

INDIAN START-UP ECOSYSTEM- Traversing the maturity cycle

Edition 2017



Supported by
Google for Entrepreneurs

NASSCOM[®]

10 000
START-UPS
A NASSCOM initiative

zinno

Copyright © 2017

NASSCOM®

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

Phone: 91-120-4990111

E-mail: research@nasscom.in

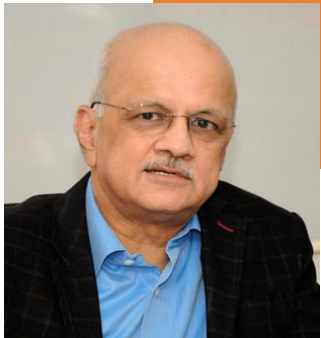
Published by NASSCOM

Disclaimer

The information contained herein has been obtained from sources believed to be reliable. NASSCOM disclaims all warranties as to the accuracy, completeness or adequacy of such information. NASSCOM shall have no liability for errors, omissions or inadequacies in the information contained herein, or for interpretations thereof.

The material in this publication is copyrighted. No part of this report can be reproduced either on paper or electronic media without permission in writing from NASSCOM. Request for permission to reproduce any part of the may be sent to NASSCOM.

FOREWORD



R Chandrashekhar
President, NASSCOM



Pari Natarajan
CEO, Zinnov

India has witnessed an phenomenal progress of the technology start-up ecosystem in the last 10 years. The period was marked by the inception of several thousands of start-ups, rise of unicorn companies with a total current market valuation of over US\$ 32 Bn and the emergence of category leaders in areas of Robotics, Analytics, Edu-tech, Health-tech, Fin-tech, etc. In 2017, the start-up base in India is expected to cross 5000 with a 7% net growth from 2016. The number of new start-ups is likely to come down from 1400+ in 2016 to 1000+ in 2017 as entrepreneurs pivot their business models and explore untapped opportunities.

Multiple indicators point that the Indian start-up ecosystem is traversing the maturity cycle. There has been impressive traction in the B2B space with almost 50% of the new start-ups in 2017 in this segment, up from 34% last year. Number of new additions of Advanced Technology start-ups is also witnessing a five-year CAGR of over 30%.

Indian ecosystem continued to remain attractive for investors with almost US\$ 6.4 Bn of funding in first half of 2017 demonstrating 167% growth over H1 2016. Unicorn funding took centre stage with big deals announced in the year. Foreign investors formed a significant share of the investor mix and non-US investors expanded their investments in Indian start-ups as well.

In addition, the start-up ecosystem also witnessed the mushrooming of a significant base of start-ups building solutions for India centric grass root level problems. 325+ such start-ups are currently solving challenges in Healthcare, Education Inclusion, Financial Inclusion, Clean Energy, Agriculture etc.

The fourth edition of the NASSCOM-Zinnov report titled **“Indian Start-up Ecosystem – Traversing the Maturity Cycle – 2017”** is a compilation of facts, trends, and insights on the Indian tech start-up landscape. The report examines the evolution of the ecosystem, its growth drivers, 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
President, NASSCOM

ACKNOWLEDGEMENT

This report has been co-developed by **NASSCOM** and **ZINNOV MANAGEMENT CONSULTING** through a comprehensive three-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 industry experts who provided insights for the report, along with the research team members that developed this report.

INDUSTRY EXPERTS

Ajeet Khurana (Angel Investor / Mentor)	Gaurav Gupta (Unilever)	Sameer Verma (NexusVP)
Alex Prather, Srikrishna Ramamoorthy (Unitus Seed fund)	Harsh Vaidya (Pitney Bowes)	Sanjay Vijayakumar (Start-up Village)
Anil Chhikara (Marcopolo Ventures)	Lalit Ahuja (ANSR)	Seetharaman Venkatraman (Soc Gen)
Ankush Grover (Innov8)	Mukesh Malik, Abhijeet Kumar (Ah! Ventures)	Shivam Ahuja (Delhi Angels)
Apul Nahata (Brigade Reap)	Murali Nandigama (Goldman Sachs)	Shubhankar Bhattacharya (Kae Capital)
Ashish Fafadia, Dhanasree Molugu (Blume Ventures)	Naveen Asrani (Microsoft)	Simi Joshi (Oracle)
Ashish Taneja (GrowX Ventures)	Nitish Agrawal (SAP)	Sunil K Goyal (Yournest)
Avnish Sabharwal (Accenture)	Padmaja Rurapel (IAN)	Tata Elxsi
Ayush Srivastava (Amazon)	Paul Justin, Anzy Mohammed (SAP Start-up Studio)	Veera Manikandan Raju (Texas Instruments)
Bharat Ravuri (ex-IHS Markit)	Poyini Bhatt (Sine IITB (Society for Innovation and Entrepreneurship))	Venkataraman Seetharaman (Socgen)
Biten Kathrani (Boston Scientific)	Rajesh Dhuddu (Quattro)	
Brij Bhasin (Rebright Partners)	Rajiv Vaishnav (Reliance GenNext Hub)	

RESEARCH TEAM

NASSCOM

- Sangeeta Gupta
- Rakesh Kumar
- Manishree Bhattacharya

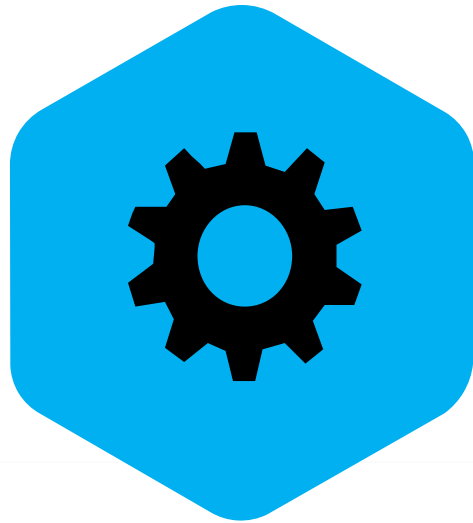
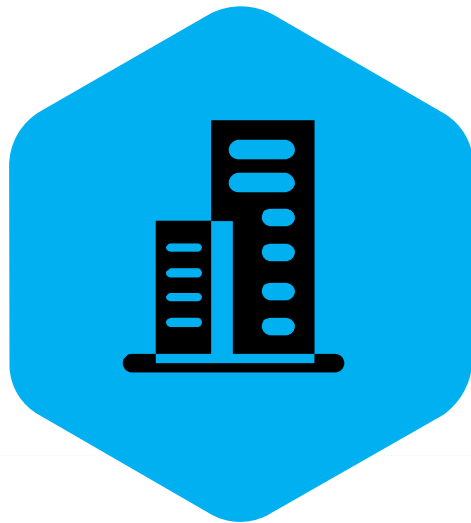


- Praveen Bhadada
- Nischay Mittal
- Abhijeet Gogoi
- Jasleen Kaur
- Neha Jagadeesh

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



Companies incorporated in the **last five years**

One or more Founding members should be of **Indian origin**










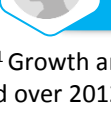
Company headquartered in **India** OR outside with product development centre largely in India

IP-backed **technology product** OR technology **platform** OR eCommerce OR Aggregators considered

EXECUTIVE SUMMARY

India Start-up Landscape 2017

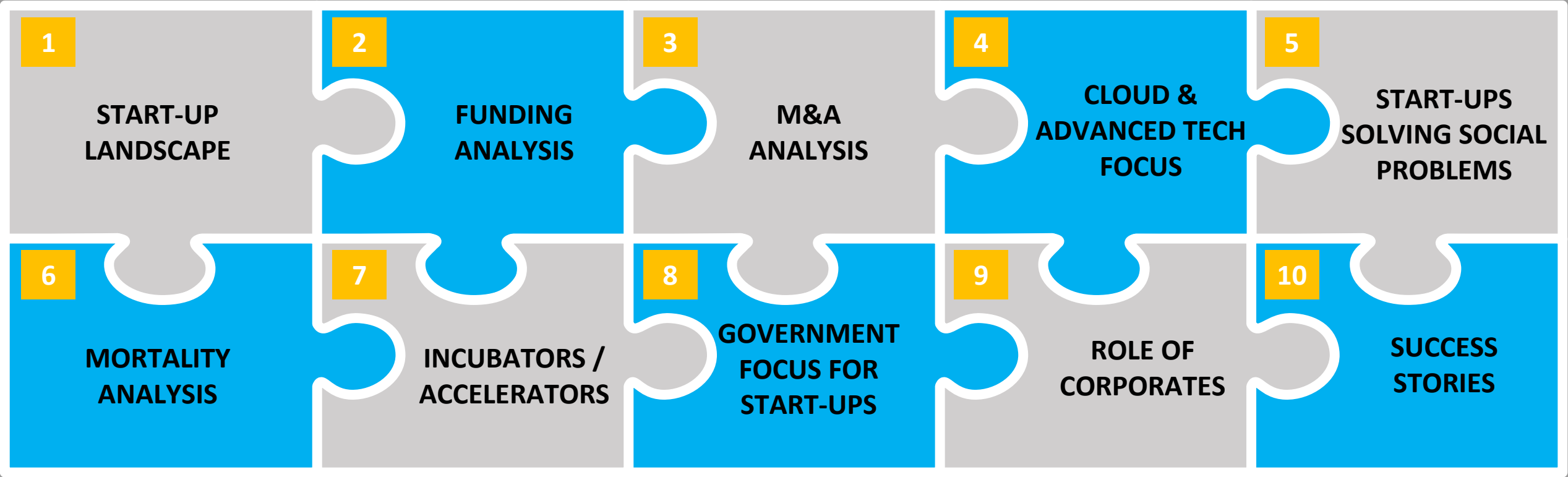
QUICK FACTS¹

	START-UP BASE ²	5000-5200 Total tech start-ups in 2017 Up by 7% YoY 1000 # of new start-up additions in 2017 Down by 29% YoY	Slow-down in new start-up addition, as focus shifts to quality
	START-UP HOTSPOTS	Bengaluru, Delhi NCR & Mumbai form 68% of start-up base Up by 7% YoY	Tier 1 cities ⁸ continue to form the lion share (~80%) of the overall start-up base
	BUSINESS FOCUS ³	B2B start-ups form 40% of the overall start-ups Up by 16% YoY	B2B start-ups continue to gain prominence
	FUNDING ANALYSIS ⁴	\$1.8 Bn Funding raised by start-ups so far in H1 2017 Down by 14% \$6.2 Mn Average funding per funded start-ups Up by 7%	Cautious investors shifting money from Seed Stage to Early/Growth Stage
	INVESTOR MIX ³	44% Foreign investors among 500+ active investors in H1 2017 Non-US forms 45% of foreign investor mix	Increasing traction from Foreign Investors, esp. from non-U.S. geos
	VERTICAL FOCUS ³	Aggregators / eCommerce: \$1.1 Bn funding Up by 22% Fin-Tech: \$200 Mn funding Up by 135%	Investors continue to remain bullish on Aggregators / eCommerce and Fin-Tech verticals
	ADVANCED TECH FOCUS ⁵	700+ Advanced Tech start-ups 30%+ CAGR for new start-up additions since 2012	Key focus on Analytics, Artificial Intelligence and Internet of Things
	START-UPS SOLVING SOCIAL PROBLEMS ⁶	325 Start-ups focused at solving core India problems Up by 18% YoY	Rise of new breed of start-ups solving key India problems
	MORTALITY ANALYSIS ⁷	20-25% overall mortality rate Further reduction in share of B2B in failed start-ups from 36% in 2016 to 30% in 2017	B2B start-ups more likely to survive vis-à-vis B2C start-ups
	INCUBATORS / ACCELERATORS	190+ active Incubators/Accelerators Up by 36% YoY	Continued growth of Incubators / Accelerators

Note: ¹ Growth and de-growth %ages are for H1-2017 over H1-2016 (unless specified otherwise); ² Start-up numbers for 2017 estimated based on analysis of data for Jan – Jul’2017 period; ³ Extrapolated based on analysis of 2100+ start-ups formed over 2012-2017 period; ⁴ Analysis of funding data for H1-2017; ⁵ Includes Analytics/Advanced Analytics, Artificial Intelligence, IOT, AR/VR, Robotics, 3D Printing, Blockchain; ⁶ Start-ups working to solve India problems such as Clean Energy, Agriculture, Education Inclusion, Healthcare, Financial Inclusion, etc.; ⁷ Mortality rate incl. analysis done for start-up mortality across 5 Years (2012-2017); ⁸ Includes Delhi NCR, Mumbai, Bangalore, Kolkata, Hyderabad, Chennai

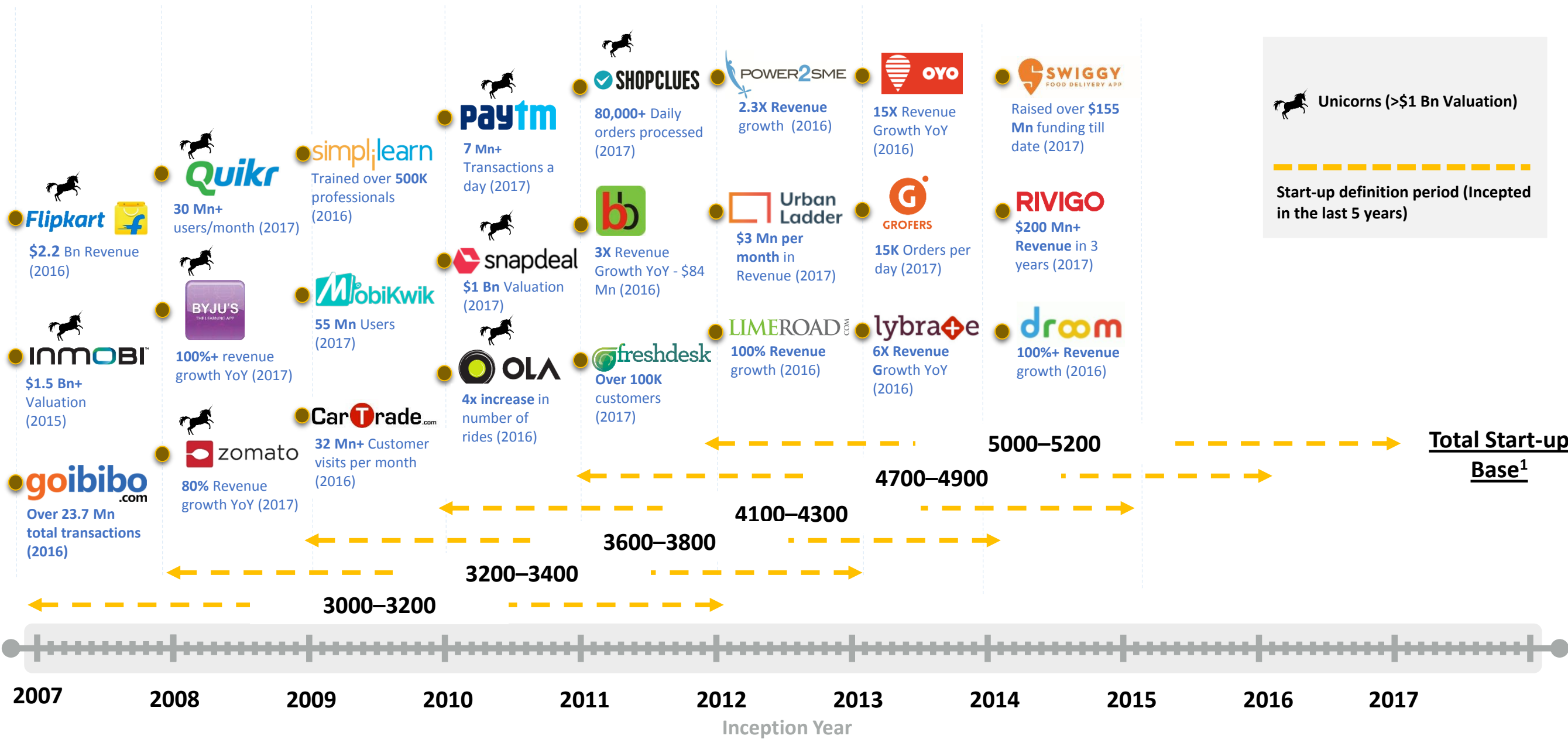
OBJECTIVE OF
REPORT

- This report analyzes –
- ✓ Current scenario and emerging trends that define the Indian start-up ecosystem
 - ✓ 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, and Corporates in nurturing the start-up ecosystem



PROMINENT START-UPS OF THE YESTERYEARS (LAST 10 YEARS)

Over the past 10 years, India has seen inception of several prominent start-ups projecting tremendous growth stories

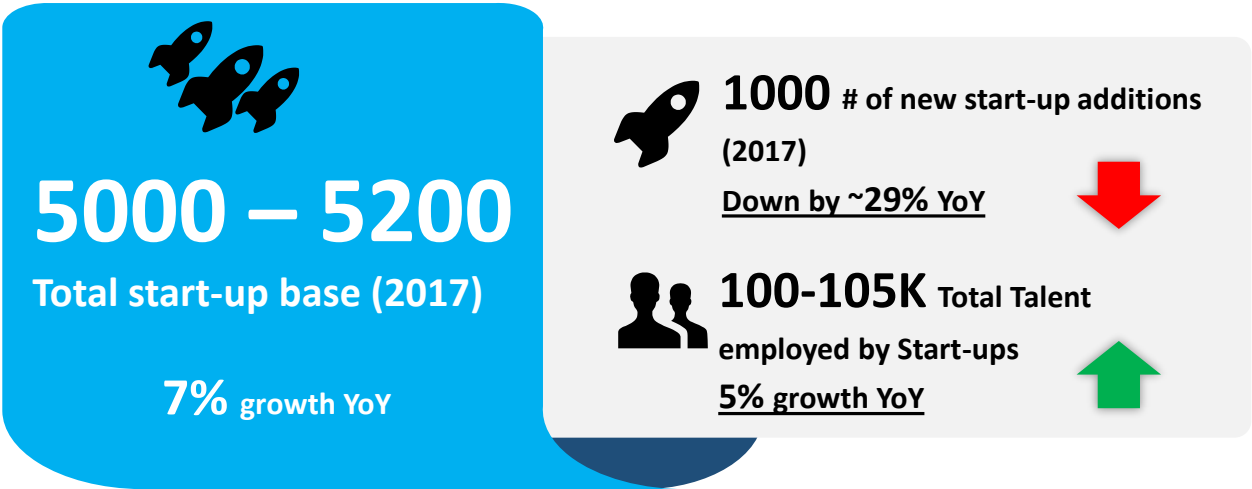


Note: ¹ Start-up base for 2012 and 2013 estimated based on average growth across 2014-2017; Start-up base for 2014, 2015 and 2016 taken from NASSCOM-Zinnov Start-ups reports

Source : Zinnov Research & Analysis, CrunchBase, TechCrunch (For Valuations), AngelList, Tracxn, Press Articles, Inc42

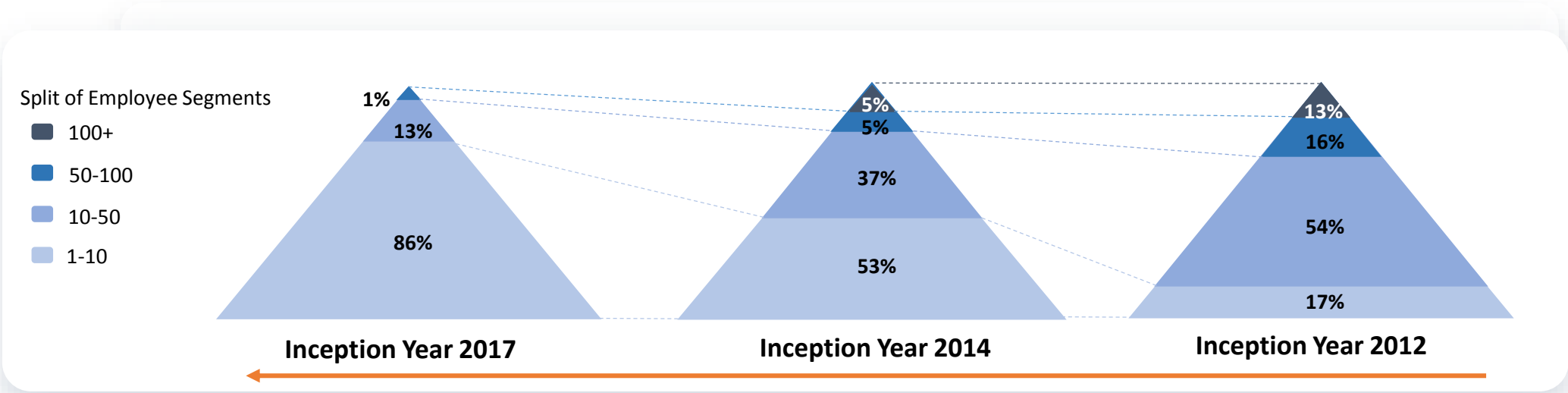
START-UP BASE AND GROWTH – 2017¹

Indian tech start-up base to reach 5000+ in 2017; slowdown in new start-up addition, as founders explore untapped opportunities



- Improvement in the quality of start-ups
- Rise of ‘**Verticalized or Specialized**’ Aggregators/eCommerce start-ups
 - **47% B2B start-ups** in the new start-up additions in 2017
 - **15% Advanced Technology start-ups** in the new start-up additions (such as Analytics, AI and IoT)
 - **18% SaaS start-ups** in the overall start-up base

Employee Pyramid – across start-ups incepted from 2012 - 2017²



Consistent growth in employee base witnessed as start-ups attain maturity

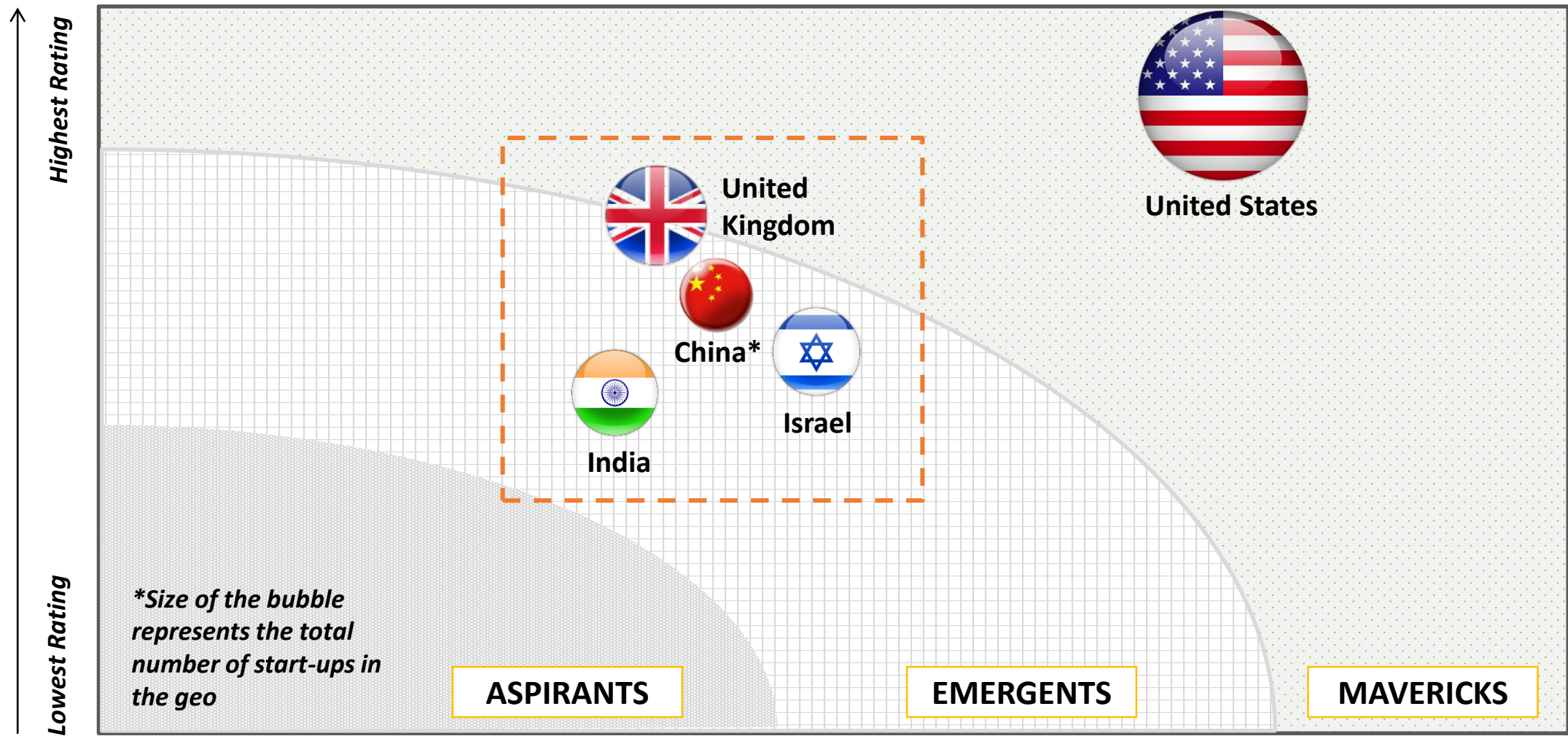
Note: ¹Start-up numbers for 2017 estimated based on analysis of data for Jan – Jul’2017 period; ²Employee pyramid analysis based on a sample of employees of 2100+ start-ups formed over 2012-2017 period
Source : Zinnov Research & Analysis, CrunchBase, AngelList, Tracxn, Start-up India Website, Inc42

GLOBAL START-UP COMPARISON FRAMEWORK

India is now competing with Israel to be the 3rd largest start-up base, while U.S. and UK retain the top two spots

Govt. Focus & Country Specific Indices

= f [Government Initiatives (Govt. Policies, Govt. Funding), Country Specific Indices (Global Innovation Index, Ease of Doing Business)]



Lowest Rating **Start-up Activity Index** Highest Rating

= f [Landscape (Total Start-ups, Start-up Per Capita, Acquisitions), Unicorns Analysis, Investors Ecosystem & Funding, Advanced Tech Focus]

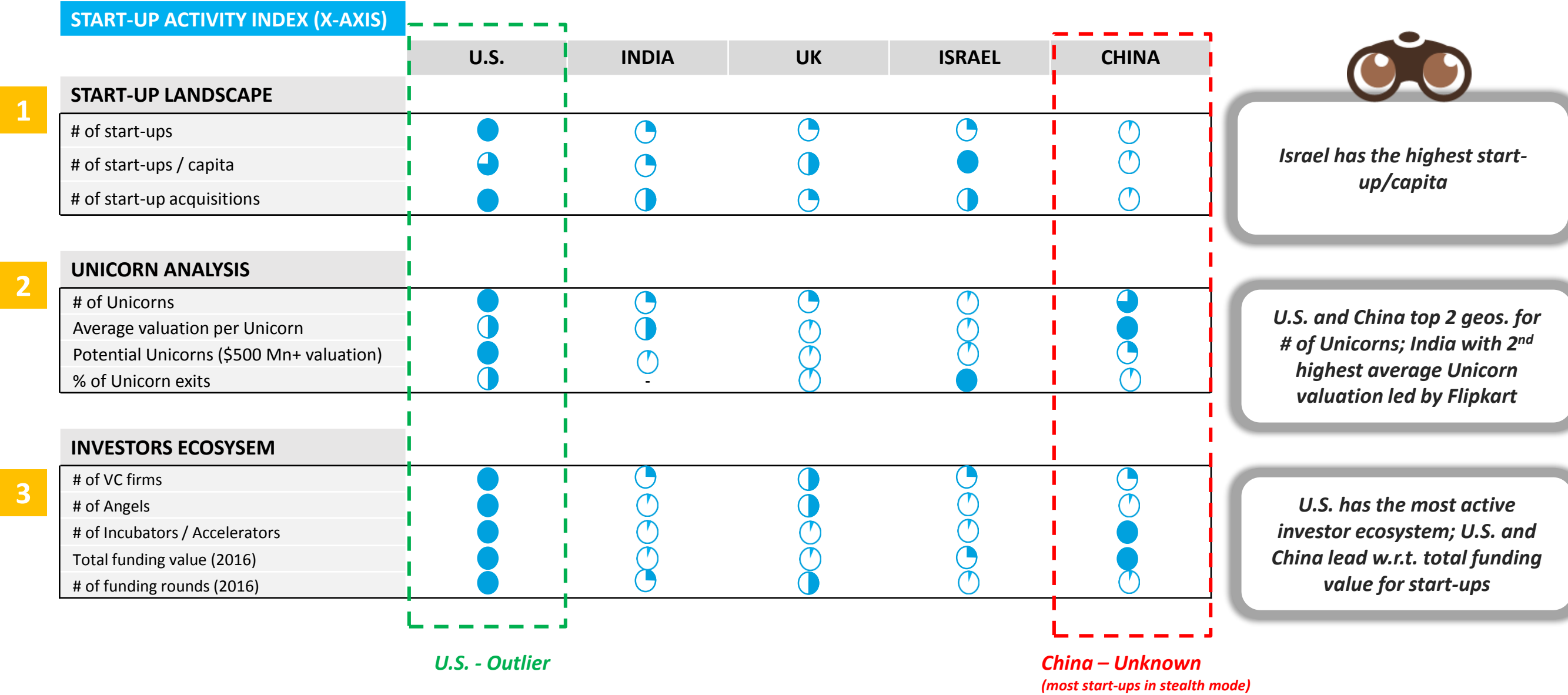
Note: Definitions: Mavericks – Evolved countries with mature start-up ecosystem; Emergents – Countries where start-up ecosystem is evolving at a rapid pace aided by increasing investments, Govt initiatives, etc.; Aspirants – Countries where start-up ecosystem is beginning to grow; however, lacks in terms of enablers such as investments, Govt. Initiatives, etc.

* China – unknown territory since several start-ups and their activities in stealth mode

Source : Zinnov Research & Analysis, CrunchBase, AngelList, World Bank Report

GLOBAL START-UP COMPARISON – RELATIVE RATINGS & DEEP-DIVE (1/2)¹

While U.S. is a clear outlier, Indian start-up ecosystem showed similarities to Israel and UK



GLOBAL START-UP COMPARISON – RELATIVE RATINGS & DEEP-DIVE (2/2)¹

India showed progress w.r.t. government initiatives; however, still requires improvement in Global indices

4

TECH / ADVANCED TECH FOCUS
% of Consumer-Tech start-ups (2012-17) ²
% of Advanced Tech start-ups (2012-17)
Avg. funding for Advanced Tech start-ups

U.S.	INDIA	UK	ISRAEL	CHINA



Israel shows the highest % of Advanced Tech start-ups

GOVT FOCUS & COUNTRY SPECIFIC INDICES (Y-AXIS)

1

GOVT. FOCUS & INITIATIVES
Govt. start-up policies & initiatives
Govt. Funding & Investment

2

COUNTRY SPECIFIC INDICES
Global Innovation Index (GII) ³
Ease of Doing Business

Though India has shown good progress in Govt. initiatives, it still requires improvement in Global indices³

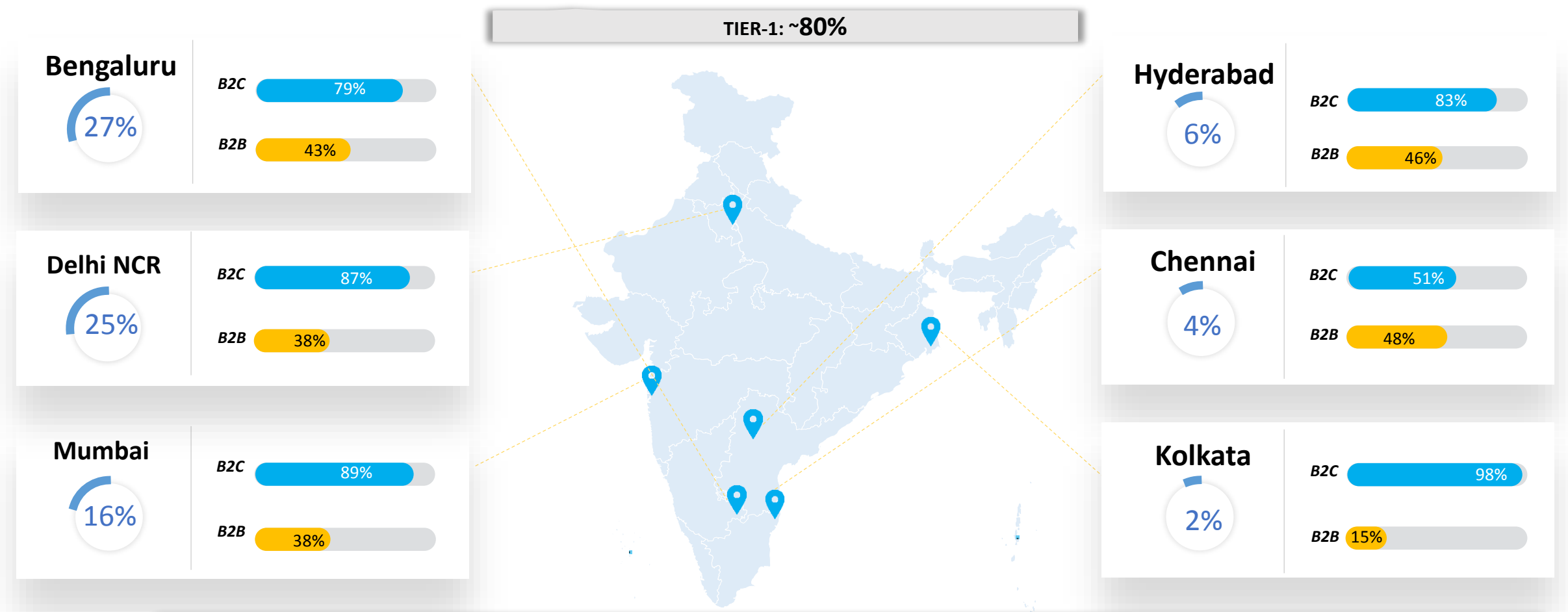
U.S. - Outlier

China – Unknown
(start-ups in Stealth Mode)

Note: ¹ Weightages used for Rating: X-Axis – Start-up Landscape (25%), Unicorn Analysis (15%), Investor Ecosystem (35%), Tech/Advanced Tech Focus (25%); Y-Axis – Govt. Focus & Initiatives (60%), Country Specific Indices (40%); ² Consumer-Tech includes Start-ups across Music, Messaging, Social Media, Gaming, eCommerce, Marketplace, Mobile Payments, Lifestyle, Travel & Accommodation, Edutainment, Fitness, Personal Finance, etc.; ³ Global Innovation Index (GII) is a function of parameters such as ICT services exports, graduates in science and engineering, e-participation, presence of global R&D companies, government’s online service, general infrastructure, creative goods exports, knowledge impact, and intellectual property payments
Source : Zinnov Research & Analysis, CrunchBase, AngelList, World Bank Report

LOCATION ANALYSIS – TIER 1 CITIES^{1,2,3}

Bengaluru, Delhi NCR and Mumbai continue to be the leading start-up hubs, with ~2/3rd of the overall start-up base



- ~80% start-ups are concentrated in tier 1 Cities
- Chennai & Hyderabad with maximum proportion of B2B start-ups, led by the presence of tech institutions and GICs⁴

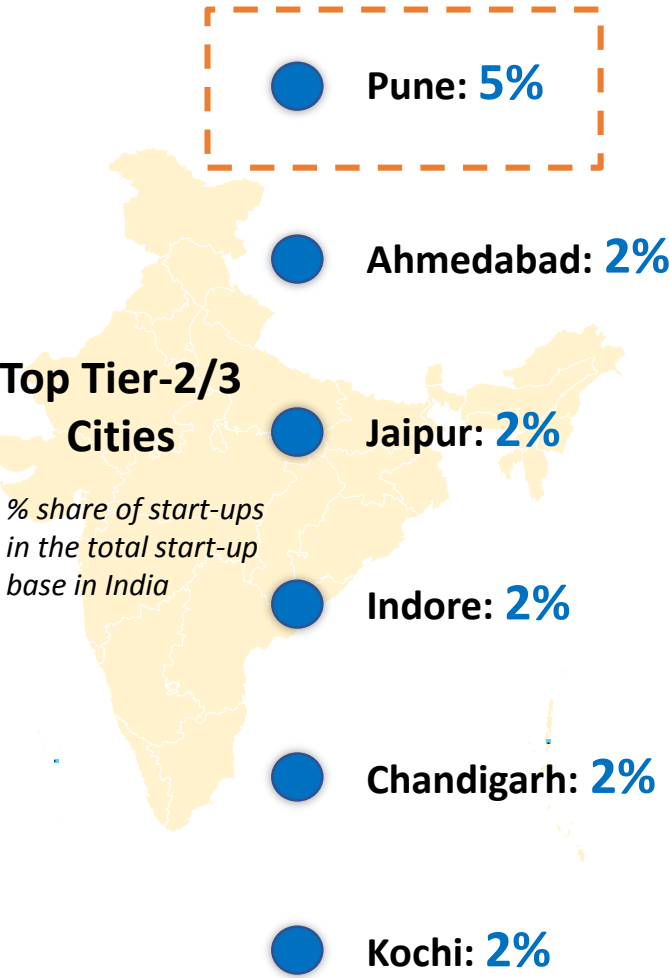
Note: ¹ % represents share of start-ups in a particular city amongst total # of start-ups in India; ² % within bars represent the B2C/B2B focus of start-ups within each city; ³ Number of Start-ups across cities estimated based on a sample of 2100+ start-ups incepted between 2012-2017 period; ⁴Hyderabad and Chennai feature among the top 5 locations for R&D / GIC talent in India
Source : Zinnov Research & Analysis, CrunchBase, AngelList, YourStory

LOCATION ANALYSIS – TIER 2/3 CITIES^{1,2}

Promising start-ups also emerging from tier-2/3 cities, which account for 20% of start-up base (up from 16% in 2016)

Promising start-ups across top tier-2/3 cities

Other illustrative examples



	<p>Inception Year: 2015 Vertical: SCM & Logistics Funding Raised: Undisclosed</p> <ul style="list-style-type: none">Currently handles over 100,000 deliveries a day
	<p>Inception Year: 2014 Vertical: Fin-Tech Funding Raised: \$12.5 Mn</p> <ul style="list-style-type: none">1000+ loans worth ~\$250 Mn disbursed across tier 2/3 cities1 acquisition made – KountMoney (Fin-tech)
	<p>Inception Year: 2012 Vertical: Jewellery Aggregator/eCommerce</p> <ul style="list-style-type: none">Plans to achieve revenue of \$75 Mn till 2020 at 70%+ growth (3-year CAGR)
	<p>Inception Year: 2014 Vertical: Enterprise Product (Cloud Solutions Provider)</p> <ul style="list-style-type: none">Acquired 2 companies in 2016 – DGWHyperloop and Aphelion Labs Pvt. Ltd.
	<p>Inception Year: 2014 Vertical: Travel & Hospitality</p> <ul style="list-style-type: none">Witnessed over 100% increase in bookings across critical markets such as NCR and Bengaluru
	<p>Inception Year: 2015 Vertical: Edu-tech Funding Raised: Undisclosed</p> <ul style="list-style-type: none">~\$65k revenue in 2016, with tie-ups with 64 institutes, 420 teachers, and 35,000 students













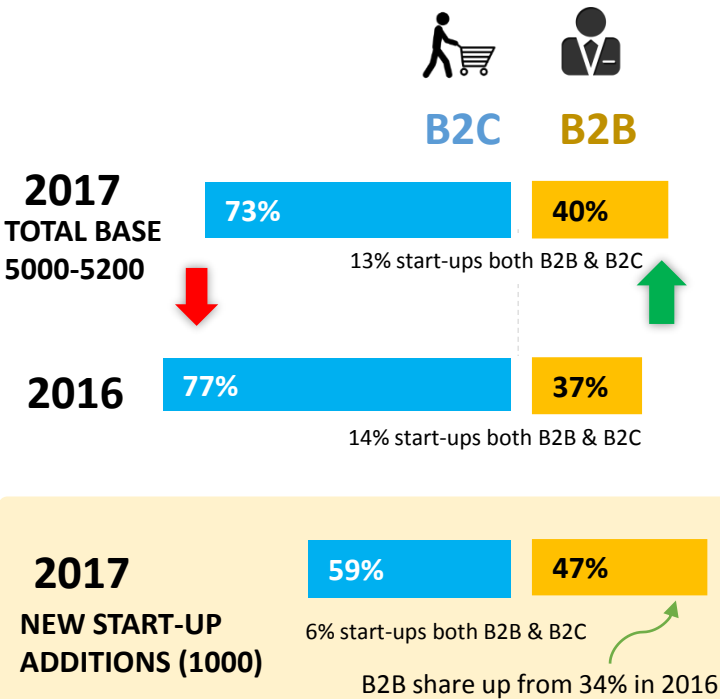
Note: ¹ % represents share of start-ups in a particular city amongst total # of start-ups in India; ² Number of start-ups across cities estimated based on a sample of 2100+ start-ups incepted between 2012-2017 period, Source : Zinnov Research & Analysis, CrunchBase, AngelList, YourStory

BUSINESS FOCUS ANALYSIS - B2B & B2C

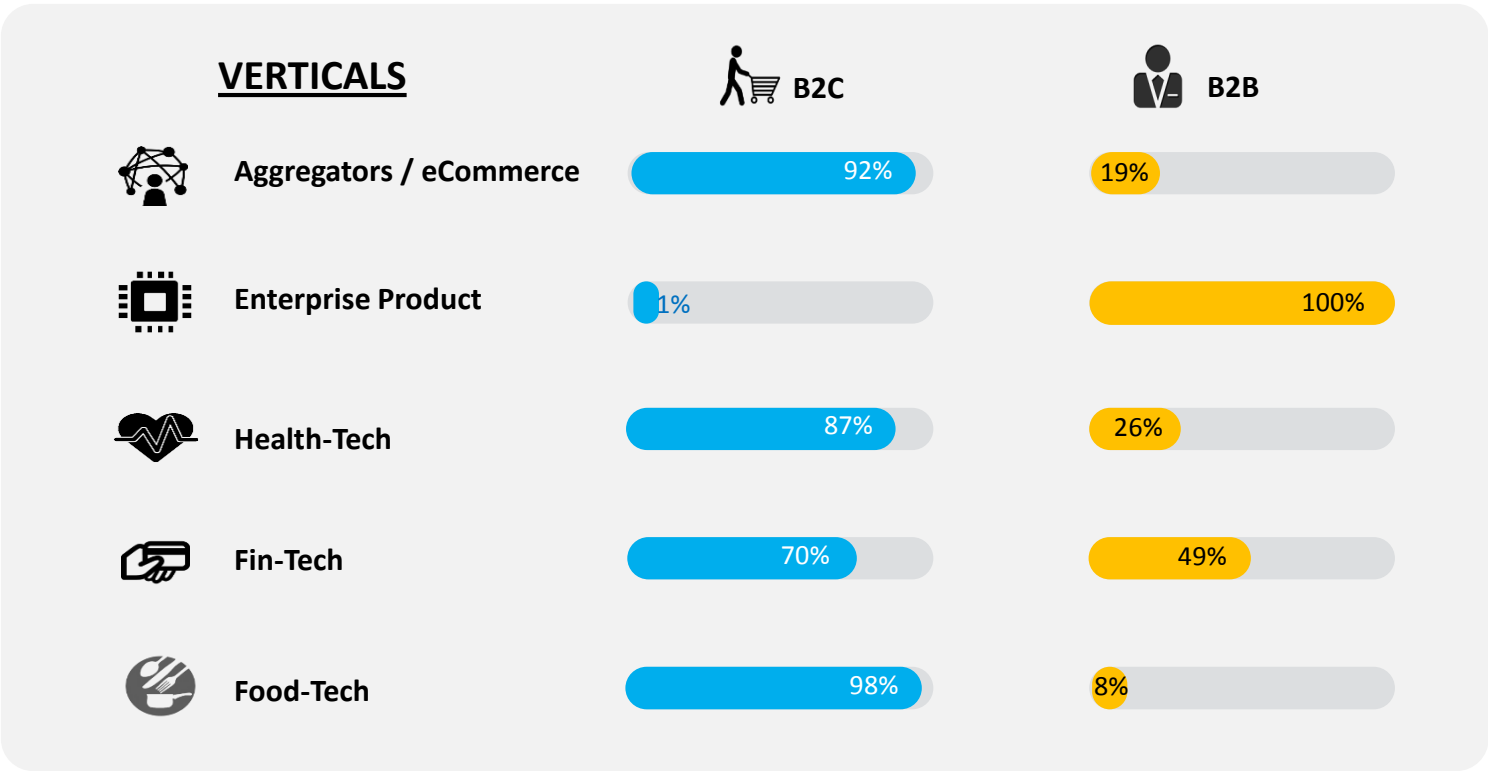
LANDSCAPE

Share of B2B in newly incorporated start-ups (47%) higher than B2B share in the overall start-up base (40%)

B2B v/s B2C focus of start-ups¹



B2B v/s B2C focus across verticals²



Sum of B2B, B2C % within a vertical would be higher than 100% due to overlaps



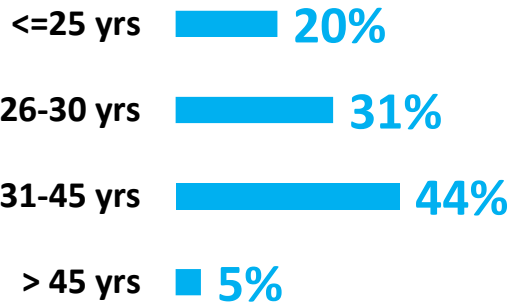
- *Share of B2B in newly incorporated 2017 start-ups is 1.2X the share of B2B in the overall start-up base*
- *Enterprise product emerges as the top vertical for B2B start-ups, followed by fin-tech*

Note: ¹Sum total of %ages would be greater than 100% due to overlaps in B2B and B2C start-ups. 13% start-ups had both B2B & B2C focus (in 2017) while 14% start-ups had both B2B & B2C focus (in 2016); ²B2B / B2C overlaps across verticals: Aggregator/eCommerce (11%); Enterprise Product (1%), Health-tech (13%), Fin-tech (19%), Food-tech (6%), Travel & Hospitality (12%)
Source : Zinnov Analysis, CrunchBase, Angellist, YourStory

DEMOGRAPHIC ANALYSIS OF FOUNDERS¹

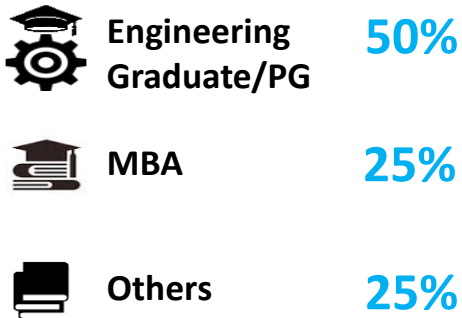
Diversification of talent, with both student and experienced entrepreneurs at the helm

Age Distribution



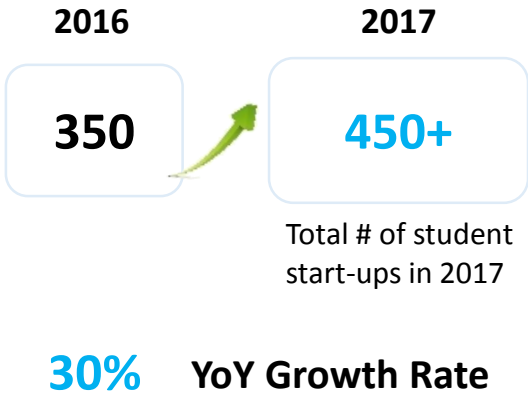
Median age of founders:
2017 – 32 years | 2016 – 31 years

Educational Qualification



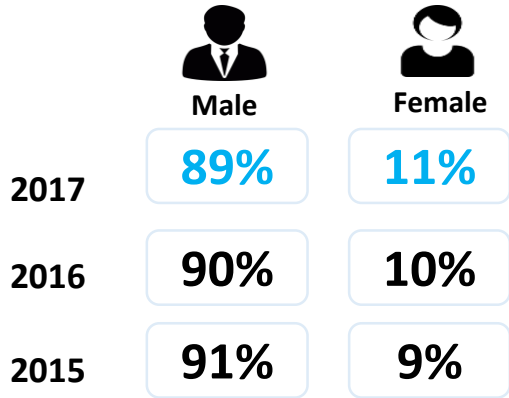
Others incl. CA/Financial Diploma, MBBS, BCA/MCA, BA/MA, etc.

Student Start-ups



Total # of student start-ups in 2017

Female Entrepreneurs



~50% of the founders are more than 30 years of age

50% of start-up founders have Engineering background

~30% growth in student start-ups, driven by growth in academic incubators

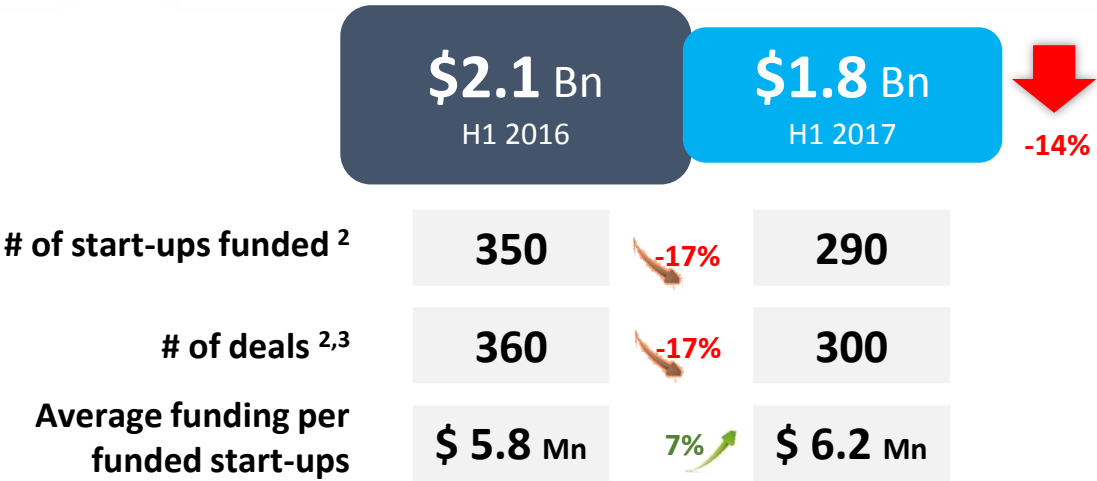
Consistent increase in % of female entrepreneurs since 2015

OVERALL FUNDING LANDSCAPE – H1 2017


FUNDING


Though Unicorn funding showed an exponential growth, “Start-up” funding reduced in H1 of 2017

Funding for start-ups incepted 2012 onwards – H1 2017¹

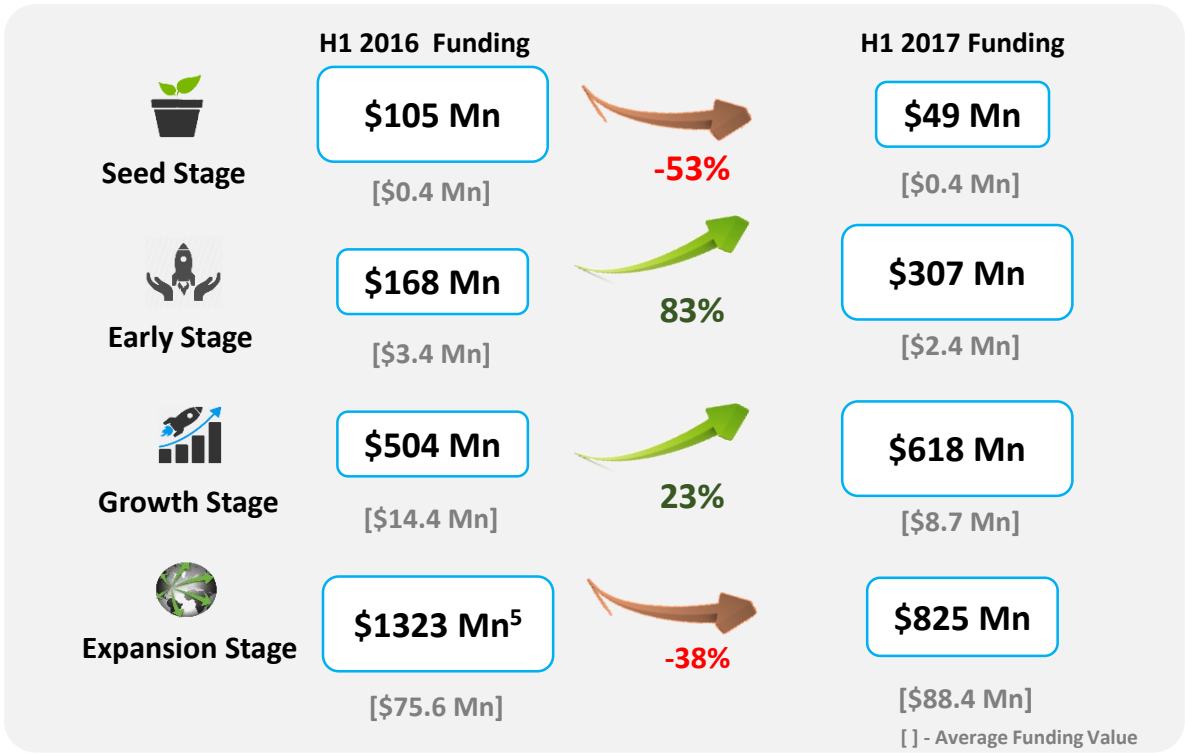


Total start-up ecosystem funding in H1 of 2017

 **Unicorns raised in excess of \$3.8 Bn in H1 2017**

 **Companies incepted before 2012 raised \$0.8 Bn**

Analysis of funding across stages⁴



Though both funding value and # of deals dropped in H1 2017 (compared to H1 2016), funding per start-up grew by 7%



Cautious investors shifting money from Seed stage start-ups to Early and Growth stage start-ups

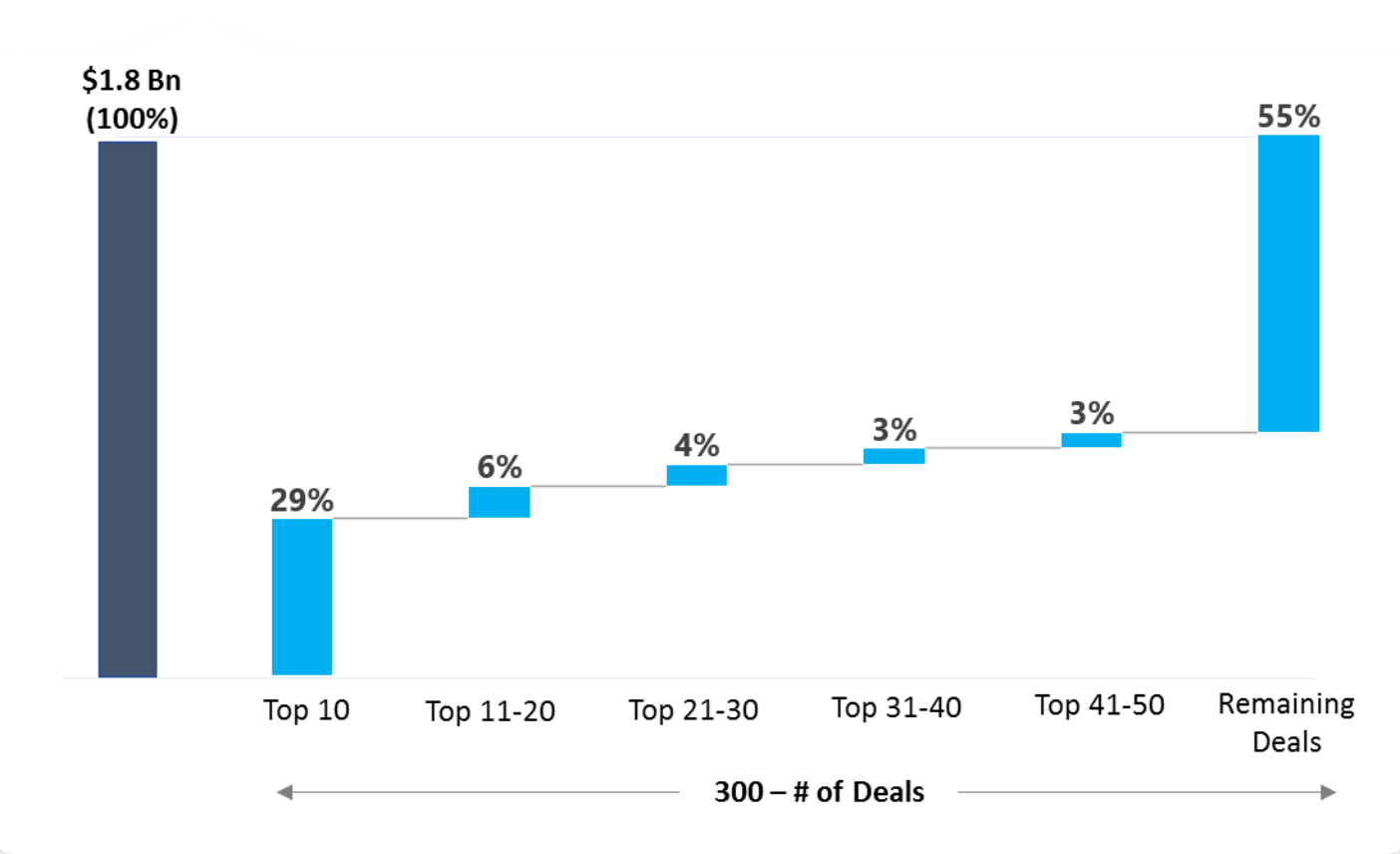
Note: ¹ Estimates based on average deal size and number of deals (extrapolated based on number of deals within H1- 2017). Deals worth \$ 1.8 Bn already closed by end of H1-2017; ² Extrapolated based on data recorded till the end of H1-2017; ³ Based on multiple rounds of funding in start-ups funded in H1-2017; ⁴ Definition of funding stages: Seed Stage - <\$1 Mn, Early Stage - \$1-5 Mn, Growth Stage - \$5-20 Mn, Expansion Stage - >\$20 Mn; ⁵ Expansion stage in 2016 also includes \$638 Mn raised by start-ups incepted in 2011 (such as Byju, Big Basket, Qubole etc.) and Unicorns (such as ShopClues and Hike)

Source : Zinnov Research & Analysis, Tracxn, CrunchBase

FUNDING ANALYSIS ACROSS TOP DEALS

Top 10 deals alone amounted to ~30% of the overall funding value

Analysis of Funded Deals (H1 2017)



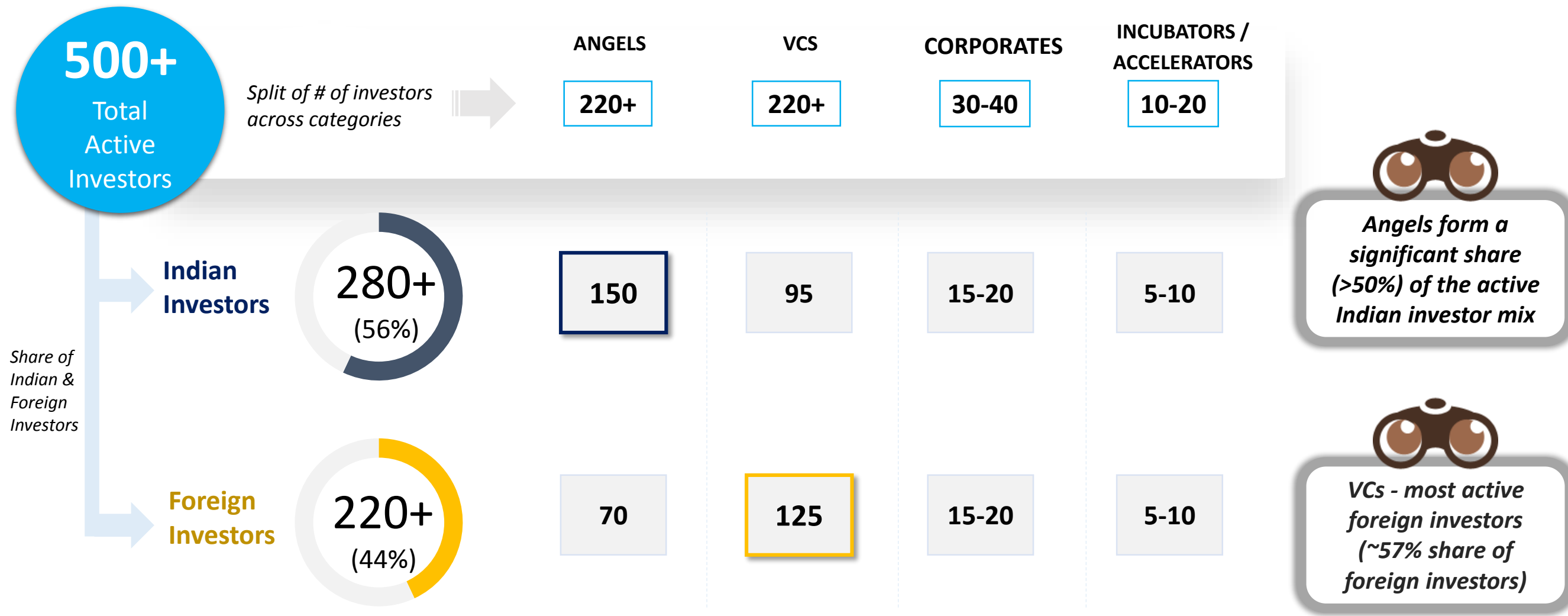
Top 50 deals (i.e. 16% deals) accounted for nearly ~45%+ of the total funding value

Top 10 Deals & Investors (H1 2017)

1		Funding: \$250 Mn Vertical: Aggregator / eCommerce	Investors: SoftBank Vision Fund, Lightspeed Venture Partners, Sequoia Capital India Advisors, Greenoaks Capital Partners
2		Funding: \$80 Mn Vertical: Food-tech	Investors: Accel India, SAIF Partners, Bessemer Venture Partners, Harmony Partners, Norwest Venture Partners
3		Funding: \$70 Mn Vertical: SCM & Logistics	Investors: Sands Capital, IFC, Accel Partners, Flipkart
4		Funding: \$21 Mn Vertical: Aggregator / eCommerce	Investors: Vy Capital, SAIF Partners, Accel Partner, Bessemer Venture Partners
5		Funding: \$21 Mn Vertical: Health-tech	Investors: Mahindra Partners, Eight Roads Ventures, F-Prime Capital Partners
6		Funding: \$18 Mn Vertical: Health-tech	Investors: Bessemer Venture Partners, Orios Venture Partners, Trifecta Capital
7		Funding: \$15.2 Mn Vertical: Aggregator / eCommerce	Investors: Kalaari Capital, SAIF Partners, Steadview Capital, Sequoia Capital
8		Funding: \$15 Mn Vertical: SCM & Logistics	Investors: Private Sector Banks (Debt Funding)
9		Funding: \$15 Mn Vertical: Fin-tech	Investors: Softbank Ventures Korea, IMM Investment
10		Funding: \$15 Mn Vertical: Edu-tech	Investors: CapitalG, Sequoia India

ANALYSIS OF ACTIVE INVESTORS (H1 2017)¹

Foreign investors formed a significant share (44%) of active investors, led by VCs

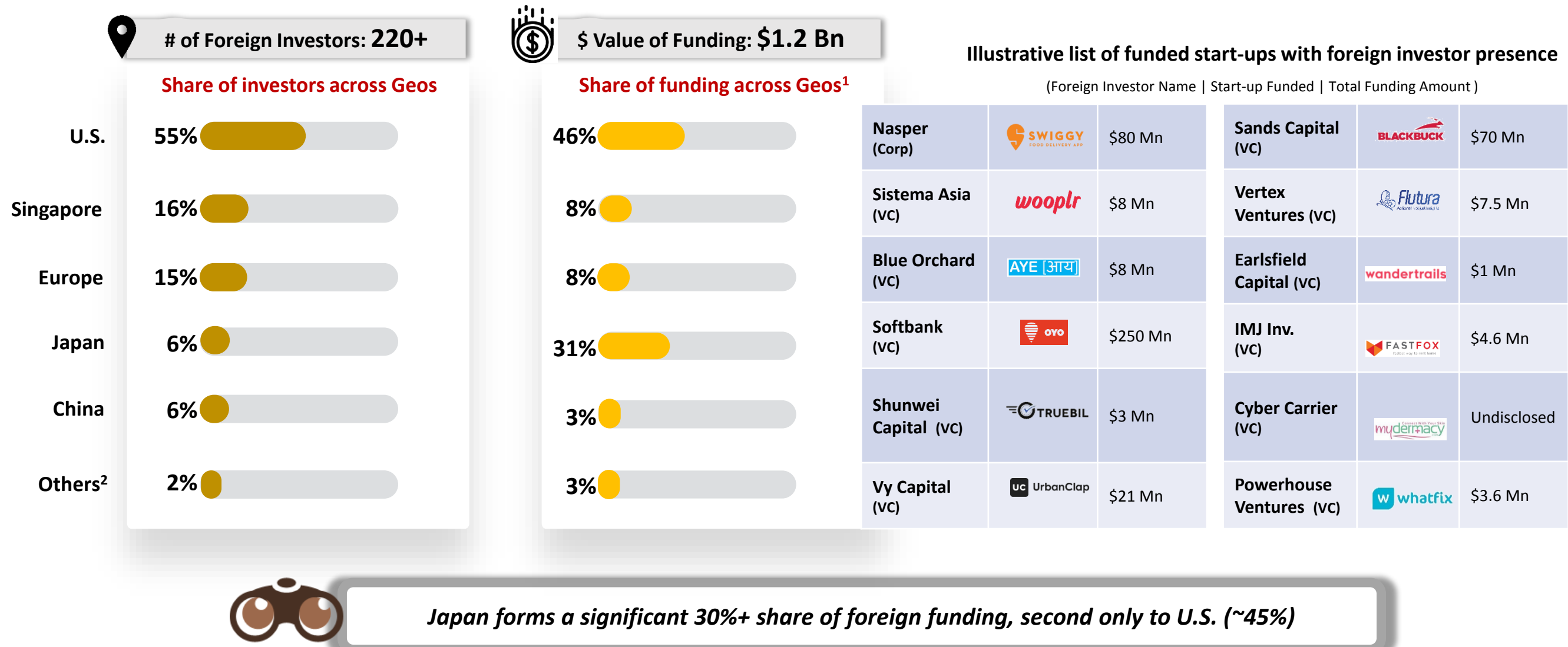


Note: ¹ Estimated based on data recorded till the end of H1-2017;
Source : Zinnov Research & Analysis, CrunchBase, Tracxn, YourStory, Inc42

DEEP DIVE ON FOREIGN INVESTORS & FUNDING (H1 2017)

FUNDING

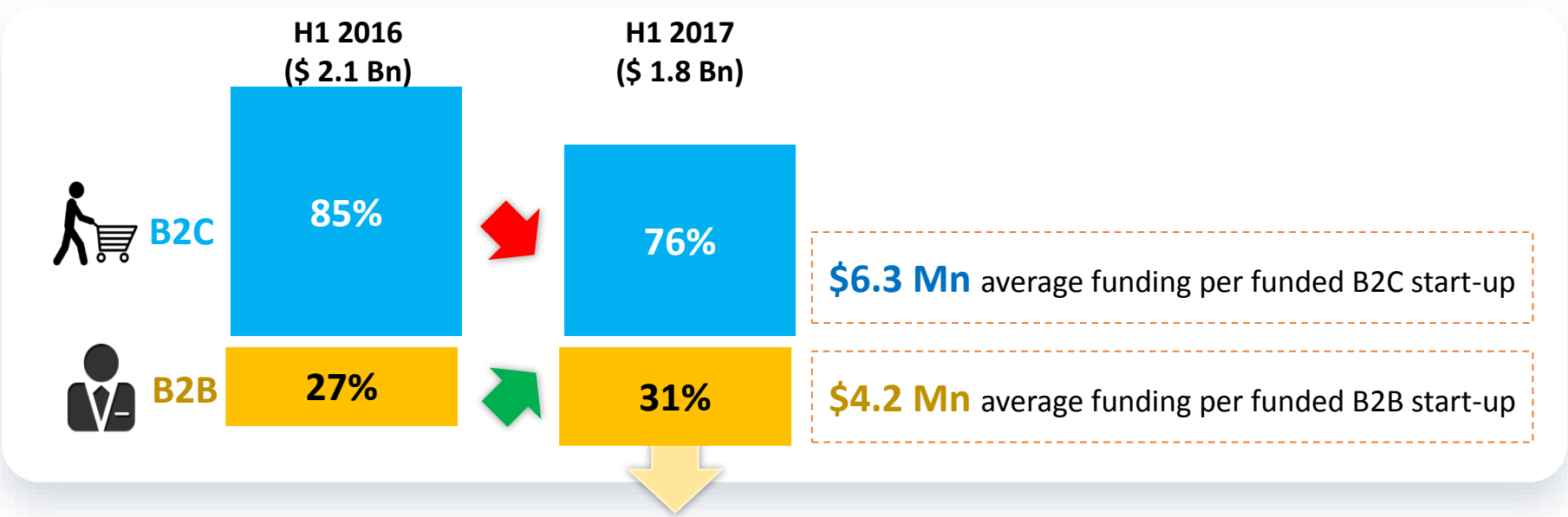
Non-U.S. investments formed a sizeable share of >50% of the foreign funding value



BUSINESS FOCUS OF FUNDED START-UPS

B2C continues to have a significant share in funding; however, B2B share rises from 27% in 2016 to 31% in 2017

Funding Split by Business Focus (B2C/ B2B)^{1,2}



B2B share of funding increased from 27% in 2016 H1 to 31% in 2017 H1

Prominent B2B Funded Start-ups

\$10 Mn Funding

(Data analytics for mobile audience engagement)

Investor:
Star India Pvt Ltd

\$10 Mn Funding

(Enables SMBs to build their online presence)

Investor:
Blume Ventures, Omidyar Network

\$8 Mn Funding

(Financial services to SMBs in north India)

Investor:
Blue Orchard

\$7 Mn Funding

(Logistics and distribution platform)

Investor:
Kalaari Capital, Norwest Venture Partners

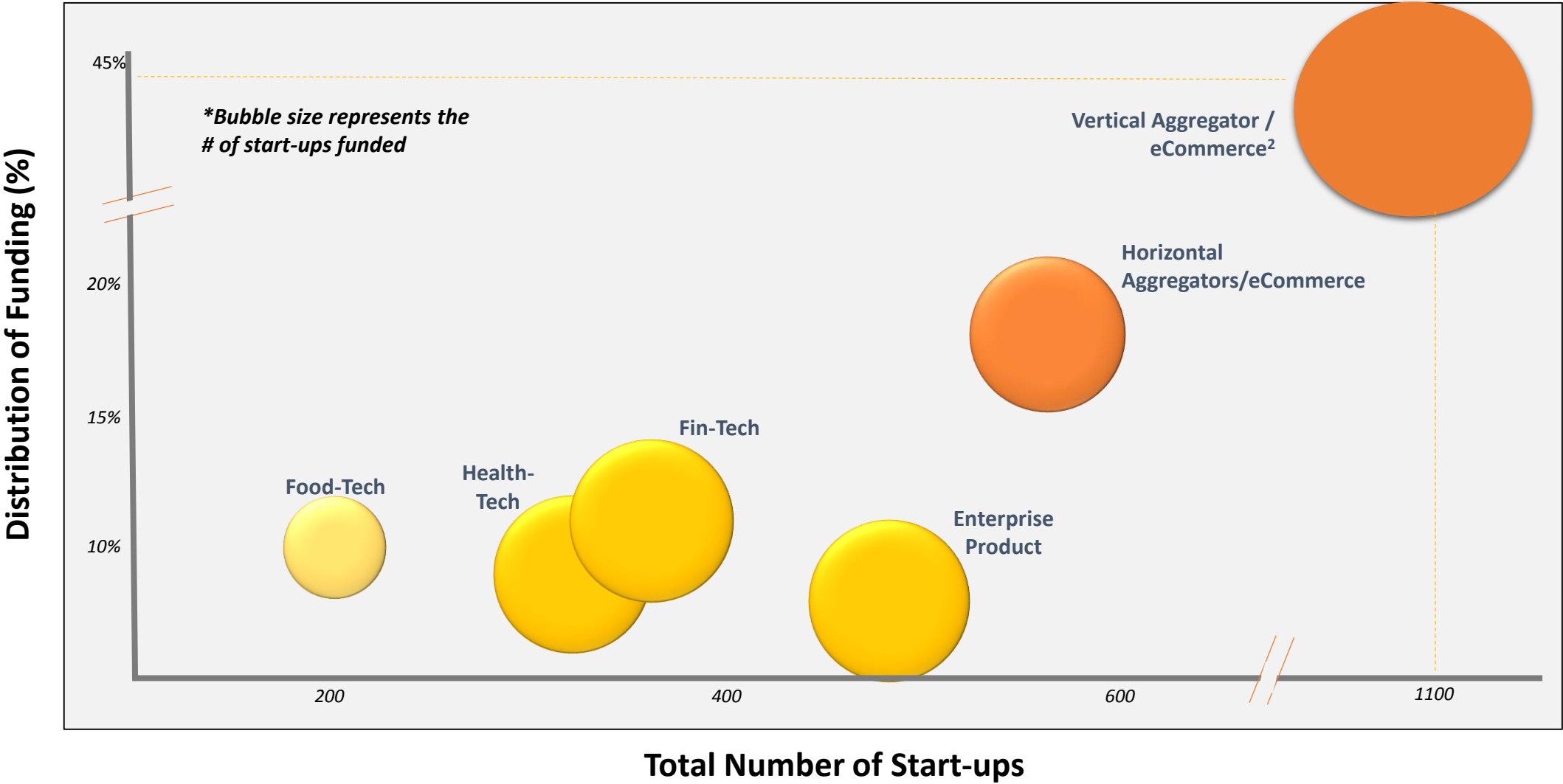
However, B2C start-ups continued to garner ~1.5X more average funding value vis-à-vis B2B start-ups

Note: ¹ % share of funding across customer segments estimated based on total funding raised for H1-2017. Deals worth \$ 1.8 Bn already closed by end of H1-2017; ² Overlap of start-ups with focus across B2C and B2B Segments : 12% in 2016 and 7% in 2017
Source : Zinnov Research & Analysis, CrunchBase, Tracxn

VERTICAL ANALYSIS OF FUNDING¹

Investors continue to remain bullish on Aggregators / eCommerce and Fin-tech verticals

Distribution of Indian start-ups by key Industry Verticals



Health-tech and Enterprise Product emerged as other key funded verticals

Note: ¹ Estimates based on average deal size and number of deals (extrapolated based on number of deals within H1-2017) across each vertical; Deals worth \$1.8 Bn already closed by end of H1 -2017; ²Vertical aggregators/eCommerce has overlaps with other industry verticals such as Travel & Hospitality, Food-tech, Fin-tech, Health-tech etc.
Source : Zinnov Research & Analysis

AGGREGATORS / eCOMMERCE VERTICAL

FUNDING

Enhanced investor focus on “Verticalized or Specialized” Aggregators / eCommerce start-ups

1700+

of Aggregator / eCommerce start-ups¹
(33% of the total start-up base)

13% YoY growth since 2016

\$1.1 Bn

Funding raised by Aggregator / eCommerce start-ups in H1 of 2017² (61% share)

22% growth since H1 2016

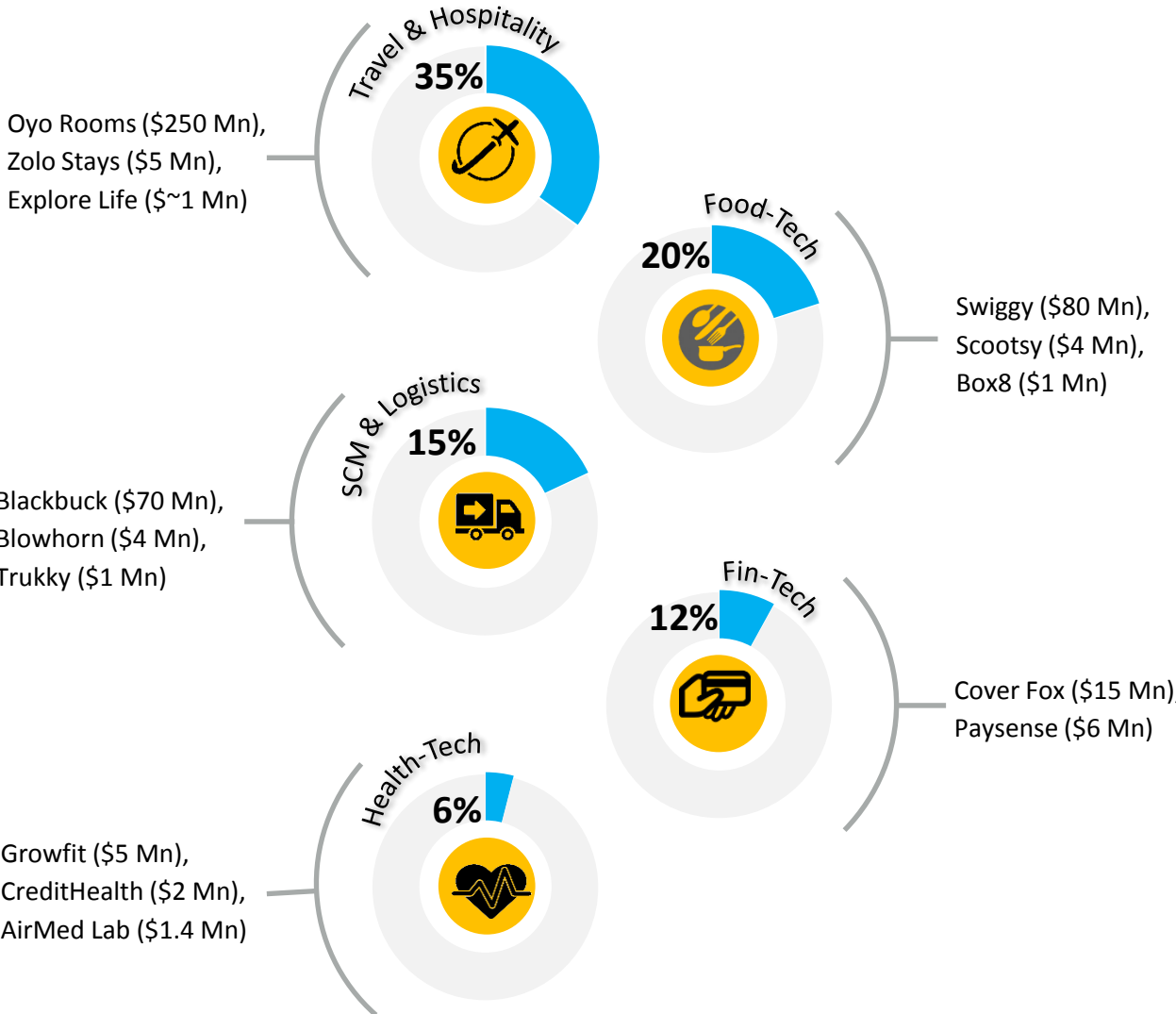
Split by Horizontal & Vertical Aggregators / eCommerce

	HORIZONTAL	VERTICAL
% share in # of start-ups	33% (560)	67% (1140)
% share in funding	30% (\$330 Mn)	70% (\$770 Mn)
	<div><div>RentOnGo</div><div>MY GLAMM</div><div>UrbanClap</div><div>magicpin</div><div>PaisaWapas</div></div>	<div><div>oyo</div><div>Coverfox</div><div>BLACKBUCK</div><div>SWIGGY</div><div>FiTraQ</div></div>



Vertical Aggregators / eCommerce form ~70% share of the overall Aggregator / eCommerce funding value and # of deals

Top Funded Verticals within Vertical Aggregators / eCommerce



Note: ¹ Extrapolated based on data analysis for a sample of ~2100 start-ups incepted between 2012-2017; ² Estimates based on average deal size and number of deals (extrapolated based on number of deals within H1-2017) across each vertical; Deals worth \$1.8 Bn already closed by end of H1 -2017;
Source : Zinnov Research & Analysis

Fin-tech showed a massive increase in funding, led by an impressive portfolio of start-ups across specialized sub-verticals

360+ # of Fin-tech start-ups¹
(~7% of total start-ups)

↑ **31%** YoY growth in # of start-ups from 2016

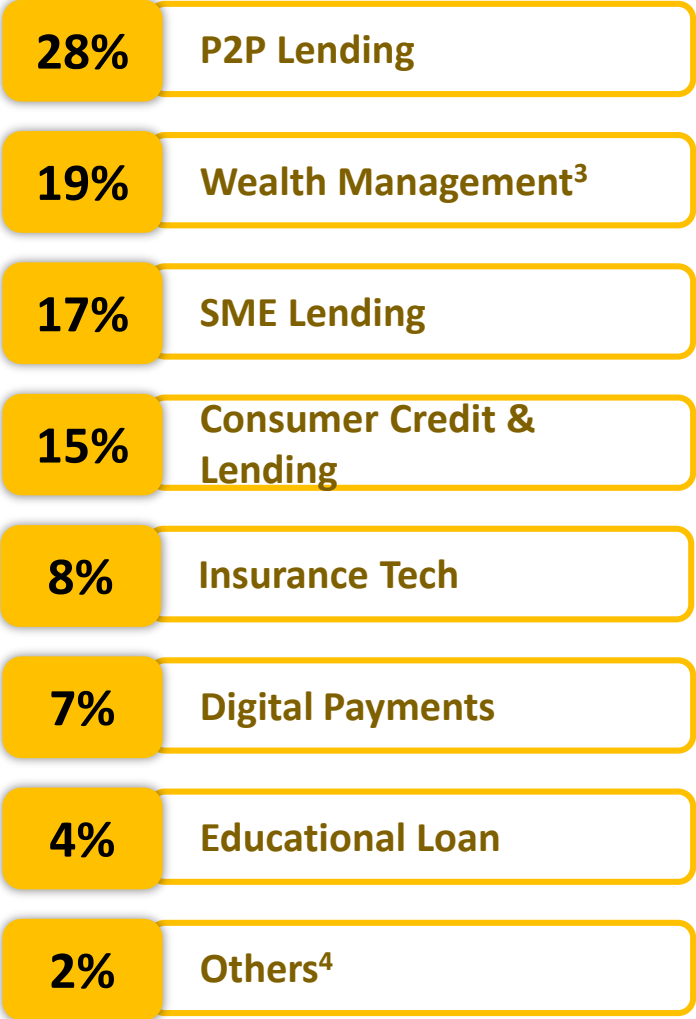
\$200+ Mn Funding raised in H1 2017²
(~11% of overall funding)

↑ **135%** growth in funding since H1 2016



31% YoY growth in overall # of Fin-tech start-ups;
2.3X increase in funding value

Top Fin-tech Sub Verticals
(% Share of Funding across Sub-Verticals)



Illustrative start-ups



(\$12.3 Mn Funding)– Instant online credit



(\$12.5 Mn Funding)– Financing company



(\$15 Mn Funding)– Balance utility app



(\$4 Mn Funding)– Savings management app



(\$8 Mn Funding)– Fin Services to SME



(\$4.8 Mn Funding)– Working capital finance to SMEs



(\$6.5 Mn Funding)– Consumer credit



(\$5 Mn Funding)– Consumer loans



(\$15 Mn Funding)– Brokerage services



(Undisclosed Funding)– General Insurance



(\$3.7 Mn Funding)– SaaS Payment solution



(\$3 Mn Funding)– Web and mobile API



(\$2.5 Mn Funding)– Micro Lending Platform focused at students



(Undisclosed)– Education Loan marketplace



(\$3 Mn Funding)– Online marketplace for Lending



(\$0.4 Mn Funding)– Automated Stock Advisor

Note: ¹ Extrapolated based on data analysis for a sample of ~2100 start-ups incepted between 2012-2017; ² Extrapolated based on Funding data recorded till H1-2017, Deals worth \$ 1.8 Bn already closed by end of H1-2017; ³ Includes Apps which help manage expenses, bill management, etc.; ⁴ Others: trade financing, remittance services etc.
Source : Zinnov Research & Analysis, CrunchBase, Tracxn

ENTERPRISE PRODUCT¹ VERTICAL

FUNDING

Though the number of Enterprise Product start-ups saw a decline, the funding value increased by 45% in 2017

480+ # of enterprise product start-ups² (~9% of total start-ups)

13% YoY decline in # of start-ups from 2016

\$145+ Mn Funding raised in H1 2017³ (~8% of overall funding)

45% growth in funding since H1 2016



13% YoY drop in overall # of start-ups
1.4X increase in funding

Top Enterprise Product Sub Verticals
(% Share of Funding across Sub-Verticals)

Illustrative start-ups

21% Data Analytics / ML / AI Platforms



(\$7.5 Mn Funding)– Machine intelligence platform



(\$ 2 Mn Funding) - AI powered bot

20% HRM / Workforce Management Solutions



(\$10 Mn Funding)– Recruitment solutions



(\$4 Mn Funding)– Cloud based HR management and Analytics Platform

14% Security Solutions



(\$2.2 Mn Funding)- Cloud security-based start-up



(Undisclosed)– End-to-end cyber security solution provider

13% SMB focused solutions



(\$10 Mn Funding)– Enable SMEs to get an online



(\$6.7 Mn Funding)– SaaS m-commerce enabler and mobile applications

13% Sales / Marketing Solutions



(\$1.1 Mn Funding)– Predictive Prospecting Platform



(Undisclosed)– Automated LeadGen platform

19% Others⁴



(\$5.5 Mn Funding)– Corporate Social Responsibility Management Solution



(\$5 Mn Funding)– Video Discovery Platform (Tags)

90% of these “Enterprise Product” start-ups are SaaS solutions

Note: ¹ Enterprise Product vertical includes B2B start-ups which are largely focused on horizontal solutions for both Large Enterprises and Small / Medium Enterprises (SMBs); ²Extrapolated based on data analysis for a sample of ~2100 start-ups incepted across 2012-2017; ³ Extrapolated based on Funding data recorded till H1-2017, Deals worth \$1.8 Bn already closed by end of H1-2017; ⁴ Others: AR/VR Solutions, Video Discovery Solutions, Infrastructure Management Solutions, etc.
Source : Zinnov Research & Analysis, CrunchBase, Tracxn

HEALTH-TECH VERTICAL

FUNDING

Health-tech showed an impressive increase in funding, led by start-ups within e-Diagnostic and Anomaly Detection

320+ # of Health-tech start-ups¹
(~6% of total start-ups)

28% YoY growth in # of start-ups
from 2016

\$160+ Mn Funding raised in H1 2017²
(~9% of Overall Funding)

129% growth in funding since H1
2016



28% YoY growth in overall # of
start-ups
2.2X increase in funding value

Top Health-tech Sub Verticals
(% share of funding across sub-verticals)

- 23% Tech-enabled Diagnostic Services
- 23% Anomaly Detection & Disease Monitoring
- 19% Aggregator/E-Commerce
- 13% Personal Health & Fitness Discovery
- 8% Health Information Management (HIM)
- 5% Tele-Health / Remote Consultation
- 9% Others³

Illustrative start-ups

 PharmEasy	(\$18 Mn Funding)– Order and scheduling diagnostic check-up	 Healthians	(Undisclosed)– Technology-led diagnostics and wellness company
 SIG{TUPLE}	(\$5.8 Mn Funding)– ML based solutions for medical diagnosis	 Niramai	(Undisclosed)– Offers Breast Cancer Screening Solutions
 MYRA	(Undisclosed)– Online pharmacy and hygiene products	 FITNAPP	(Undisclosed)– Discover and purchase fitness services
 Grow Fit	(\$4.5 Mn Funding)– Mobile health companion	 FITPASS	(\$5.8 Mn Funding)– Offers membership for more than 1000+ gyms in NCR
 ABI HEALTH	(\$1.5 Mn Funding)– Unified digital health platform	 Good Methods	(Undisclosed)– Cloud based Solutions for Dental Practice Management
 CELES CARE	(\$1.5Mn Funding)– Online clinics consultation for women	 YOLO Health	(Undisclosed)– Offers instant health reports via video conferencing
 YOSTRA	(Undisclosed)– Medical devices for diabetes related complications	 sepalika	(\$0.7 Mn Funding)- Healthcare related content platform

FOOD-TECH VERTICAL

FUNDING

Food-tech vertical saw a decline in both the number of start-ups and funding garnered in 2017

200+ # of Food-tech Start-ups¹
(~4% of total start-ups)

33% YoY decline in # of start-ups from 2016

\$180+ Mn Funding Raised in H1 2017²
(~10% of Overall Funding)

40% decline in funding since H1 2016



33% YoY drop in overall # of food-tech start-ups in 2017;
40% decline in funding value

Top Food-tech sub verticals
(% share of funding across sub-verticals)

66% On-Demand Delivery



(\$80 Mn Funding)– Food ordering and delivery solution



(\$3.6 Mn Funding)– On-Demand Food Delivery

16% Online Grocery



(\$10 Mn Funding)– Online meat and fish ordering



(\$3 Mn Funding)– Provides ready-to-cook products

8% Gourmet / Curated Food



(\$3 Mn Funding)– Healthy home cooked food delivery



(\$0.5 Mn Funding)– Online Asian gourmet food

6% Restaurant Management solution



(Undisclosed)– Solutions to restaurants such as POS and loyalty apps



(Undisclosed)– Cloud based restaurant management software

4% Discovery Platforms



(Undisclosed)– Guide to eating out options and reservations



(\$0.4 Mn Funding)– Online food discovery platform

Note: ¹ Extrapolated based on data analysis for a sample of ~2100 start-ups inception across 2012-2017; ² Extrapolated based on Funding data recorded till H1-2017, Deals worth \$1.8 Bn already closed by end of H1-2017;

REVENUE MODEL ANALYSIS OF FUNDED START-UPS¹









FUNDING

Commission and Subscription based revenue models remain the most popular among Investors

% share of funding across major revenue models

Illustrative start-up examples

Other Innovative Revenue Models

<div>33%</div> <div>Commission Based Model</div>	<div>Start-ups charge a commission for a transaction that it mediates between two parties</div>	<div> Food-tech: Earns a commission of nearly 10-15% for every online order</div>	<div> Aggregator/eCommerce: Charges a commission of 10% on the products sold</div>
<div>30%</div> <div>Subscription Based Model</div>	<div>Customers pay a subscription price to have access to a product or a service</div>	<div> Health-tech: Charges consumers on personalised diet plan and concierge</div>	<div> Enterprise Product: Analytics for competitive intelligence on Pricing and various SKUs²</div>
<div>27%</div> <div>Transaction / Fee Based Model</div>	<div>Customer paying a fee for a transaction to the operator of a platform</div>	<div> SCM & Logistics: Charges 10-15% on each transaction</div>	<div> SCM & Logistics: Charges a 2% transaction fee</div>
<div>10%</div> <div>Advertising / Affiliate Based Model</div>	<div>Start-ups earning from Ad revenue from sponsors (mostly for start-ups offering free content or services to customers)</div>	<div> Fin-tech: Apps revenue model revolves around earnings from advertisements</div>	<div> Aggregator/eCommerce: Earns from advertising and listing fees</div>

Insights Based Model


(\$1.1 Mn funding) intelligent sales prospecting platform charges customers for # intelligent attributes such as SKUs (or Stock Keeping Units) bought

Hyper-Personalized Model


(\$10 Mn funding) offers recruitment solutions and charges based on level of customization required for each job (Commission Based Model)

Retainership Model


(Funding Undisclosed) works with customers providing tailor-made digital marketing techniques and charges on a monthly retainership basis

Freemium Model


(\$3 Mn funding) fitness platform providing work out video tutorials for free while charging customers access for cult fitness centers (Subscription based Model)

Note: ¹ Analysis based on a sample of 60+ funded start-ups across different verticals incepted across 2012-2017;
Source : Zinnov Research & Analysis;

MERGER & ACQUISITION ANALYSIS – BY ACQUIRER CATEGORY

Rising role of corporates, with 30% share in M&As



40+ M&A deals
(H1 of 2016)

25% Growth



50+ M&A deals
(H1 of 2017)

Indian Start-ups – 60%

Acquirer + Acquired



Little, a deal discovery start-up acquired beauty and wellness start-up



MyDidi, domestic help provider acquired home services start-up **TimeMyTask**

Indian Corporates – 16%

Acquirer + Acquired



Axis Bank acquired **FreeCharge**, an online payment platform



Kalyan Jewellers acquired **Candere**, a jewellery e-commerce platform

Global Corporates – 14%

Acquirer + Acquired



Google acquired **Halli Labs** (within 4 months of inception)



News Corp, diversified media and information services acquired analytics start-up **GyanMatrix**

Indian Unicorns – 10%

Acquirer + Acquired



Paytm acquired **Insider.in**, an online ticketing and events platform



Quikr acquired **Zimmer**, hyper local home services start-up

Acquisitions by
Acquirer Category

B2C / B2B SPLIT OF START-UP ACQUISITIONS (H1 2017)

MERGER & ACQUISITIONS

B2B acquisitions continue to rise, mostly focused at building tech capabilities

Share of B2C in M&A



B2C



Market expansion - primary reason for B2C acquisitions (40%+ share)

Examples B2C acquisitions for market expansion

Acquirer + Acquired

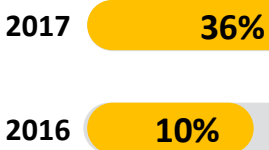


OneLoyalCard, a restaurant table reservations and deals platform acquired **Pocketin** to consolidate their position in NCR and expand to other markets



Mastitickets.in acquired to target regional markets, specifically Andhra Pradesh and Telangana

Share of B2B in M&A



B2B



Building tech capabilities - primary reason for B2B acquisition (80%+ share)

Examples of B2B acquisitions for building tech capabilities

Acquirer + Acquired



Google acquiring Halli Labs to build new **Machine Learning** based innovative products



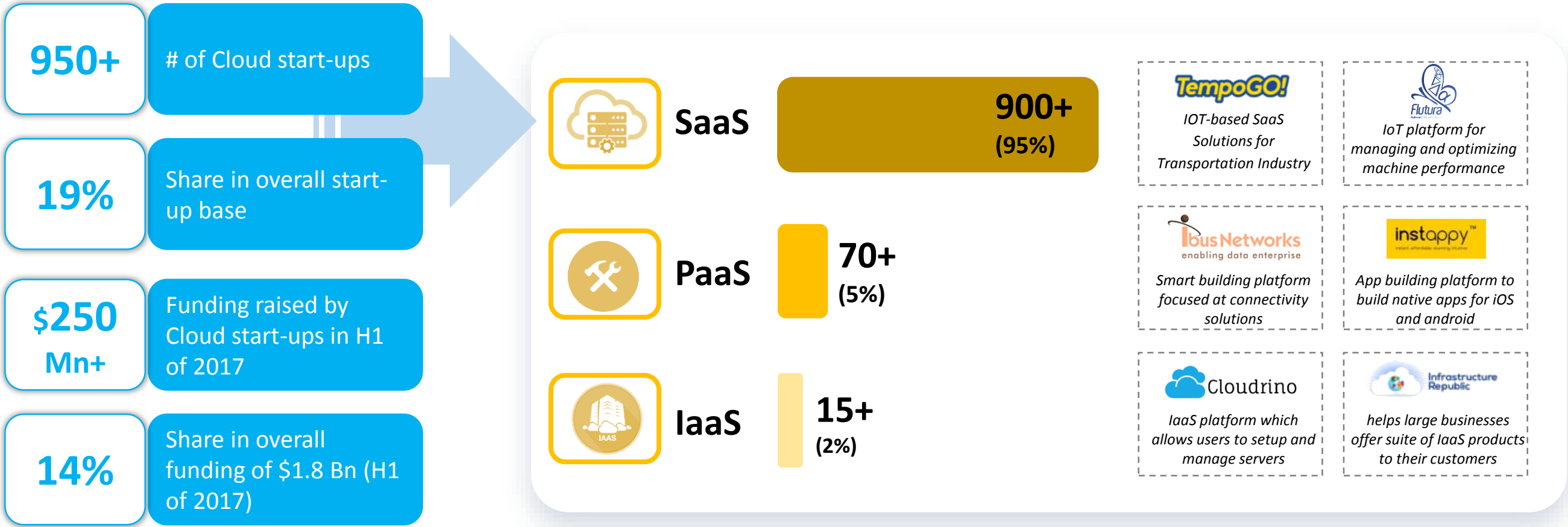
Leverage Shoppist's **NLP-based recommendation** capabilities to create a personalised experience

ANALYSIS OF CLOUD START-UPS¹

Increasing focus on Cloud start-ups, with SaaS forming a mammoth share

Split of Cloud start-ups across SaaS/PaaS/IaaS^{1,2}

Examples to Illustrate



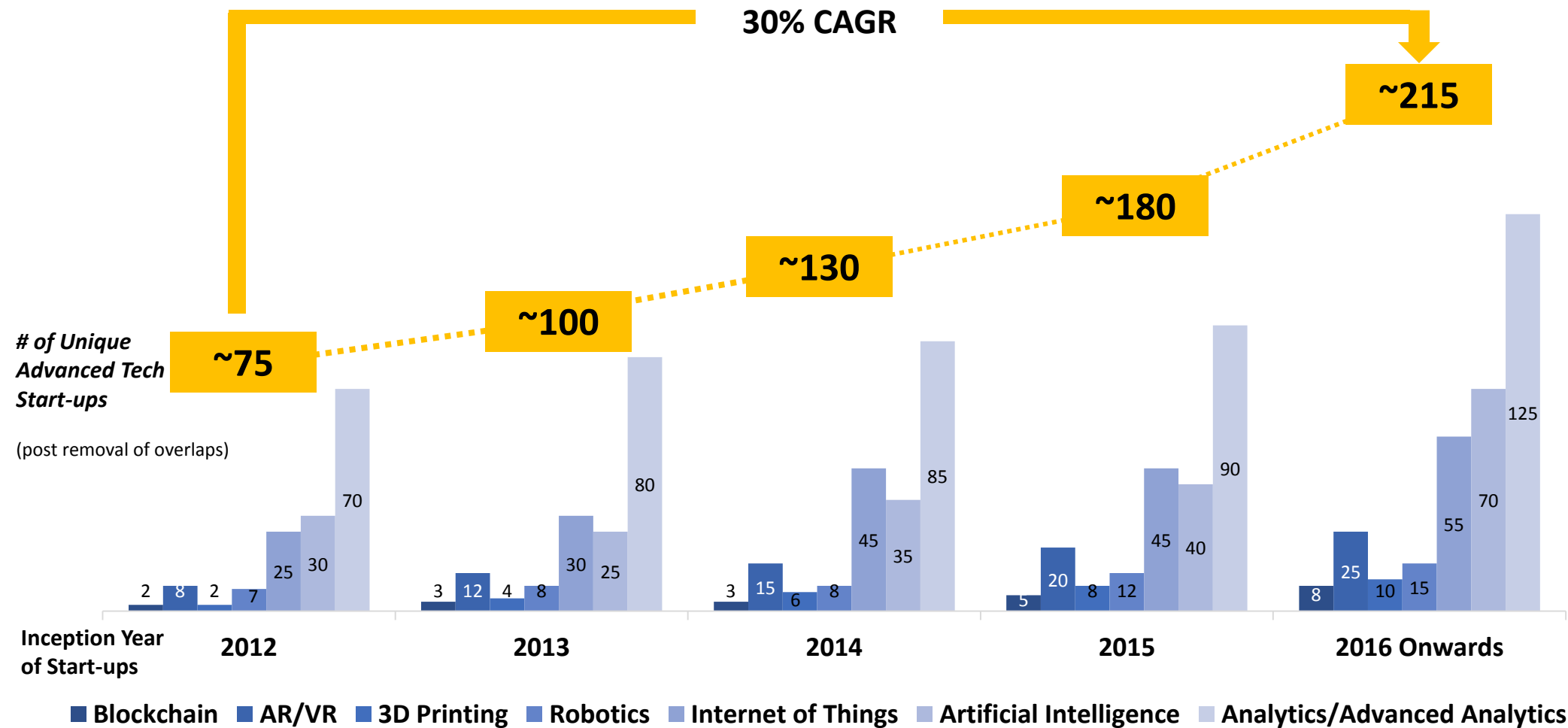
SaaS start-ups form majority share (~95%) of the 950+ Cloud start-ups

Note: ¹ Extrapolated based on data analysis for a sample of ~1000 start-ups inception across 2012-2017; ² Sum may not add up to 950 due to overlap of start-ups providing both SaaS as well as PaaS offerings
Source : Zinnov Analysis

GROWTH OF ADVANCED TECH START-UPS^{1,2} SINCE 2012

CLOUD &
ADVANCED
TECH

Impressive growth in the number of new-age Advanced Technology start-ups over the last 2 years



**~700+ Unique
Advanced Tech start-ups**

450+ Analytics /
Advanced Analytics

200+ Artificial
Intelligence (AI)

220+ Internet of Things
(IoT)

80+ Augmented /
Virtual Reality (AR/VR)

50+ Robotics

30+ 3D Printing

20+ Blockchain



Growth of new-age Advanced Tech start-ups; 30%+ CAGR for new start-up additions since 2012

Note: ¹ Extrapolations based on data analysis for a sample of ~2100 start-ups inception between 2012-2017; ² In-depth analysis of ~600 Start-ups in the Advanced Tech space across Advanced Analytics, IOT, Artificial Intelligence (Including ML, NLG, NLP etc.), AR/VR, Robotics, 3D Printing, Blockchain;
Source : Zinnov Research & Analysis, CrunchBase, Inc42

The individual
numbers do not add to
700 due to overlaps

ADVANCED TECH START-UPS – FUNDING ANALYSIS (H1 of 2017)

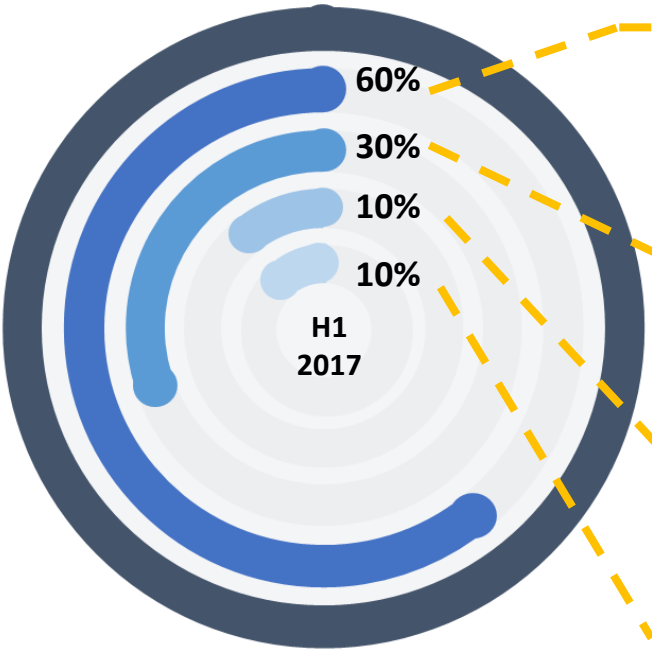
Advanced Technology start-ups garnered an impressive 20%+ of the overall funding in H1 2017



~\$340 Mn Funding¹ for Advanced Tech start-ups

~20% of total funding (H1 2017)

Share of \$340 Mn funding across Advanced Tech areas²



Illustrative start-ups (with funding raised in 2017)

	Analytics / Advanced Analytics rivigo Logistics services and Solutions \$ 15 Mn ATIGO Truck Network Platform \$ 10 Mn Credit Mantri Lending Platform \$ 7.6 Mn
	Artificial Intelligence (AI) belong.co Recruitment solutions \$ 10 Mn Flutura Machine Intelligence Platform \$ 7.5 Mn SIG TUPLE Solutions to analyse Medical Data \$5.8 Mn
	Internet of Things (IoT) airmed Healthcare Lab Aggregator \$ 1.4 Mn zenatix Energy Management & Analytics \$1.2 Mn TempoGO! IOT Solutions for Transportation \$0.9 Mn
	Others³ (Incl. AR/VR, 3D Printing, & Robotics) Uncanny Vision CV on Embedded Systems (Funding Undisclosed) Simulapis AR/VR based Edu-Tech (Funding Undisclosed) ABSENTIA VR Head mounted device \$1.2 Mn



Within Advanced Technology, AI start-ups top gainers with ~3X more funding compared to IoT start-ups

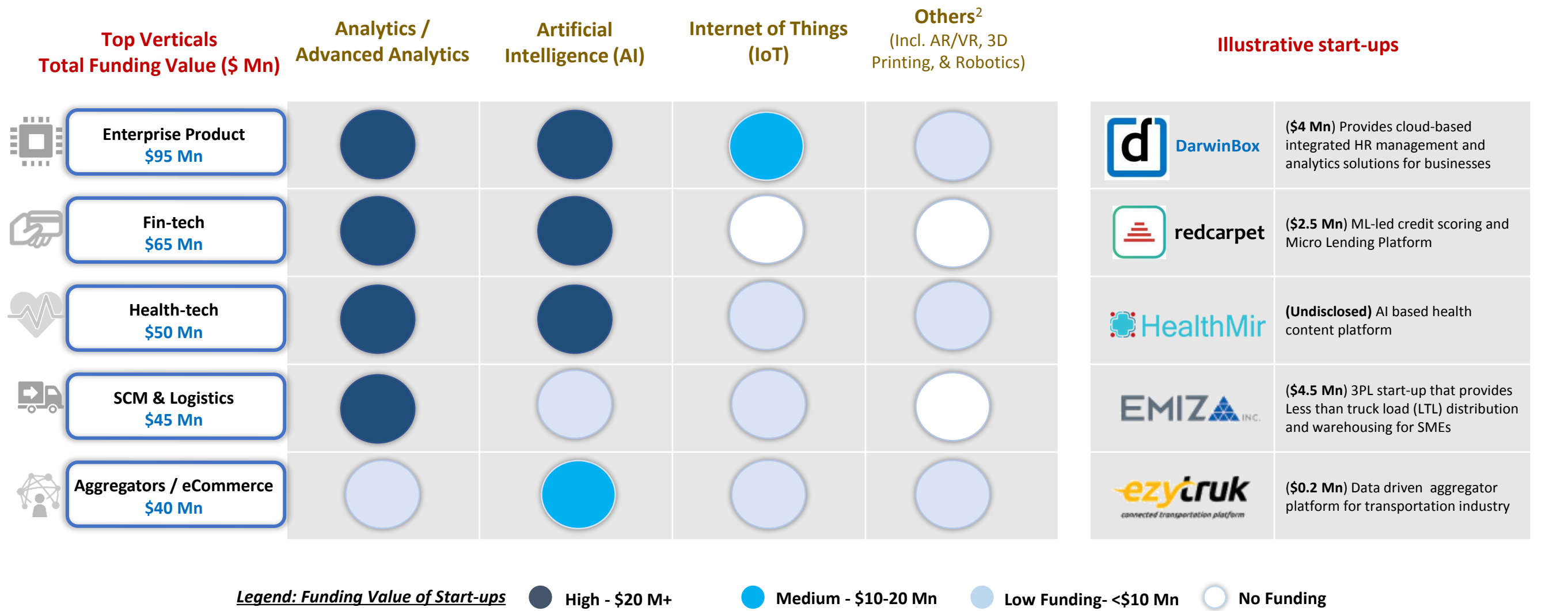
Note: ¹ Extrapolated based on Funding data recorded till H1 of 2017; Deals worth \$1.8 Bn already closed by end of H1-2017; ²Sum total of %ages do not add up to 100% due to overlaps; ³Blockchain start-ups did not receive any funding in 2017

Source : Zinnov Research & Analysis, CrunchBase, Inc42

VERTICAL ANALYSIS OF ADVANCED TECH START-UPS¹

Enterprise Product, Fin-tech, and Health-tech emerge as the top verticals being disrupted by Advanced Tech

CLOUD & ADVANCED TECH



FOUNDERS' ANALYSIS OF ADVANCED TECH START-UPS^{1,2}

More founders with Engineering background at the helm of Advanced Technology start-ups

 **Founder Age**

33yrs Median age of Advanced Tech founders (compared to 32 yrs overall)

55% founders have more than 30 yrs of age

 **Work Experience**

~**45%** Founders have previous **work experience** (Tech or Non-Tech)

Previous **companies** include Infosys, Microsoft, IBM, Intel, Persistent, Cisco, Citrix, Dell etc.

 **Educational Qualification**


80%+ Founders have an Engineering background (incl. Engg. Graduate / PG)

Student Start-ups in Advanced Tech remain low (less than **10%**)

 **Professional Courses**


20% Founders have complete advanced tech Professional Courses

Prominent Courses: Analytics (19%), Robotics & Mechatronics (18%) and AI (7%) among others



1.6X more founders with **Engineering background** for **Advanced Tech** vis-à-vis overall start-ups

Advanced Tech Founder Profiles (for illustration)




Gade Autonomous Systems focused on developing state of the art social and service robots

Prior Industry Experience – **6 years+** in Nordstrom Robotics, Bonn Rhein Sieg University

Highest Education – **M.S. In Robotics** – Bonn-Rhein-Sieg-University of Applied Sciences (top themes incl. Robotics Design, R&D, etc.)

Sasi Kiran Gade
Founder at Gade Autonomous Systems
Age – 33 years




1 Martian Way is focused on AI technologies to develop software powering drones, robots and automation products | Founded in December, 2014

Prior Industry Experience – **8 years+** in Marine Group, Digibag

Highest Education – **M.S. EE In Concentration ACE (Robotics)** – University of California (top themes incl. Bio Robotics, Telematics, etc. Part of Stanford Ignite, Stanford University Graduate School of Business

Karan Kamdar
Founder & CEO at 1 Martian Way
Age – 33 years



SenseGiz is focused at IOT based wearable tech (incl. smart watches) | Founded in March, 2013

Prior Industry Experience – **7 years+** in Girnar Alloys

Highest Education – **M.Sc. In Mechatronics** – University of Southampton (top themes incl. Control Design, Robotic Systems, Advanced Electrical Systems, Sensors & Signal processing, etc.)

Abhishek Lathe
Founder & CEO at SenseGiz
Age – 35 years

Note: ¹ Analysis done on founder profiles of ~350+ Advanced Tech start-ups; ² Advanced Tech start-ups include start-ups leveraging Analytics/Advanced Analytics, IoT, Artificial Intelligence, Robotics, AR/VR, 3D Printing, Blockchain

Source : Zinnov Research & Analysis, CrunchBase, LinkedIn, Start-up Website

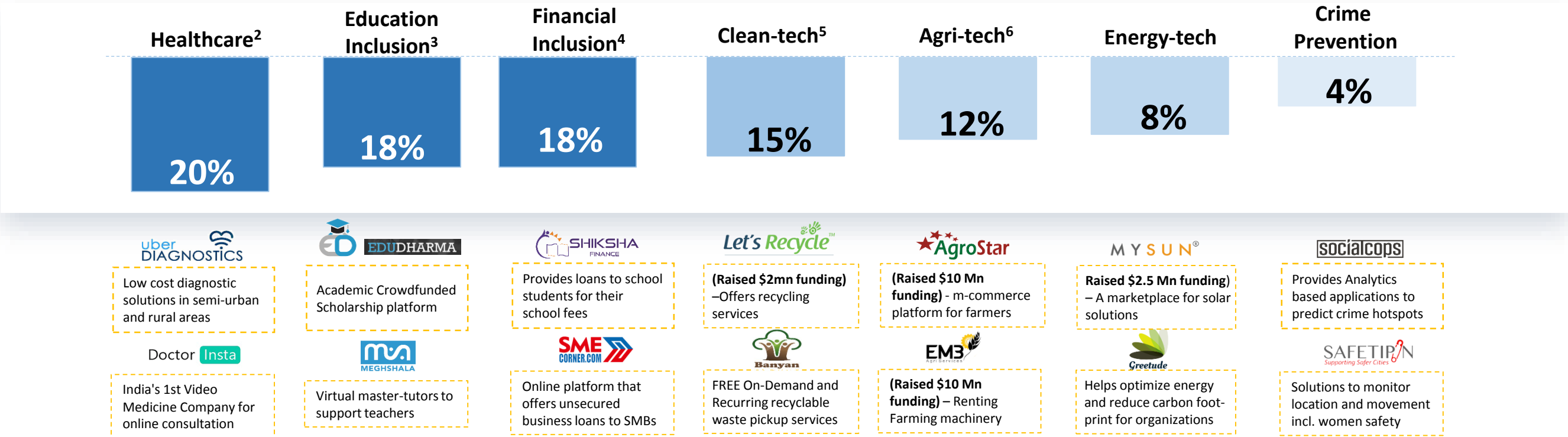
START-UPS TARGETING SOCIAL PROBLEMS IN INDIA

SOLVING SOCIAL PROBLEMS








Mushrooming of a huge base of start-ups catering to social challenges – HealthCare and Education Inclusion at the top



Share of start-ups Solving Social Problems across Sub-segments



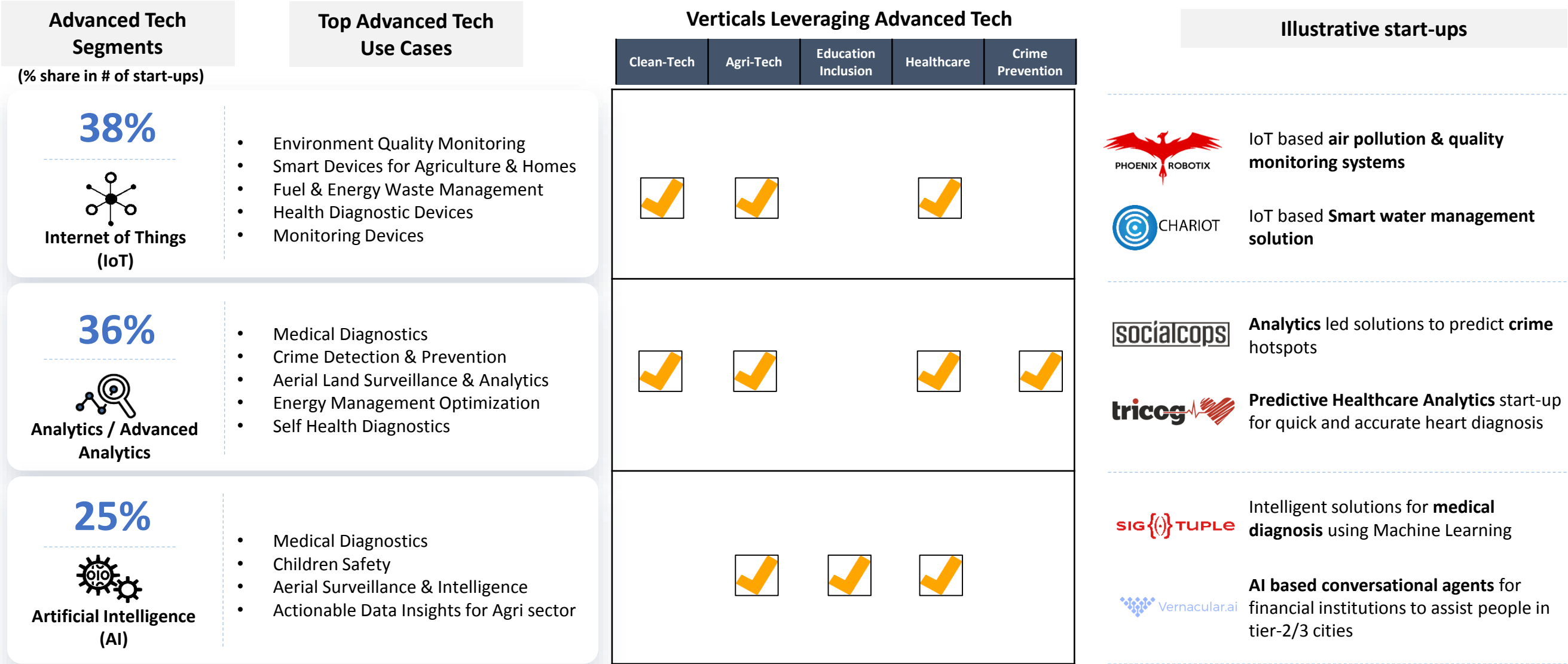
Note: ¹ In-depth analysis of 325+ start-ups focused at solving key India challenges (based on data recorded till July, 2017) ²HealthCare – incl. tele-medicine, remote healthcare, mobile health, medical devices and healthcare solutions targeted at rural / semi-urban areas, etc.; ³ Education Inclusion – incl. remote education, education loans, scholarship crowdfunding platforms, education & training targeted at rural areas etc.; ⁴ Financial Inclusion – incl. micro financing, rural and Agri lending, crowdfunding, investments, and other solutions targeted at rural / semi-urban areas etc.; ⁵ Clean-tech – incl. solutions for waste management, sanitation, clean energy, air / water / land pollution monitoring etc.; ⁶ Agri-tech – incl. agro-services and solutions to enable farmers to improve yield, sell directly by eliminating middlemen, product & price discovery platforms, etc.

Udaipur	 Karma Healthcare	Healthcare Inception Year: 2014	<ul style="list-style-type: none"> • Providing integrated healthcare to rural areas through mobile technology
Coimbatore	 EDUDHARMA	Educational Inclusion Inception Year: 2016	<ul style="list-style-type: none"> • India's first online Academic Crowdfunded Scholarship Platform for less affluent students • Have supported 60+ students so far with 76.8% success rate
Jaipur	 CAPITAL FLOAT	Financial Inclusion Inception Year: 2013	<ul style="list-style-type: none"> • Online platform focused at providing working capital finance to SMBs • 620% Revenue growth YoY achieved in FY17
Pune	 AgroStar	Agri-tech Inception Year: 2013	<ul style="list-style-type: none"> • M-Commerce platform for farmers which offers farm solutions, data analytics and agri inputs
Indore	 Gramophone	Agri-tech Inception Year: 2016	<ul style="list-style-type: none"> • Aids farmers through technology by providing them timely information, technology and inputs to achieve better yields.
Ahmedabad	 ezysolare	Energy-tech Inception Year: 2014	<ul style="list-style-type: none"> • Online marketplace for solar products and services
Kochi	 iCaptura	Crime Prevention Inception Year: 2015	<ul style="list-style-type: none"> • Offer iCapture surveillance camera product which offers facial recognition and notifying system

ADVANCED TECH FOCUS OF START-UPS TARGETING CORE INDIA PROBLEMS^{1,2}

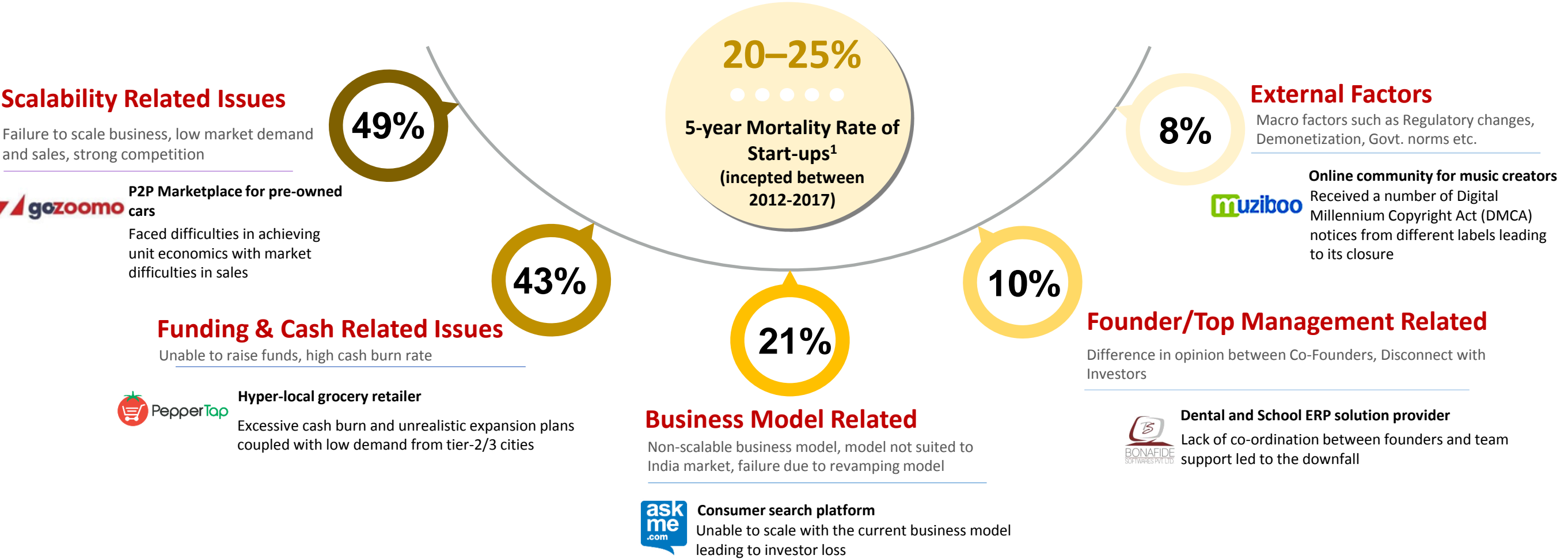
SOLVING SOCIAL PROBLEMS

~20% start-ups solving social problems are leveraging Advanced Technology at the back-end



MORTALITY ANALYSIS OF START-UPS¹

Start-up mortality continues to be a key problem with majority start-ups dying within 1.6 – 1.9 years of inception



1.6-1.9 years to failure (from inception)

55% Failed Start-ups had received Funding

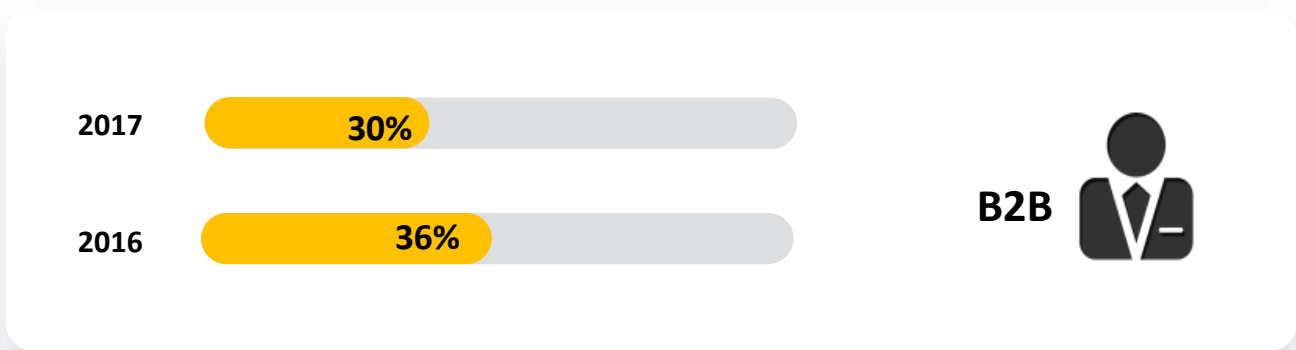
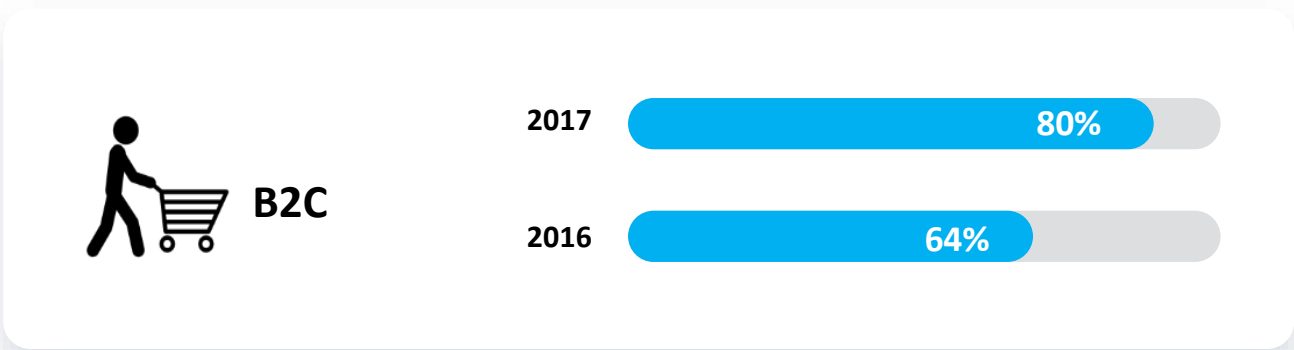
20% Failed Start-ups graduated from I/As

Note: ¹ Analysis based on a sample of ~1000 start-ups (incepted between 2012-2017) analyzed for dead / active status; further deep dive of 100 failed start-ups to analyze the top reasons for mortality
Source : Zinnov Research & Analysis, Press Articles, AngelList, YourStory, Inc.42

MORTALITY ANALYSIS OF START-UPS ACROSS BUSINESS FOCUS¹

B2B start-ups show higher stability, with further reduction in share of B2B in failed start-ups

B2C / B2B Share of Failed Start-ups



Examples of failed B2C start-ups

taskbob
Reliable Home Services

\$5.7 Mn Funding

Home service start-up
Inception Year: 2014

Unable to reach the desired scale and profits

rooms tonite

\$1.5 Mn Funding

Hotel Booking Start-up
Inception Year: 2014

Unable to raise funds

cardback

\$0.7 Mn Funding

Online platform for loyalty cardholders
Inception Year: 2013

Low product demand and cash crunch

Examples of failed B2B start-ups

TURANT DELIVERY

\$0.15 Mn Funding

Hyperlocal logistics start-up
Inception Year: 2014

High cash burn rate and unable to raise funds

PARCELLED.in

\$5 Mn Funding

On-demand logistics services provider
Inception Year: 2014

Poor margins and high cash burn rate

TOLEXO

NA

Marketplace for Industrial Goods
Inception Year: 2014

Dip in sales and underperformance following demonetization

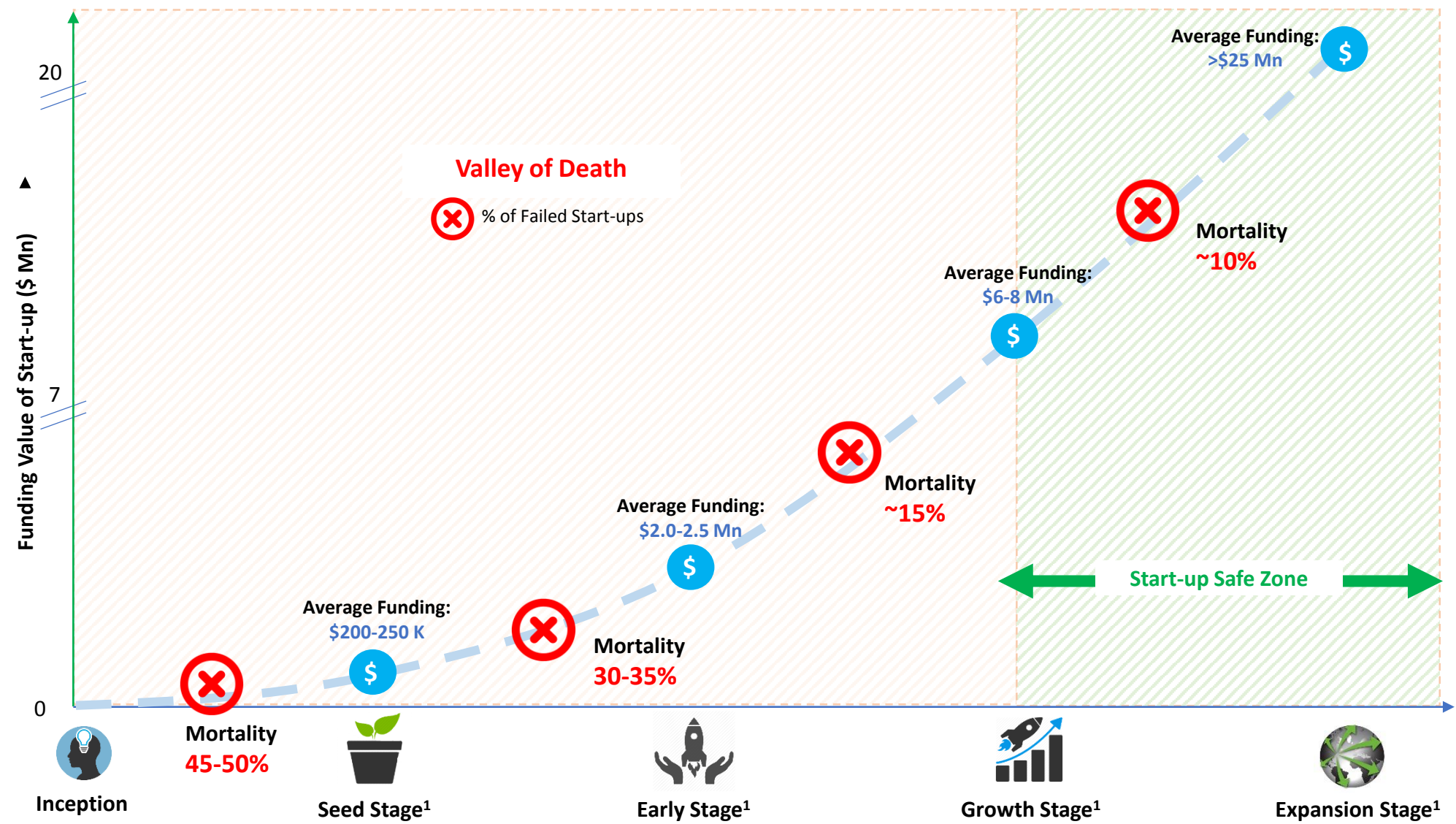


Delhi NCR top state for B2C start-up failures (40%+) while Bengaluru leads w.r.t. B2B start-up failures (33%)

Note: ¹ Analysis based on a sample of ~1000 start-ups (incepted between 2012-2017) analyzed for dead / active status; further deep dive of 100 failed start-ups to analyze the top reasons for mortality
Source : Zinnov Research & Analysis, Press Articles, AngelList, YourStory, Inc.42

JOURNEY OF FAILED START-UPS – MORTALITY V/S FUNDING ANALYSIS OF 100 FAILED START-UPS^{1,2}

Start-ups are most vulnerable from inception till early stage funding, thereby needing maximum support



~45-50% die even before securing seed stage funding, and need maximum support to kick start

Start-ups become stable post growth stage funding with minimal risk of mortality

Note: ¹ Definition of funding stages based on funding amount: Seed Stage - <\$1 Mn, Early Stage - \$1-5 Mn, Growth Stage - \$5-20 Mn, Expansion Stage - >\$20 Mn; ² Analysis based on a sample of ~1000 start-ups (incepted between 2012 – 2017) analyzed for mortality; further deep dive of 100 failed start-ups across their funding values and stages

Source : Zinnov Research & Analysis, Press Articles, AngelList, YourStory, Inc.⁴²





INCUBATOR / ACCELERATOR (I/A) ANALYSIS

INCUBATORS / ACCELERATORS

Vibrant Incubator/Accelerator ecosystem; growth led primarily by Private & Corporate Incubators / Accelerators

190+ # of Active Incubators / Accelerators in 2017 (~35% YoY Growth)

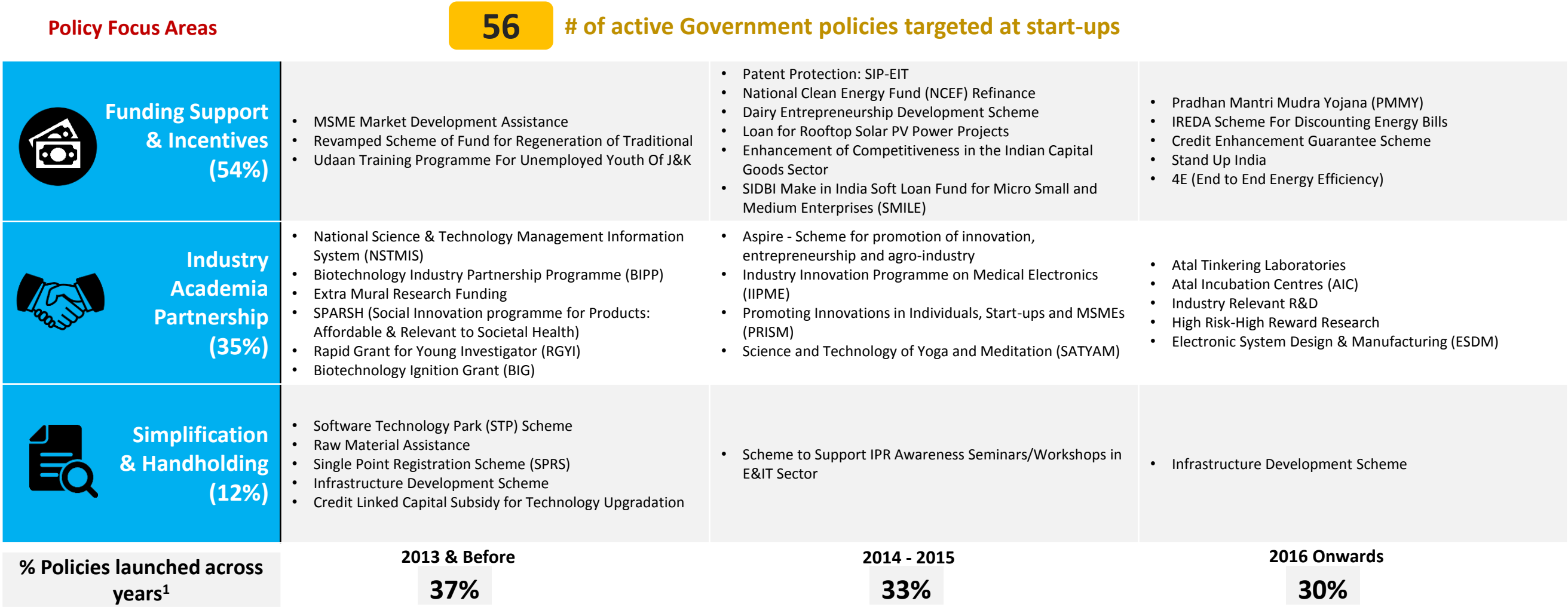
~40% Incubators / Accelerators are based out of Tier 2/3 Cities

Types of Incubators / Accelerators	# of Incubator / Accelerators	Location (Tier-1 / Tier-2/3)	Focus Verticals	Focus Tech	Illustrative Examples of I/As	Key Support for Start-ups
CORPORATE	20 (up by 33% YoY)	90% 10%	Fin-tech, eCommerce, Health-tech, Enterprise Product	Cloud, Analytics/ Advanced Analytics, ML/ AI		<ul style="list-style-type: none">Offers on-Premise or Cloud tech PlatformTechnology counsel and mentorshipNetworking opportunitiesAlignment with BUs for live POCsAccess to Customers
PRIVATE	65 (up by 55% YoY)	75% 25% Metro's, Pune, Ahmedabad, Jaipur, Lucknow, Chandigarh, etc.	Aggregator / eCommerce, Media & Ent-tech, Edu-Tech, Fin-Tech	Cloud, Big Data, IOT, AR/VR		<ul style="list-style-type: none">Mentorship by diverse set of experienced leadersFree office space for a tenure of 6 to 12 months
ACADEMIC	90 (up by 29% YoY)	40% 60% Ahmedabad, Kanpur, Bhubaneshwar, Guwahati, Roorkee, Patna, etc.	Multiple	ML/ AI, Analytics/ Advanced Analytics, IOT		<ul style="list-style-type: none">Access to facultyAccess to active eco-system of mentors, funders, entrepreneurs and industry expertsCreative and supportive work environment
GOVT. SUPPORTED	15 (up by 25% YoY)	30% 70% Kochi, Goa, Trivandrum, Ahmedabad, etc.	Multiple	Analytics/ Advanced Analytics, Cloud, IOT		<ul style="list-style-type: none">Strategic mentorshipAccess to govt schemesLegal & Statutory Support

GOVERNMENT START-UP POLICIES ACROSS YEARS AND FOCUS AREAS

GOVERNMENT
FOCUS FOR
START-UPS

With 50+ active policies, Government continues to support the start-up ecosystem in India



~30% of the active start-up policies have been launched post 2016

KEY GOVERNMENT INITIATIVES FOR START-UPS

GOVERNMENT
FOCUS FOR
START-UPS

Govt. also announced key initiatives across funding, industry-academia partnership and simplification of policies

Government’s “Start-Up India” initiative



Funding Support and Incentives

- ✓ ~\$1.5 Bn corpus for over 4 years to aid start-up funding
- ✓ Credit guarantee Trust to support flow of funds
- ✓ No Capital Gains Tax while Income tax waived off for 3 years
- ✓ Tax Exemption on Investments Above Market Value



Industry-Academia Partnership and Incubation

- ✓ Atal Innovation Mission to boost innovation & encourage youth
- ✓ Focus on PPP model to create 35 new incubators and 31 innovation centers
- ✓ Set-up 7 new Research Parks with ~\$1.2 Mn investment into each
- ✓ 5 Bio-Tech clusters to be established



Simplification and Handholding

- ✓ Self-certification to reduce regulatory liabilities
- ✓ Easy registration through mobile app
- ✓ Fast tracking patent examination and providing rebates
- ✓ Legal support to Start-ups
- ✓ Simplifying public procurement rules and support faster exits

Government Initiatives announced since 2017

Jan’17

Start-up India Learning Program (4 Week Program)

Free online entrepreneurship program in collaboration with UpGrad through structured learning

May’17

Extends Definition of Start-ups

Overall age limit has been raised for all start-ups to 7 years
Biotechnology firms saw the limit raised to 10 years from the date of incorporation

June’17

Start-up India Hub

A virtual online platform for all stakeholders of the entrepreneurial ecosystem in India to discover, connect, and engage with each other

Aug’17

FDI for Start-ups

As per Department of Industrial Policy and Promotion (DIPP), start-ups can raise up to 100% of funds from Foreign Venture Capital Investors (FVCIs)

CORPORATE INITIATIVES FOR START-UPS

ROLE OF CORPORATES

Increasing advent of corporate initiatives – both Indian and Global –focused at nurturing the start-up ecosystem

Engagement Models with Start-ups	Description	Key Levers				Illustrative Examples			
		Access to Market	Coaching & Mentorship	Funding & Grants	Access to Facilities / Infrastructure				
INCUBATORS / ACCELERATORS	Acts as a promising way for Corporates to better understand and leverage emerging technologies						YES Bank launched its business accelerator for Fintech in March, 2017		Apple announced its first App Accelerator in Bengaluru
CORPORATE FUNDS	Dedicated funds for Start-ups to aid them across financial, technological, customer acquisition, etc.						Venture Arm setup a fund of \$170 million to nurture Advanced Tech start-ups		Announced \$30 Mn fund in association with Israel-based Teva for Health-tech start-ups
START-UP PARTNERSHIPS FOR JOINT GTM	Corporates partnering with start-ups to co-develop solution across an existing use case area						Launched Foundry acting as a platform connecting Unilever brands with Advanced Tech start-ups		Set-up Innovation labs in India to ride the Fin-tech and emerging tech wave
START-UP ACQUISITIONS	Acquisitions to build tech capabilities, market expansion and acqui-hire						Acquired FreeCharge from Snapdeal for \$60 million		Acquired India’s Halli Labs in July 2017 to build new ML based innovative products
ENTREPRENEURSHIP NETWORKS / SIGs ¹	Participation in such events opens up new avenues for corporates for idea generation, validation and business deals						Actively engages with start-up communities such as MobileMonday, Start-up Week, etc.		Collaborated with Tie Bengaluru to launch an IOT SIG
EVENTS & HACKATHONS	Help reveal new insights and use cases for problem solving using technology / emerging technologies						Organized India’s first Insurance-tech hackathon to tap talent from start-ups & institutes		Organized a Blockchain hackathon for start-ups to create novel prototype product

Note: ¹ SIG: Special Interest Groups – Community with a shared interest in advancing a specific area of knowledge such as IOT, Analytics, Addictive Manufacturing, Mobility etc.

Source : Zinnov Research & Analysis, Press Articles, YourStory

NEW START-UP “SUCCESS METRICS” & SUCCESS STORIES

SUCCESS STORIES

While Funding has been the de-facto success parameter, Indian start-ups are now exhibiting newer “Success” parameters

1 REVENUE & REVENUE GROWTH



E-platform for SME working capital
620% Revenue growth YoY achieved in FY17¹



P2P lending platform
300% Revenue growth YoY achieved in FY17²



Online automobile transactional marketplace
Revenue Growth of 600% YoY in 2016³

2 PROFIT MARGIN / BREAK EVEN



Hyper-local grocery start-up
Achieved operational break-even in 2 years⁴



HR & Payroll Management Solutions
Achieved operational break-even in 1 year⁵



Provides premium washing
Break even in less than a year since inception in 2015⁶

3 # OF CUSTOMERS / CUSTOMER GROWTH



Enables SMBs to build websites instantly
225% CAGR growth in Customers from 2013 to 2017⁷



Fintech / Consumer finance start-up
More than 10,000 customers onboarded in 2 years⁸



e-Comm for fresh, chemical-free seafood
More than 80,000 customers across 5 cities in 2 years alone⁹

4 REPEAT CUSTOMERS



AI based search for Fashion Industry
Achieved 85% repeat customers within 2 years¹⁰



Online medicines ordering & delivery
Achieved 75% customer retention rate since inception in 2014¹¹



Food Tech – Offers Meal Packages
60% repeat customers since inception in 2014¹²



NASSCOM 10,000 Start-ups Program

IMPACT OF NASSCOM 10,000 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 through F.A.M.E. model by 2023



Impact

- 10 warehouses incorporated since its inception in 2013
- Incubated ~ 300 start-ups across warehouses with more than \$40.7 mn funding raised
- 800+ high impact events conducted in 22 cities - attended by 35,000 attendees
- Initiatives impacted 2468 start-ups - out of which 327 received funding, and all start-ups received mentorship

NASSCOM 10,000 Start-ups Programs

Virtual Program/Warehouse Program

10,000 Startups Virtual Program is designed to help startups who are product ready and have reasonable traction. Our industry-wide connects and huge partner network ensures that the right opportunities are created for these startups. The program is a series of small and big sessions and workshops such as Mentor 101, Investor 101 and other equally impactful initiatives to ensure that the startups scale to the next level.

NASSCOM Industry Partner Program (NIPP)

NIPP is India's largest industry backed corporate innovation program, supporting open innovation initiatives. It is designed to foster sustained engagement with startups, developers and the broader ecosystem.

48

APPENDIX

PROJECT SCOPE & METHODOLOGY

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 prominent verticals such as Fin-tech, Health-tech, Enterprise Products etc. along with the adoption of technologies such as Cloud, Analytics, Artificial Intelligence, IoT etc. and the 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
- Incubator/Accelerator Websites

Zinnov Repository:

- Zinnov tech product start-up database

Expert Discussions:

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

DEFINITIONS – START-UPS, INVESTORS AND INCUBATORS/ACCELERATORS

Start-ups

Intellectual Property (IP) backed technology product/platform; eCommerce/ aggregators using digital platform for customer engagement

- **Incorporation Year:** Companies incorporated in **2012** 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

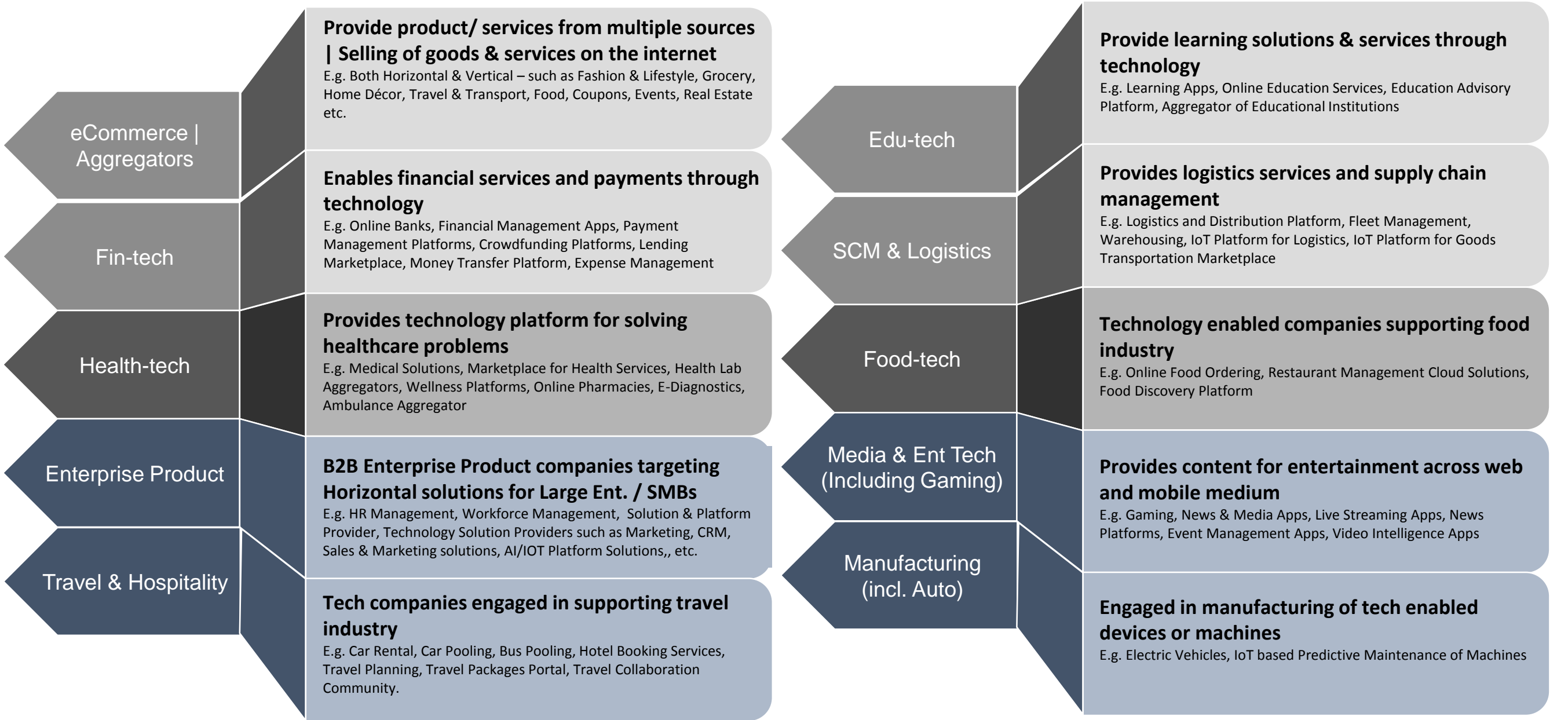
Investors

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

Incubators/
Accelerators

- **Incubators** help start-ups in idea development, and 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

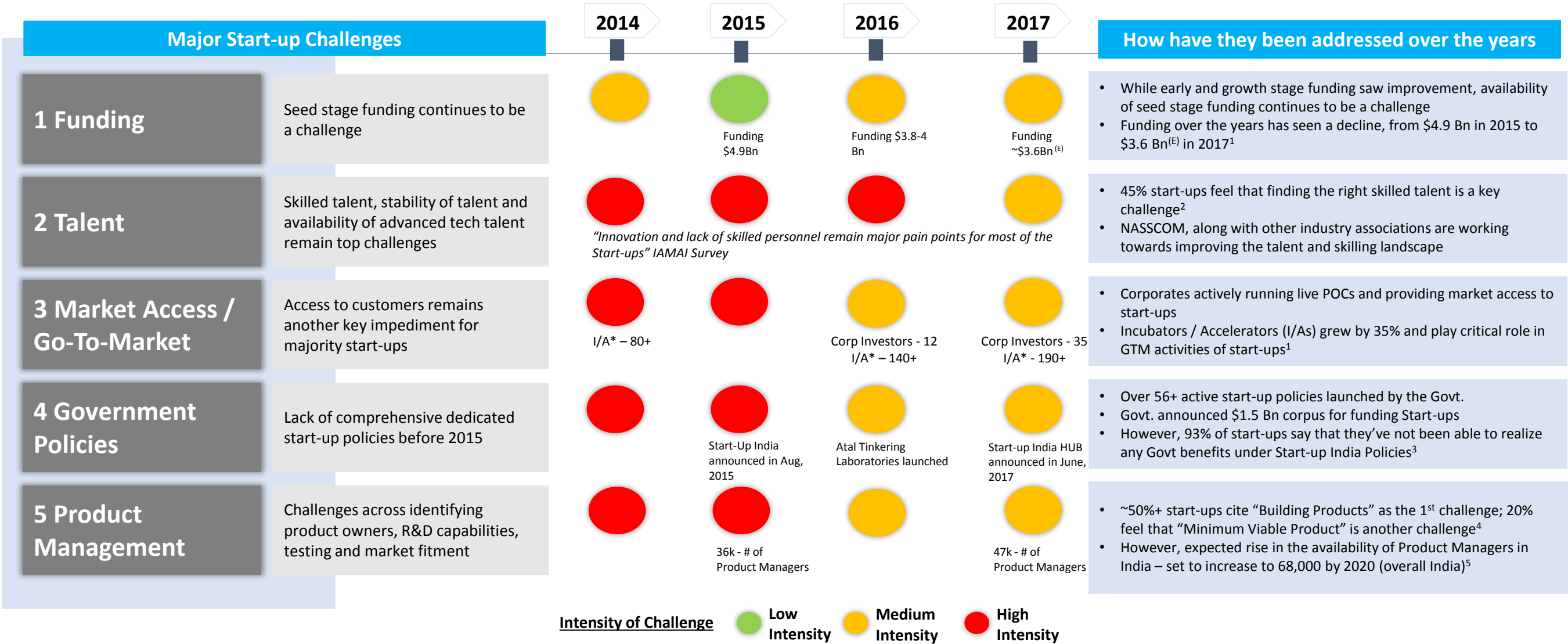
VERTICAL DEFINITIONS



MAJOR CHALLENGES FACED BY START-UPS IN INDIA

LANDSCAPE

Talent and global market access – top areas to be addressed for a sustainable growth of the ecosystem



Note: E – Estimated based on H1-2017 Funding; * I/A – Incubator / Accelerator; ¹Zinnov Start-up Funding Analysis; ²Survey Report by Athena; ³Press Article Inc42; ⁴ NIT University Survey of Product Start-ups across the Globe; ⁵ Google & Accel Partner Report
Source : Zinnov Analysis, LinkedIn, CrunchBase, YourStory, Inc42

LOCATION ANALYSIS OF 2017 H1 FUNDING¹

FUNDING

Delhi NCR and Bengaluru continue to garner a mammoth share of 75%+ of the overall funding value



DELHI NCR	TOP DEALS	BENGALURU
\$ 250 Mn	(Aggregator/ eCommerce)	\$ 80 Mn (Aggregator/ eCommerce)
\$ 21 Mn	(Aggregator/ eCommerce)	\$ 70 Mn (Aggregator/ eCommerce)
\$ 15 Mn	(SCM & Logistics)	\$ 15 Mn (Aggregator/ eCommerce)
\$ 15 Mn	(Fin-Tech)	\$ 12 Mn (Fin-Tech)
\$ 15 Mn	(Edu-Tech)	\$ 10 Mn (Recruitment Solutions)

*Bubble size represents the overall # of start-ups in that city

Note: ¹ Estimates based on average deal size and number of deals (extrapolated based on number of deals in first two quarters) across cities, Deals worth \$1.8 Bn already closed by end of H1-2017; Other cities that raised funding in H1-2017 includes Kochi, Goa, Surat, Chandigarh, Trivandrum etc.

Source : Zinnov Research & Analysis, CrunchBase, Tracxn

KEY REASONS FOR ACQUISITIONS

50% of M&A for building tech capabilities, up from 17% in 2016

M&A break-up by key reasons for acquisitions
(Total M&A = 50 in H1 2017)

50%

Up from 17% in 2016



Building Tech Capabilities

Expand capabilities across Analytics, Innovation, Platforms, etc.

28%

Down from 40% in 2016



Market Expansion

Expand into new markets, geo expansion, enhancing business model and area of expertise

13%

Down from 15% in 2016



Product Portfolio Expansion

Strengthen position within existing segment, expansion of product portfolio

11%

Up from 8% in 2016



Acqui-hire

Acquisition to acquire talent of the acquired company

Acquisitions by Indian Corporates

Acquirer + Acquired



(Vertical: M&E)

Leverage Zapr's platform to detect offline media and enabling better understanding of mobile audience



(Vertical: Telecom)

Use Seynse Digital Financial platforms and their algorithms to build new products



(Vertical: Enterprise Product)

Incorporate Exclusif's tech capabilities in the space of SMB customized solutions

Acquisitions by Global Corporates

Acquirer + Acquired



(Vertical: Enterprise Product)

Enhance products through Ramyan's unique Customer Experience Management (CEM) Platform



(Vertical: Enterprise Product)

Leverage FinitePaths platform to offer superior customer experience



(Vertical: Prof. Services)

Jobspire will be integrated with JustCode to strengthen its core products and tech capabilities

Acquisitions by Indian Start-ups

Acquirer + Acquired



(Vertical: Aggregator / eCommerce)

Strengthen its technology platform through StyleSpot's product discovery platform



(Vertical: Health-Tech)

Integrate Fitard's capabilities of real time analysis of users







(Vertical: Aggregator / eCommerce)

Leverage Shoppist's NLP-based recommendation capabilities to create a personalised experience

INCUBATORS / ACCELERATORS

INCUBATORS / ACCELERATORS

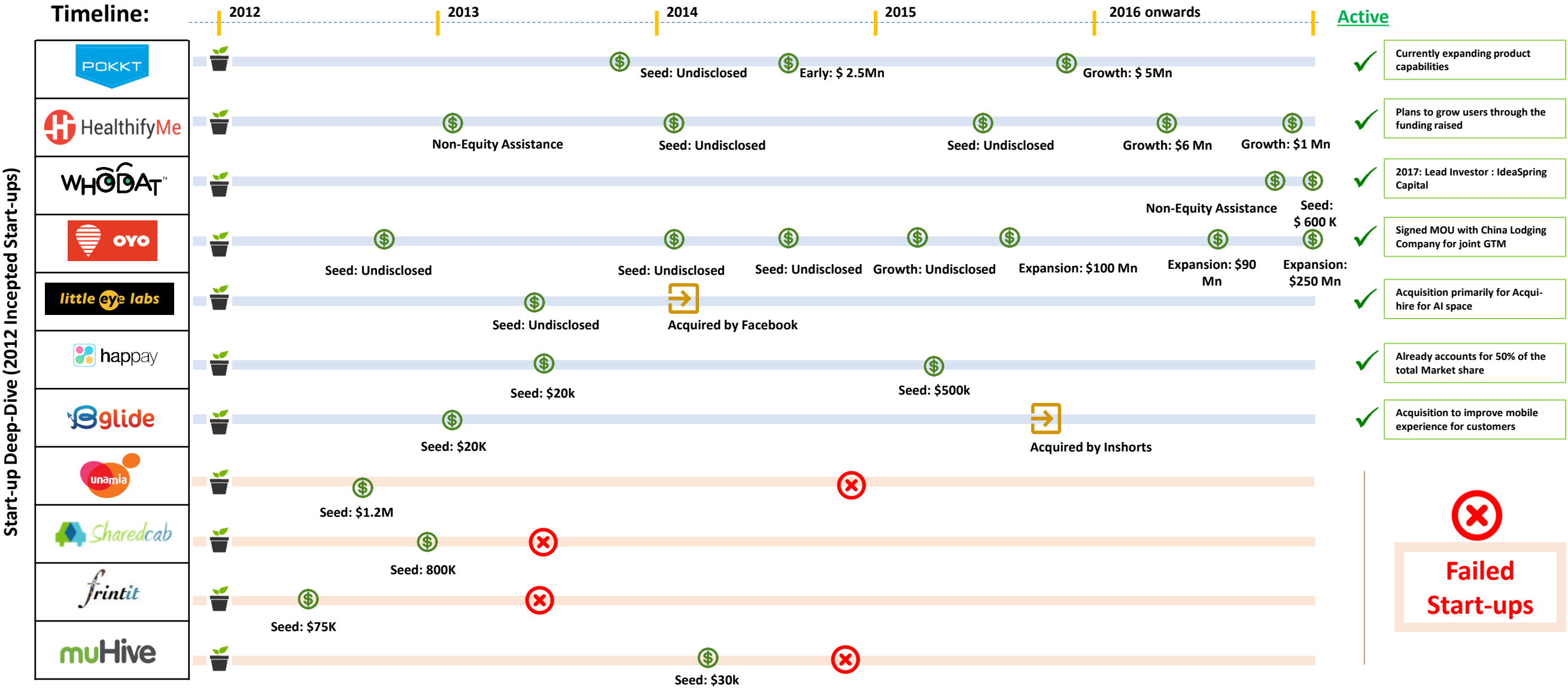
Incubators/Accelerators differ in their focus areas and the type of support they provide to start-ups

	<div>Corporate</div> <div> NetApp Excellerator</div> <div>Founded: 2017 Bengaluru</div>	<div>Private</div> <div> ISME Ace</div> <div>Founded: 2017 Mumbai</div>	<div>Academic</div> <div> IIM KOZHIKODE LIVE</div> <div>Founded: 2017 Bengaluru</div>	<div>Govt. supported</div> <div> Dalmia SMART CITY ACCELERATOR</div> <div>Founded: 2016 Bengaluru</div>
Program Period	4 Months	4 Months	12 Months	4.5 Months (20 weeks)
Grants	\$15,000 (Equity Free Grant)	\$100,000 Seed Funding; 8% Equity charged	No	Charges 2% Equity
Batches / Cohort of Start-ups	6 Start-ups	12 Start-ups	12 Start-ups	NA
Start-up Support Initiatives	<ul style="list-style-type: none">✓ Business mentorship✓ Technology mentorship✓ Target customer access/POC's✓ Investor connects	<ul style="list-style-type: none">✓ Mentorship from financial sector leaders✓ Demo day to pitch to investors✓ Access to ecosystem partners (Banks, Insurance Companies, Retail NBFC's etc.✓ Media & marketing support	<ul style="list-style-type: none">✓ Mentorship by faculty members✓ Networking events, seminars, etc.✓ Access to investors✓ Access to Govt. schemes	<ul style="list-style-type: none">✓ Industry connects✓ Strategic mentorship✓ Access to Govt. schemes✓ Investment support✓ Business acceleration✓ Legal & statutory support✓ Media visibility
Co-working Space	Yes	Maker Space, Rapid Prototyping Lab, Sandbox Center, Demo Room	Yes – meeting rooms, conference rooms at subsidized rates	No
Tools/Software	Access to ONTAP Cloud, SDK, Collaboration & Productivity Tools	100K Cloud Credits	-	Software & Hardware design support, UI/UX and Architecture level design support
Tech Focus Area	Cloud, IoT, Artificial Intelligence, Data Security, Storage, Analytics	Fin-Tech	-	IoT, Security
Focus Verticals	Multiple	Banking, Consumer Finance, Insurance Tech, Payments	Horizontal	Smart Cities, Energy & Utilities, Waste Management, Clean Tech

TIMELINE: JOURNEY OF SEVERAL START-UPS FROM INCUBATORS/ACCELERATORS^{1,2}

INCUBATORS /
ACCELERATORS

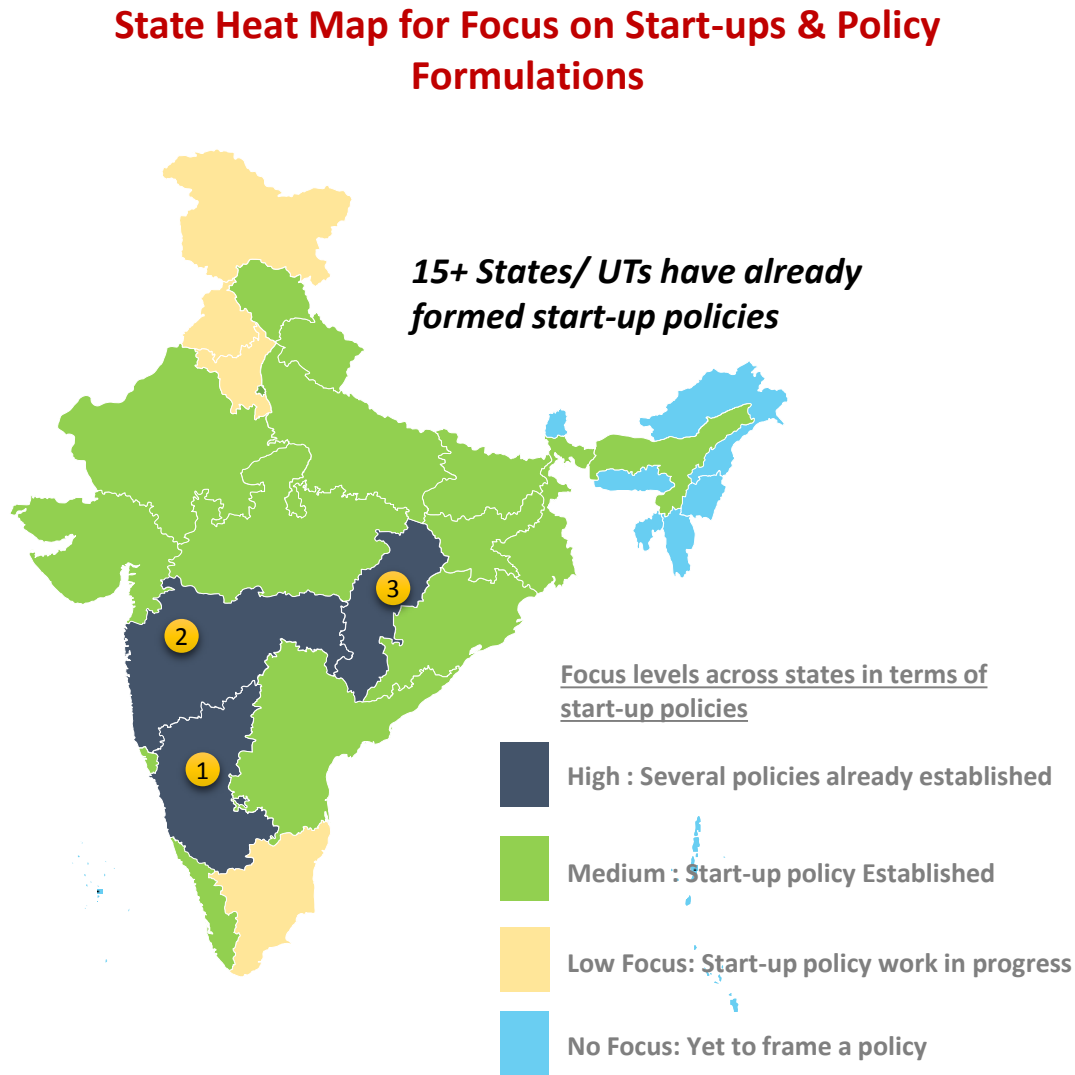
Start-ups graduating from Incubators / Accelerators continue to have both success and failure stories



STATE GOVERNMENT INITIATIVES FOR START-UPS

GOVERNMENT
FOCUS FOR
START-UPS

Karnataka, Maharashtra and Telangana emerge as the leading states in terms of start-up focus and initiatives



Karnataka	Maharashtra	Telangana
<div><div>Signed Pact with DigitalOcean (Sep'17)</div><div><ul style="list-style-type: none">Signed MoU with DigitalOcean to provide cloud infrastructure and support to start-ups (\$1000 Cloud Credits) enrolled with the Karnataka Start-up Cell</div></div> <div><div>Start-up Elevate Programme (May'17)</div><div><ul style="list-style-type: none">Identify 100 innovative start-ups across sectors in the state and enable access to mentors, networking, funds, idea validation, incubation, etc.\$620 Mn allocated for the initiative</div></div> <div><div>Investment in Incubation Hubs (Nov'16)</div><div><ul style="list-style-type: none">Govt. announced to invest \$4.5 Mn into a start-up incubation hub at 35,000 sq ft plot in BengaluruPlan to set up 5 start-up incubators across the state at a cost of \$6.8 Mn to nurture innovators in tier-2/3 cities</div></div> <div><div>Tourism Promotion Programme by Government (Sep'16)</div><div><ul style="list-style-type: none">8 innovative tourism related start-ups were selected for funding and support from Karnataka Tourism DepartmentAnnounced assistance totalling to about \$0.3 Mn to the chosen start-ups to work on their ideas</div></div>	<div><div>Setting up of an Innovation Ecosystem (Jul'17)</div><div><ul style="list-style-type: none">Government of Maharashtra, FICCI and University of Texas Austin-USA, collaborated to set up Innovation Ecosystem in Maharashtra to drive creation of at least 1,000 enterprises as technology start ups, create thousands of jobs and create INR 6,000 crore (US\$ 1 billion) impact in the state</div></div> <div><div>100% waiver to start-ups or incubators (April'17)</div><div><ul style="list-style-type: none">Proposed to issue a 100% waiver to start-ups or incubators on stamp duty and registration; 50% proposed waiver on their second transaction as wellAnnounced to compensate for the cost of obtaining an Indian patent (up to \$0.3 Mn) and international patent (up to \$1.5 Mn)</div></div> <div><div>Drafted Maharashtra State Innovation and Start-up Policy (April'17)</div><div><ul style="list-style-type: none">Proposes to establish incubators in 12 prominent high demand sectors including construction, production and manufacturing, textile, automotive, hospitality, health care, banking & finance and InsurancePlans to attract an investment of \$780 Mn while developing at least 2000 start-ups in 5 years</div></div>	<div><div>Early-Stage Fund To Promote Entrepreneurship (July'17)</div><div><ul style="list-style-type: none">Government to set up \$310 Mn (INR 2,000 Cr) master fund for investment in sector-specific start-ups, along with general venture capital fundsPlan to set up a \$38.7 Mn (INR 250 Cr) T-SEED fund to support seed stage start-ups</div></div> <div><div>Expansion plans to its T-Hub Incubator (March'17)</div><div><ul style="list-style-type: none">Five fold expansion of T-Hub, a PPP initiative across 300,000-350,000 sq ft for development of start-ups in the statePost operations scheduled in 2018, the facility would be the largest of its kind in the world</div></div> <div><div>Telangana's Open Data Policy</div><div><ul style="list-style-type: none">This policy enables information from various government departments to available online easily to enable transparencyIt enables start-ups in the state to address public issues by finding solutions using the information onlineSecond state in India after Sikkim to have such a policy</div></div>

CASE STUDY – FAILED B2B START-UPS

MORTALITY ANALYSIS

Several reasons for B2B start-ups closing down operations over the past several years



Hyper-local logistics provider

Gurgaon, NCR
Inception Year: Dec 2014
Total Funding: \$0.15 Mn
Shut-down: 2016



“The B2B model demanded heavy working capital and that sort of kept the VCs away”

Siddharth Arora
Co-Founder

Funding & Cash Related Issues

- ❌ **High Working Capital Business:**
Witnessed increasing working capital demands
- ❌ **Unable to Raise Funds:**
Multiple tries with various VC’s to raise \$2 Mn in funding, but were not able to close a deal



Platform for loyalty cardholders

Delhi
Inception Year: Feb 2013
Total Funding: \$0.17 Mn
Shut-down: 2017



“The market we were targeting was not mature enough since most people in India do not have multiple credit cards”

Nidhi Gurnani
Co-Founder

Less Demand and lack of funds

- ❌ **Difficulty in Customer Acquisition:**
Very few multiple credit card holders
- ❌ **Lack of funds to educate customers:**
Company needed deep pockets to educate customers about product safety and security



Discovery and pitching mobile platform

Gurgaon, NCR
Inception Year: Dec 2014
Total Funding: \$2.8 Mn
Shut-down: 2016



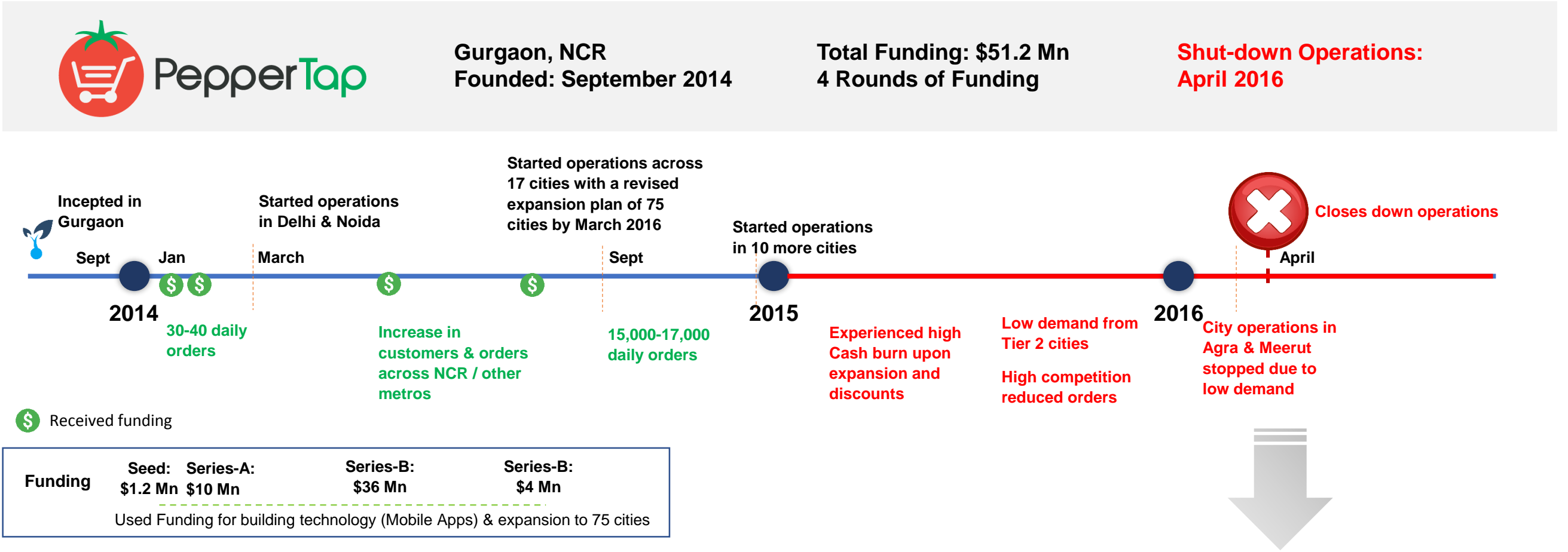
“It was not because of funding or product fit, but we had to shut down due to reasons which were out of our control”

Prashant Sharma
Founder

External Factors

- ❌ **Legal Complications**
Possible legal complications arose due to the nature of the platform
- ❌ **SEBI Regulations**
As per SEBI notice, such platforms were termed as violating laws on private placement of equity

PepperTap Case Study



- Top Reasons for Mortality**
- ❌ **Excessive Cash Burn-out:** Heavy discounts (2 hour delivery) which reqd. buffer capacity to be maintained & also led to non optimized fleet / logistics
 - ❌ **Non-Scalable Business Model:** Relied solely on partners to maintain inventory | very less ~5% commission based revenue with low volumes
 - ❌ **Unrealistic Expansion Plan:** Tried to expand too fast which their existing business model did not support

NASSCOM®

Plot No 7 to 10, Sector 126, Noida, Uttar Pradesh 201301, India Phone: 91-120-4990111

www.nasscom.in

research@nasscom.in



Visit our e-community at <https://community.nasscom.in>