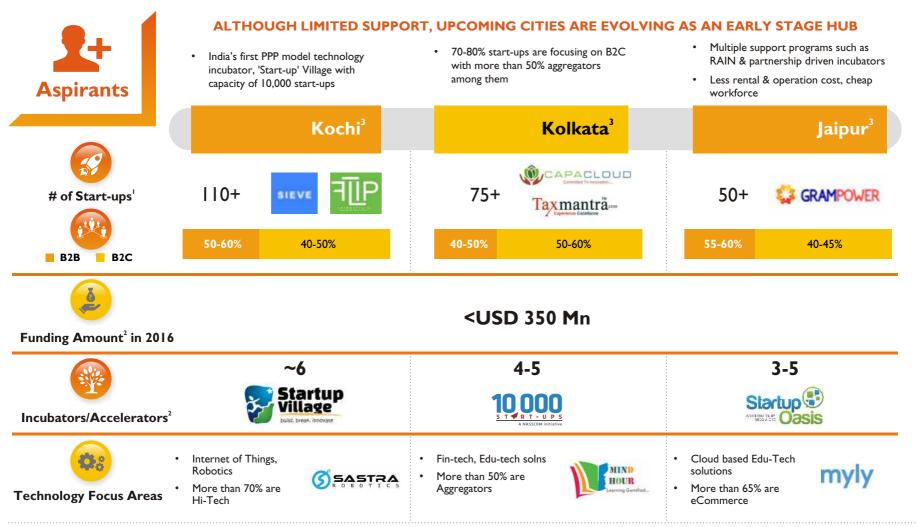
Receiving similar funds, while Hyderabad becomes Cyberabad, Pune – an emerging Health-Tech hub, and Chennai – the B2B storehouse



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



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

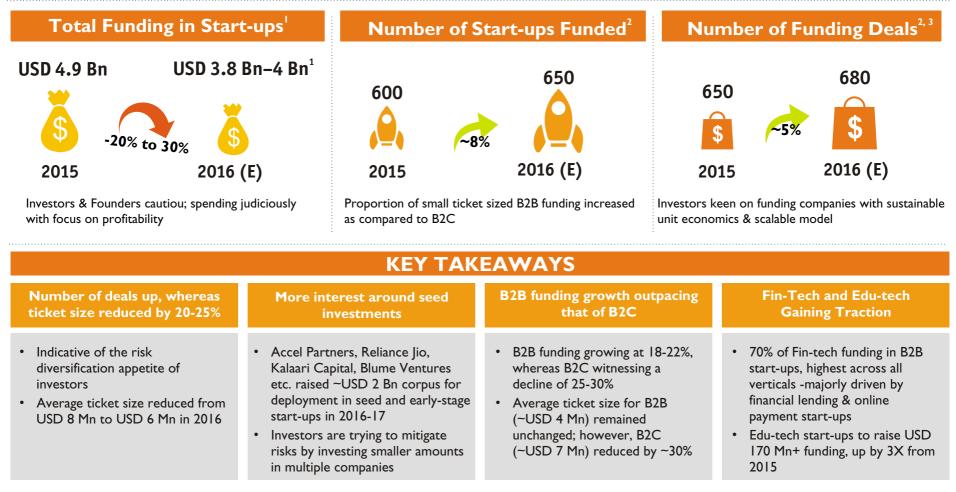
- ~8% growth in number of funded startups¹ in 2016
- USD 3.8-4.0 Bn funding¹ in 2016, down by 20-30% YoY
- 25% share of B2B fundings¹ in 2016, up from 18% last year
- USD 175 Mn funding raised by Hike (highest funding raised in 2016²)



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. 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



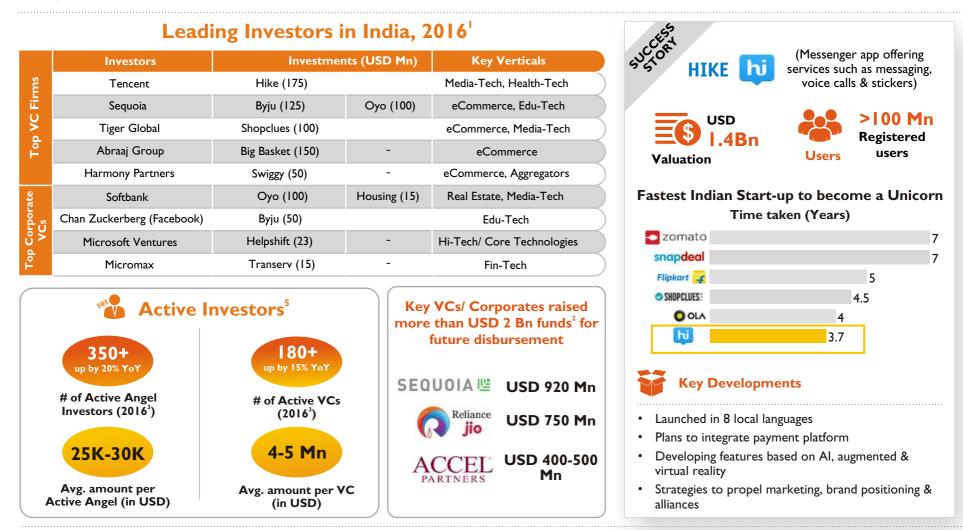
"The decrease in funding doesn't mean that the interest has gone down but more of rationalization has set in. Overall, the interest will remain in the next couple of years." - Investor Speak.

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

Investor Landscape

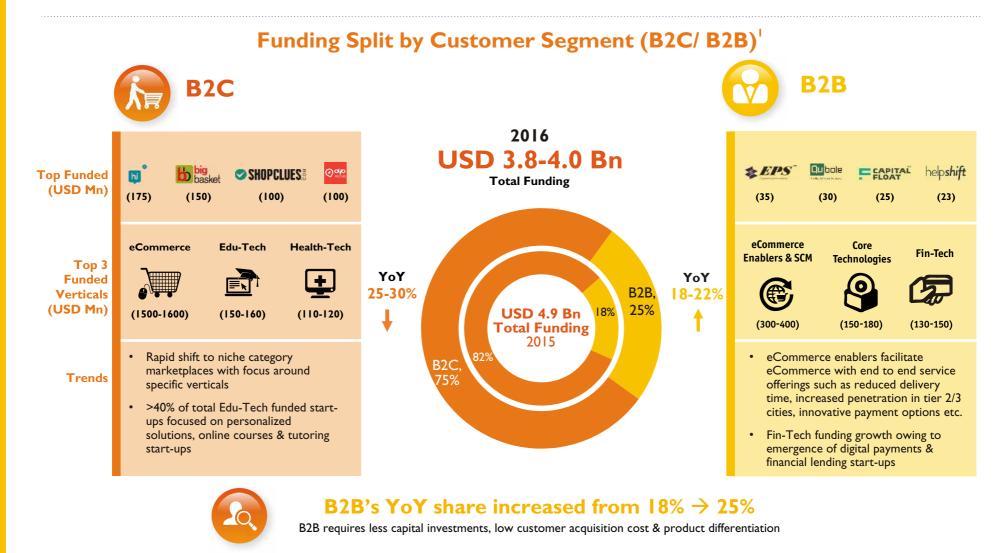
Indian start-ups continue to remain attractive among investors, raising more than USD 2 Bn corpus for future disbursement



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)

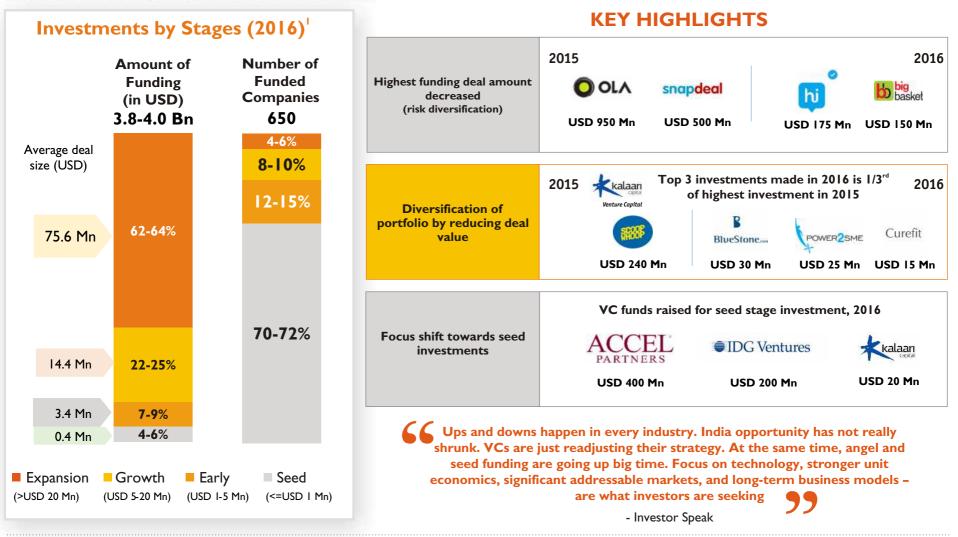
B2B segment generates 1/4th of the total funding – its growth outpacing that of B2C



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

Analysis by Funding Stages

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



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

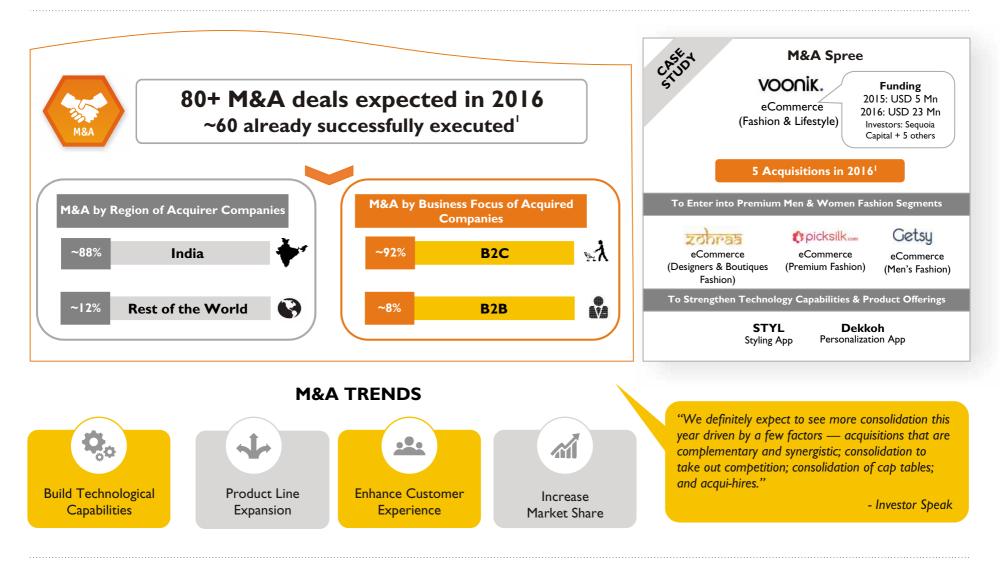


Sources: YourStory, Zinnov Analysis

Indian Start-up Ecosystem Maturing - Edition 2016

Mergers & Acquisitions (M&A) Landscape

Indian unicorns and start-ups on an acquisition spree – \sim 60 M&As already executed successfully in 2016¹

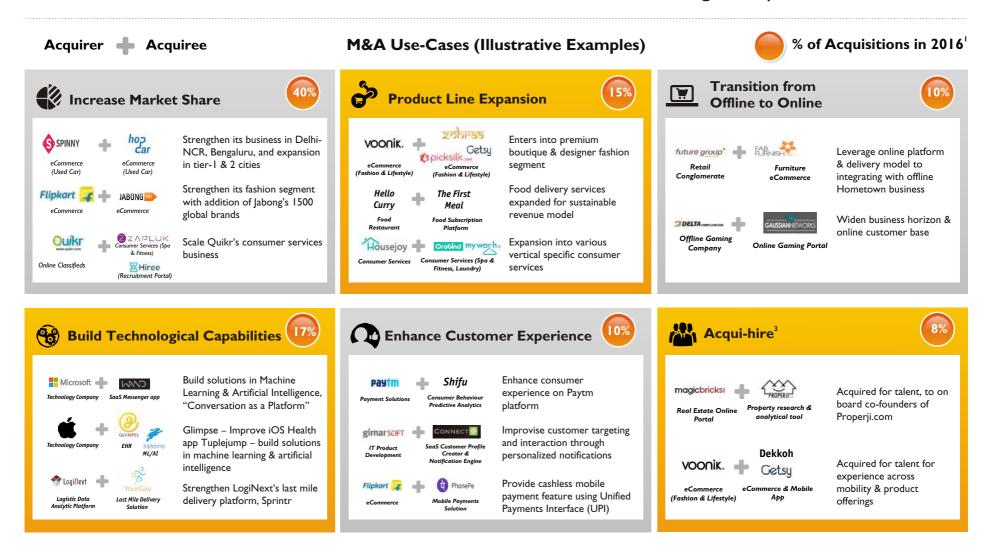


Source: Deal Curry, News Articles ; Notes: 1. Data presented is from Jan-Sep 2016



M&A – Break-up by Reasons

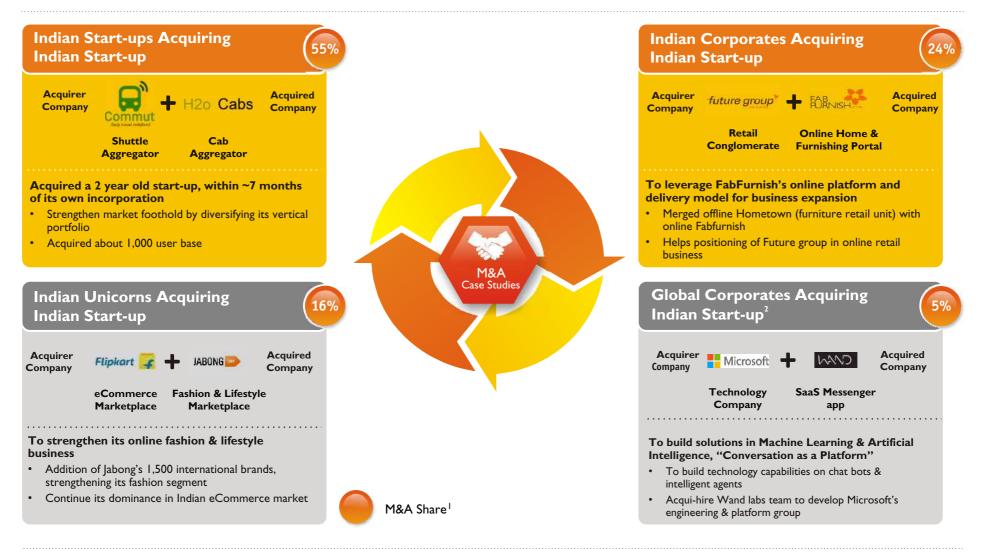
More than 50% of the M&As to increase market share and build technological capabilities



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

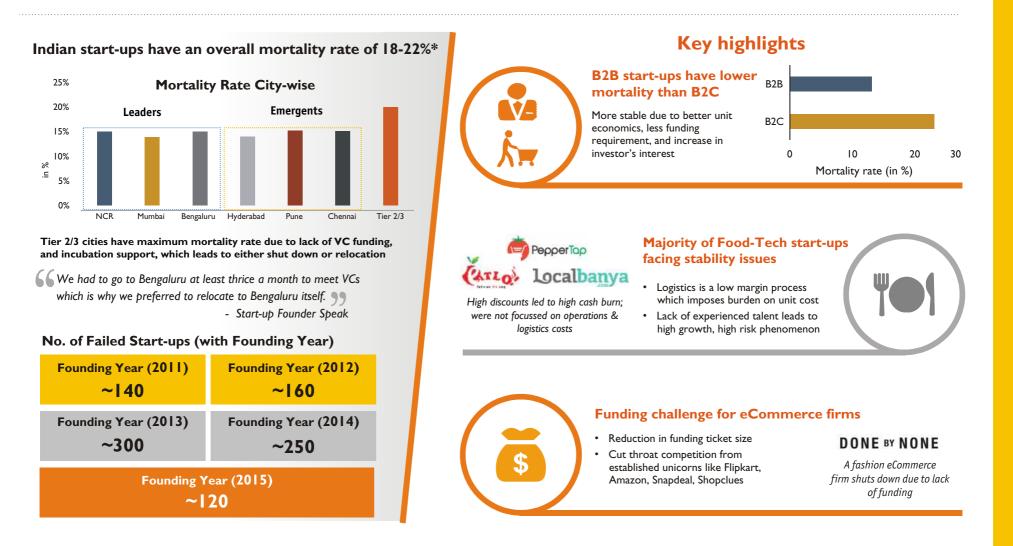


Notes: 1. Data presented till September 2016 2. Start-up founding team are Indians Source: Deal Curry, News Articles, Zinnov Start-up Database, Zinnov Analysis



Start-ups Mortality Landscape

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



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

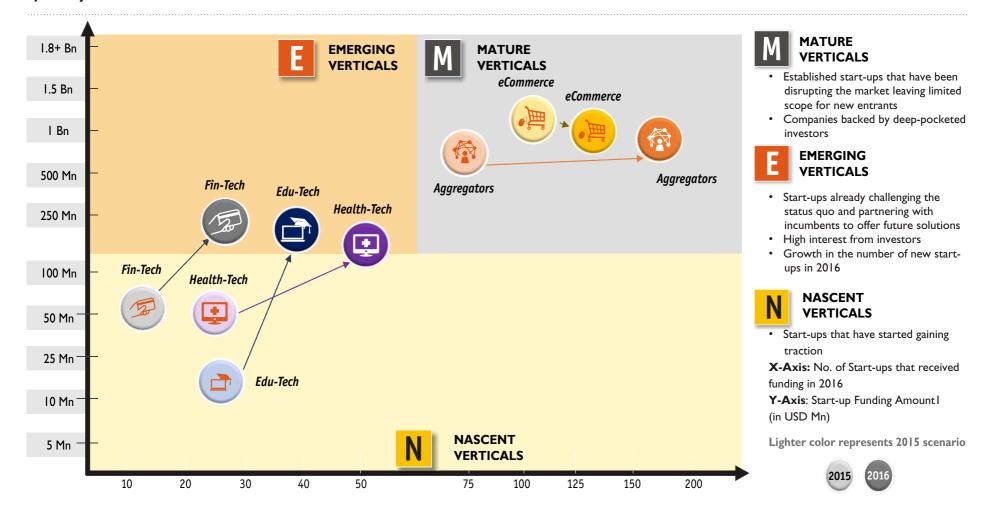
- eCommerce and Aggregators leading the space, more than 180+ new start-ups² in 2016
- Edu-Tech is the fastest growing vertical in terms of funding¹ with 3x YoY growth
- Significant disruption in Health-Tech and Edu-Tech with 100+ & 40+ new start-ups² respectively
- Cloud, IOT & ML/AI are the core technologies 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

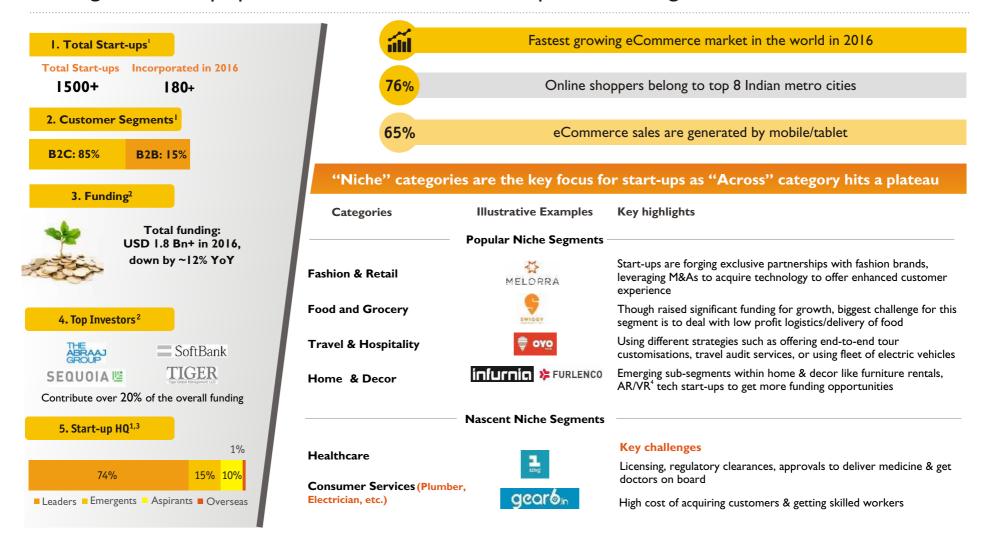
Vertical Comparison – 2016 over 2015

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



eCommerce Start-ups – Quick Facts & Emerging Use Cases

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

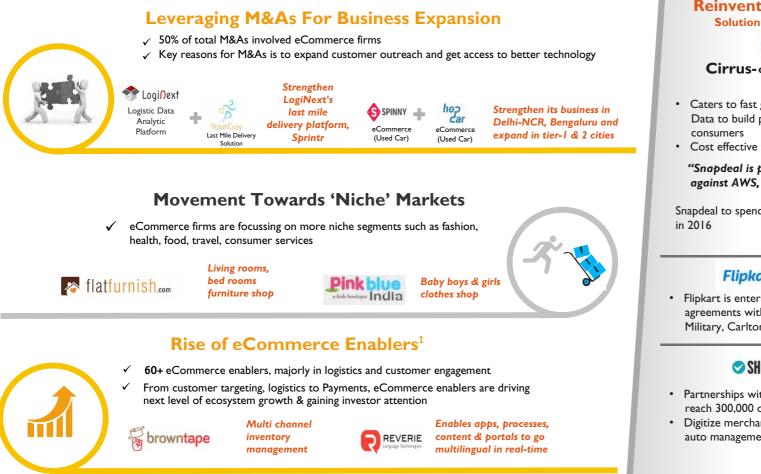


Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016 3 Leaders: Bengaluru, NCR, Mumbai; Emergents: Hyderabad, Chennai, Pune; Aspirants: Upcoming Cities/Tier-2/3 Cities, 4. AR = Augmented Reality, VR = Virtual Reality; Source: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



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
- 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

Flipkart ___

exclusive licensing

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

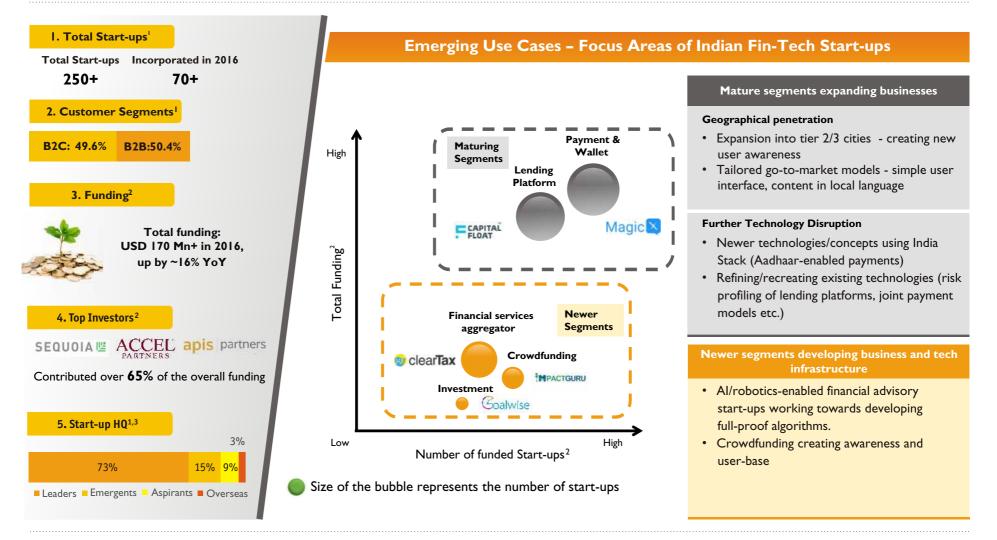
SHOPCLIJES going rural

- · 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



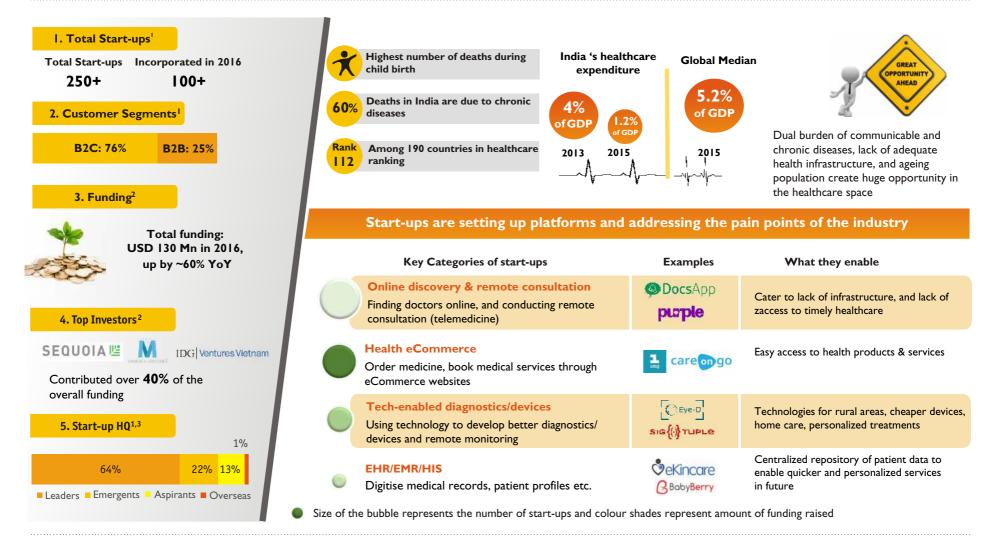
CHALLENGES

"You need the right set of talent to develop

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

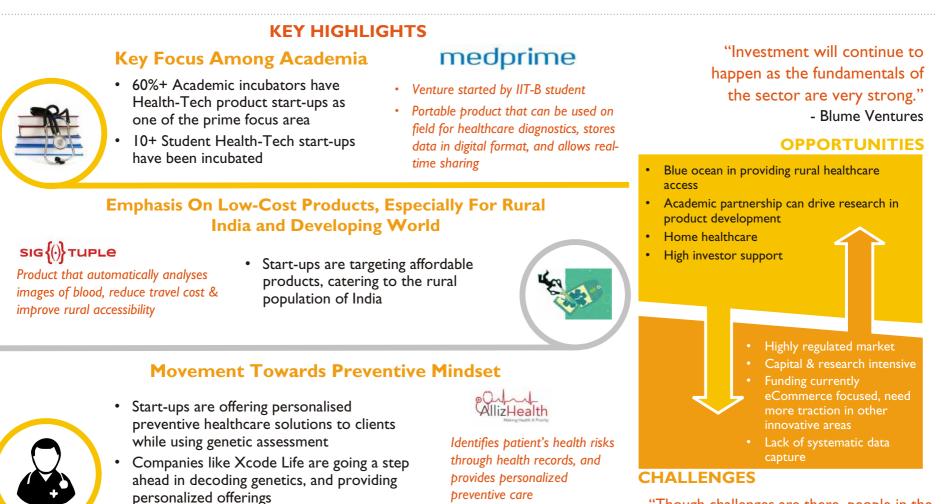


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Health-Tech Start-ups – Top Trends & White Spaces

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

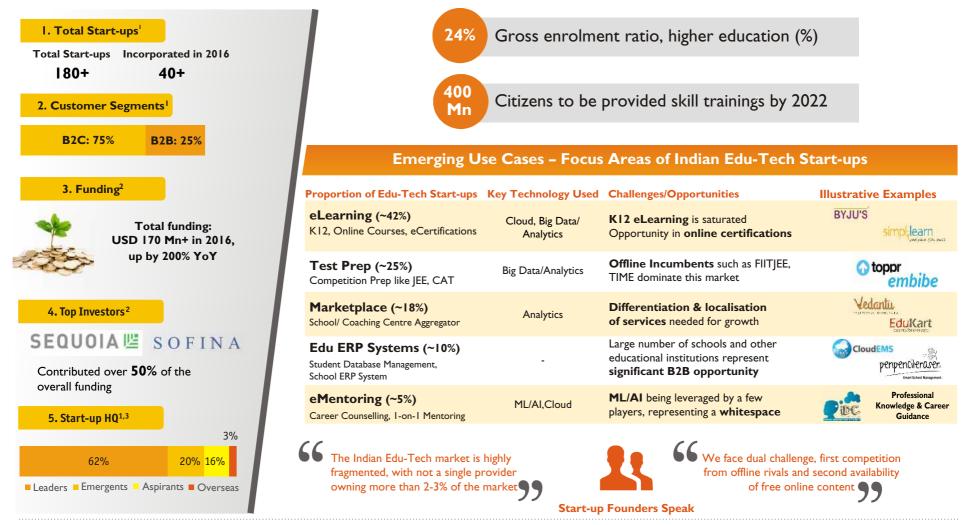


"Though challenges are there, people in the industry are working hard to get through them." - Investor Speak

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

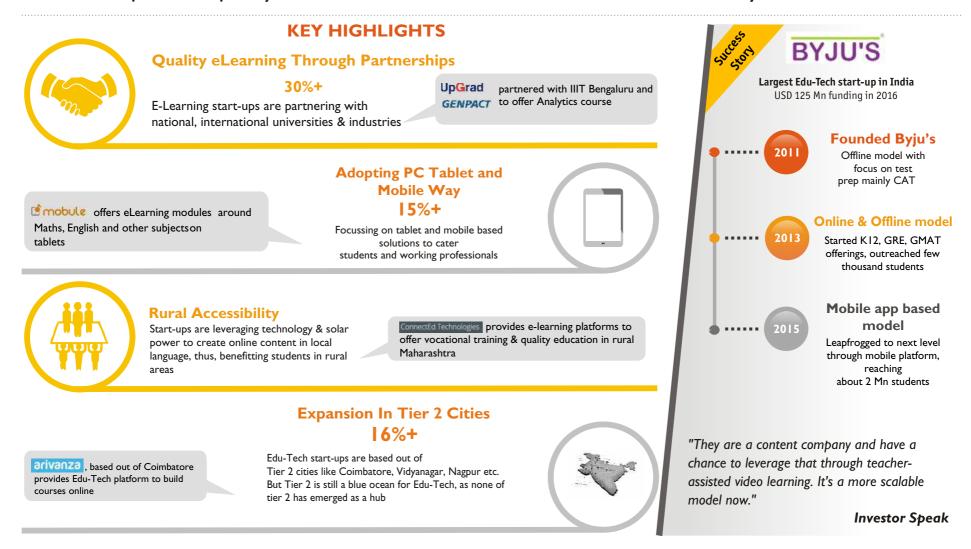


Notes: I Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016; Amount contributed by lead investors alongwith a group of other investors 3 Leaders: Bengaluru, NCR, Mumbai, Emergents: Hyderabad, Chennai, Pune, Aspirants: Upcoming/Tier-2/3 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

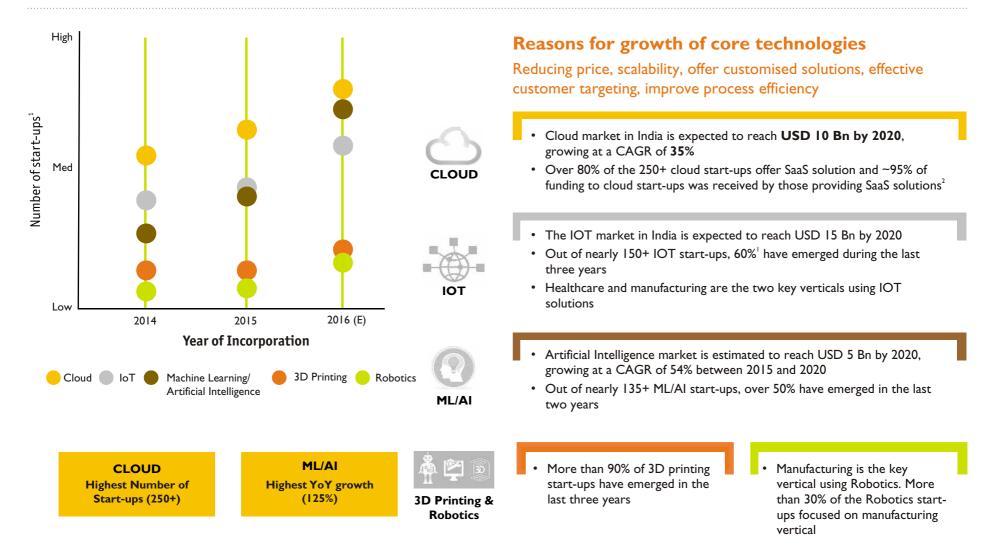
Focus is to provide quality education, with rural and semi-urban accessibility



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

Core Technologies – Quick Facts & Emerging Use Cases

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

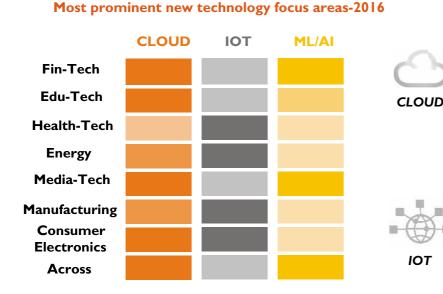


Notes: | Extrapolated based on data for ~1750 start-ups recorded till Aug 2016; 2. Extrapolated based on data recorded till Q2-2016; Source: NASSCOM report, Zinnov Analysis



Core Technologies – Top Trends & White Spaces

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

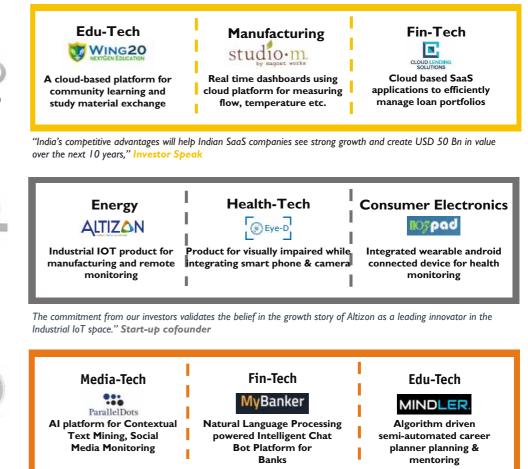


- Manufacturing and Energy are the early adopters of new technologies
- Followed by Fin-Tech, Health-Tech & Edu-Tech verticals
 - % of start-ups using technology





ML/AI



"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

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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

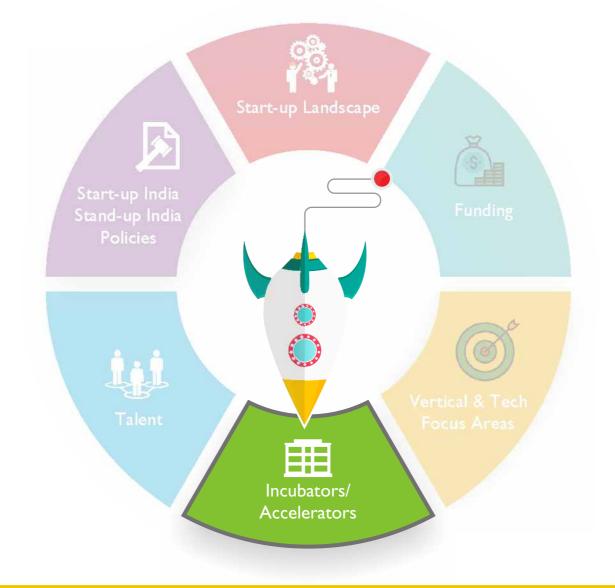
Solving Energy Problems	Providing Quality Education	Improving Health Access	Making India Cashless	Financial Inclusion	Easy Loan Accessibility
Smart monitoring, energy analytics platforms, smart transportation, solar energy	Online education platforms, mentoring, rural accessibility	Access to healthcare, affordable diagnostics solutions	Digital payments, wallets for transactions	Inclined with Pradhan Mantri Jan- DhanYojana scheme for comprehensive financial inclusion	Alternate lending, financing
ALTIZON	BYJU'S	medprime	📀 ft cəsh	The Case Way in Barrage Yor Allerage	CAPITAL FLOAT
Provide IOT solution for 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	Provides prepaid payment solutions with Yes Bank	Online SMB lending platform
Impact	Impact	Impact	Impact	Impact	Impact
Cloud solutions for operational efficiency, predictive maintenance, smart grid and connected health industries	Providing tablet- based quality education to 2Mn+ students	Portable product that can be used on field for healthcare diagnostics, stores data in digital format, and allows real-time sharing	Enabled 2,000+ merchants	Served 3,00,000 customers per month and each remits an average of INR 4,000 by EZdhan service	Disbursed INR 500 crore in 2 years Plans: INR 2,000 crore in 2016

4

Section 4: Incubators and Accelerators



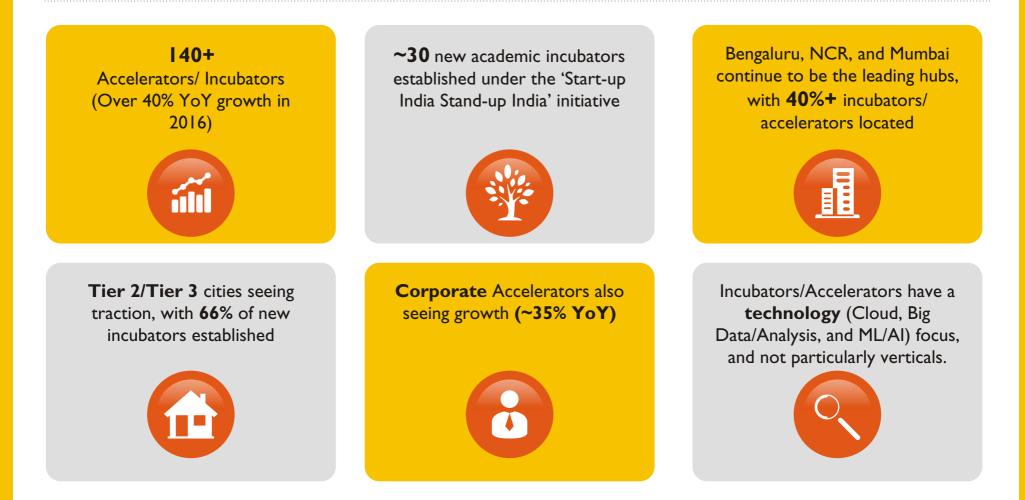
- 140+ incubator & Accelerators across India
- Over 40% YoY growth over 2015 with 40 new additions this year
- Corporate Accelerators continue to enter Indian market to leverage talent



Indian Start-up Ecosystem Maturing - Edition 2016

Incubators and Accelerators – Quick Facts

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



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

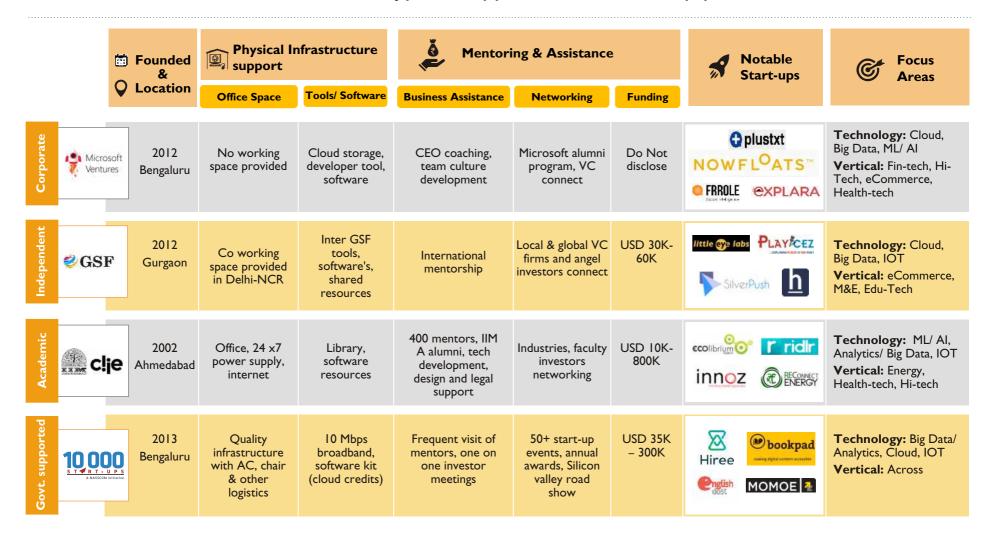


Notes: Incubators provide seed funding, incubate ideas, help in product development whereas Accelerators help start-ups having at least one version of the product in scaling up the business. Source: Zinnov Research & Analysis

> Indian Start-up Ecosystem Maturing - Edition 2016

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

Opportunities

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

Indian Start-up Ecosystem Maturing - Edition 2016

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 woman
- Start-up ecosystem continues to attract talent from start-ups, traditional industry & investors

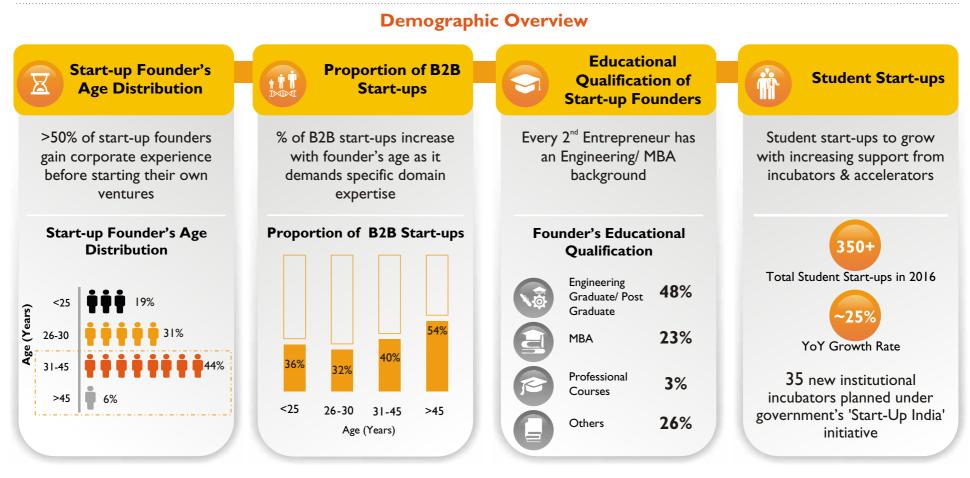




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Start-up Founders – Demographic Insights

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

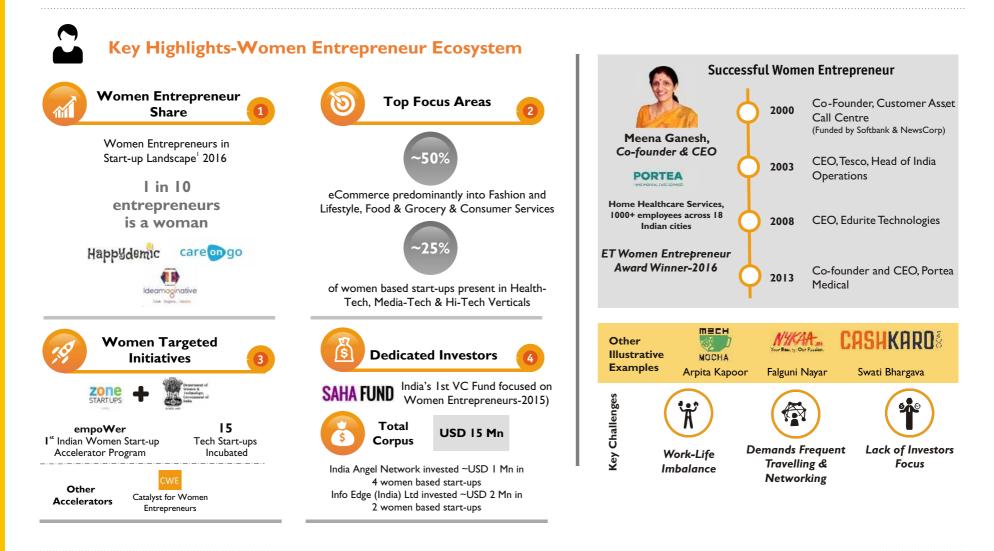


Median age of start-up founders has reduced marginally from 32 years in 2015² to 31 years in 2016²

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



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%¹ 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%¹ 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



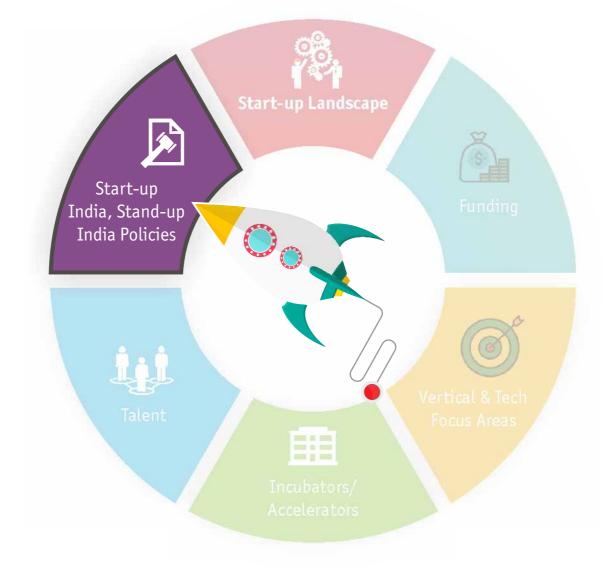
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Source: 'Belong (Bengaluru), Data recorded during Nov, 2015 to April, 2016

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



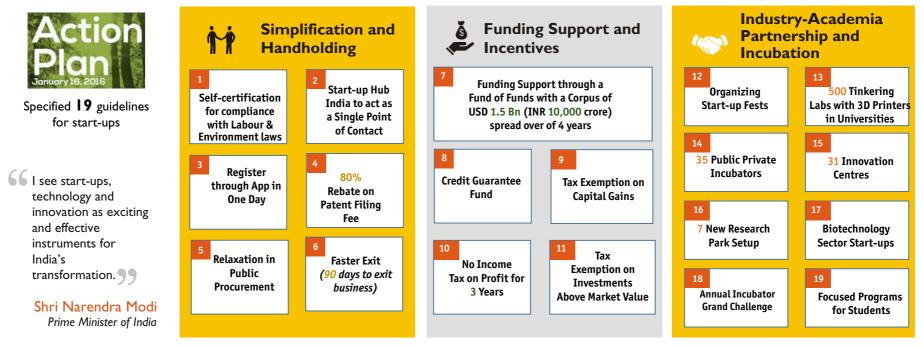
- Action Plan declares 19 guidelines such as self certification, tax exemption, patent fee rebate
- 13+ states have developed start-up policies to develop state level ecosystem



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



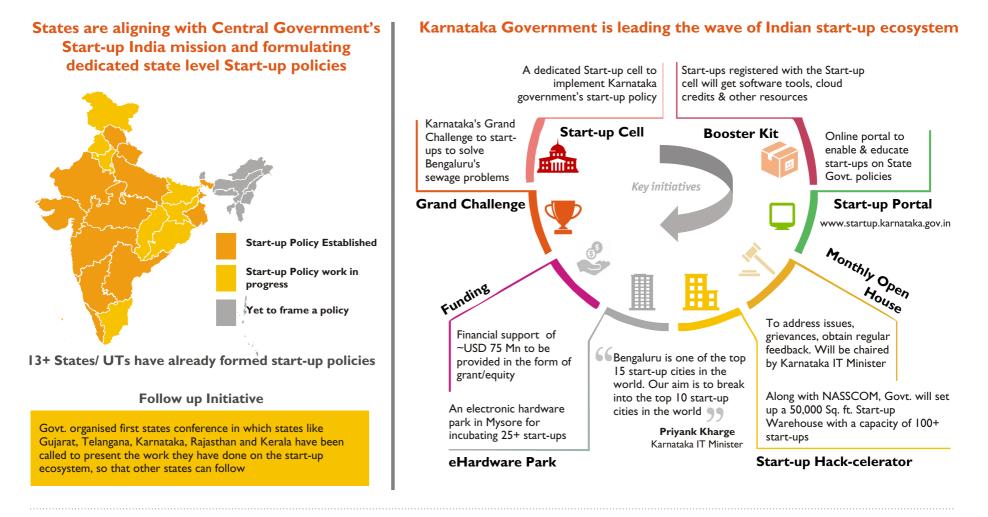
To foster innovation and to promote start-up ecosystem, NITI Aayog plans to set up 100 incubation centres across the country



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



"*" – Funding is for incubation support and start-ups



NASSCOM 10,000 Start-ups Program

START

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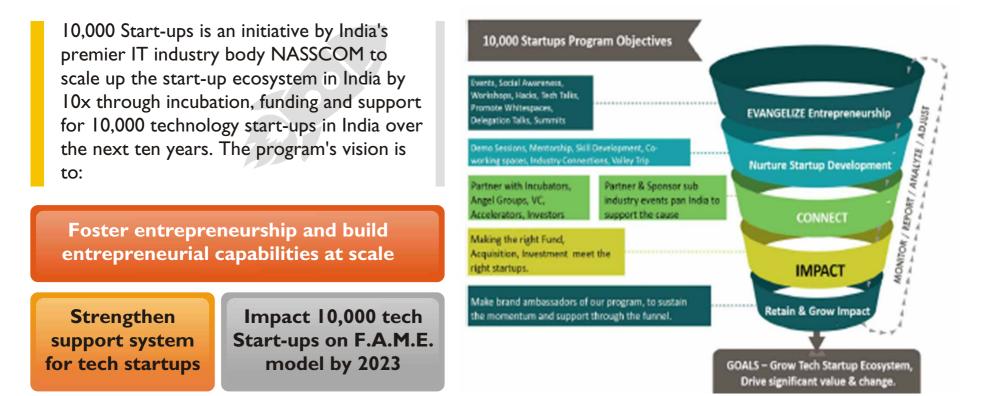
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80

12

About 10,000 Start-ups



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.

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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

Chennai

Mumbai

Bangalore

Kochi

- Hyderabad
- Kolkata
- Vizag
- PuneGurgaon/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. ltd, 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

Start-up Konnect Program

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



Our events facilitate start-ups with connects

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 ¹	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 I28 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

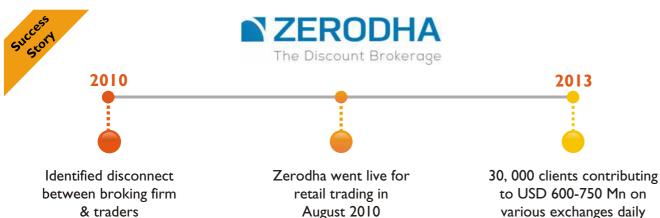
	Total Start-ups	Incorporated in 2016	B2B vs B2C Proportion	Funding (in USD Mn)	Top Investors	HQ split
Media Tech	150-200	75-90	25-30% 70-75%	40-60	Tiger Global, IDG, Unilazer Fund	Leaders: 74% Emergents: 10% Aspirants: 16%
Core Technologies/ Hi-Tech	700-800	150-200	75-85% I 5-25%	240-270	Omidyar Network, Stanford Angels, Accel Partners, Kalaari Capital, Inventus Capital	Leaders: 55% Emergents: 20% Aspirants: 25%
SCM & Logistics	150-170	15-25	<u>60-70%</u> <u>30-40%</u>	100-150	Alpha Capital, Sherpa Capital, Nyca Partners, Thomvest Ventures	Leaders: 82% Emergents: 8% Aspirants: 10%
Food Tech	300-400	50-60	<mark>5</mark> -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	<mark>70-75% 90-95%</mark>	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





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 & ٠ mobile (customer centric solutions)
- Prioritised client satisfaction, got the advantage of word-ofmouth advertising by our clients

66 As a low cost broking business, it was imperative that we kept our operational costs low. Zerodha Team to USD 600-750 Mn on various exchanges daily

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



Sources: YourStory, Zinnov Analysis

Project Scope and Research Methodology

An amalgamation of secondary research, and in consultation with industry thoughtleaders - 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.



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



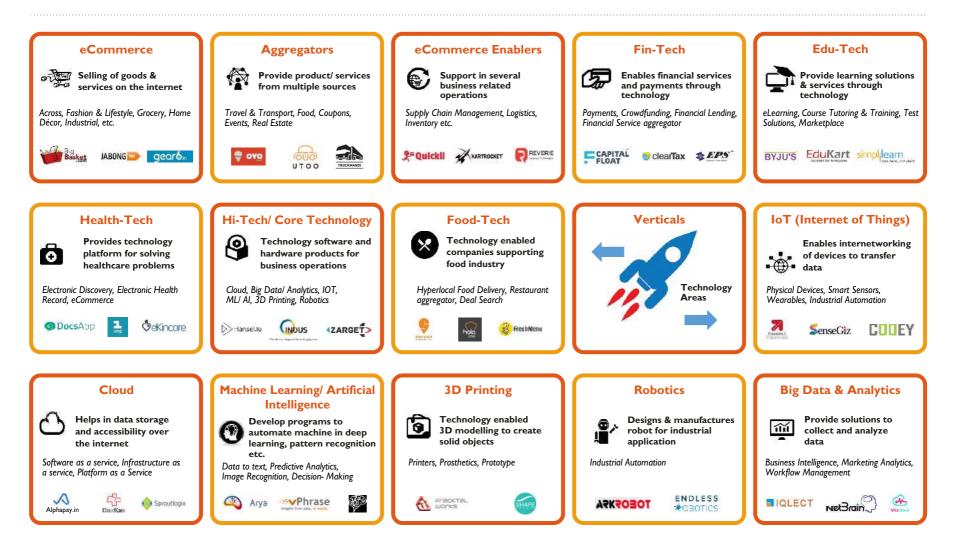
Definitions I/2

Start-ups, Investors, and Incubators/ Accelerators



Definitions 2/2

Verticals and Technology Focus Areas







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