

Pilot Survey on Indian Startup Sector - Major Findings



RESERVE BANK OF INDIA
DEPARTMENT OF STATISTICS AND INFORMATION MANAGEMENT
2019

Findings from a pilot survey on Indian startup sector conducted by the Reserve Bank are presented in this document. It presents the feedback received from the survey respondents and does not reflect the views of the Bank. Comments/suggestions are solicited from stakeholders on the findings of the survey as well as on methodology, usefulness of information and scope for improvement in the survey. The same may be forwarded to - The Director, E-Commerce and New Age Survey Division, Department of Statistics and Information Management, Reserve Bank of India, C-8, 2nd floor, Bandra-Kurla Complex, Bandra (East), Mumbai-400051; [e-mail](#).

Table of Contents

	Executive Summary	i
1.	Introduction	1
2.	Objectives of the survey	1
3.	Coverage and Design	1
4.	Major Findings	2
	4.1 Startup Sector in India: The Contours	2
	4.2 Profile of Founders	3
	4.3 Product Innovation and Sectoral Spread	5
	4.4 Motivation and Professional Support	7
	4.5 Technology, Customers and Markets	8
	4.6 Sources of Funds	9
	4.7 Financial Performance and Constraints Reported	11
	4.8 Future plans	12
5.	Conclusion	13

Executive Summary

1. The Reserve Bank conducted a pilot survey on Indian startup sector during November 2018 to April 2019. A total of 1,246 startups (public/private limited companies, partnership firms, limited liabilities partnerships and others) participated in the survey. Around three-fourths of respondents were from the states of Karnataka, Maharashtra, Telangana, Delhi and Tamil Nadu.
2. Startups in six sectors, viz., agriculture, data & analytics, education, health, IT consulting/solution and manufacturing accounted for nearly 50 per cent of the survey respondents.
3. Respondents cited market/industry demand and team experience as the major enabling factors for setting up the startups. Both domestic markets (mainly semi-urban, urban and metropolitan areas in India) and foreign countries were the target destination of the startups.
4. Almost half of the respondents informed that they were in an early stage of revenue generation while 31 per cent were in a growing stage. Of the remaining startups which were yet to generate any revenue, as high as 86 per cent were aged below three years.
5. The annual turnover for over one-fourths of the respondents was up to ₹ 10 lakhs whereas around 20 per cent startups did not report any revenue generation. Less than one-fifths of the respondents reported that their turnover exceeded ₹ 1 crore.
6. Only 14 per cent of startups had more than 10 employees in the first six months of their operation but as the sector matured, the share increased to 40 per cent at the time of conducting the survey.
7. Around 36 per cent of the startups availed institutional loans (including from banks) to finance their activities.

Pilot Survey on Indian Startup Sector - Major Findings

1. Introduction

1.1 In view of the emerging importance of the startup sector in the Indian economy, the Reserve Bank of India (RBI) conducted a pilot survey on Indian startup sector during November 2018 to April 2019. Responses were received from 1,246 startups. This report presents the major findings of the survey.

1.2 The structure of the report is as follows: section 2 presents the objectives of the survey while the survey coverage and design are briefly described in section 3. Major findings from the survey are discussed in section 4 and the conclusions are summarised in section 5.

2. Objectives of the survey

2.1 Startups are ignited by entrepreneurial and innovative spirit in an economy and play an important role in its growth. The pilot survey was aimed at collecting information on select important characteristics of the startup sector, viz., geographical, institutional and age profile of the sector, academic, professional and gender profile of the founders, motivational factors, turnover, workforce, target markets, types of products, technology used, sources of funds and future plans (the survey questionnaire is provided in the [Annex](#)).

3. Coverage and Design

3.1 The pilot survey approached the following target groups: (a) startup entities recognised by the Department for Promotion of Industry and Internal Trade (DPIIT) of the Ministry of Commerce and Industry, Government of India; and (b) entities under incubators/accelerators¹ with age not more than seven years², which might be outside

¹ An accelerator is typically a 3-4 month program for startups at early traction and scaling stage. It is a process of intense, rapid and immersive education aimed at accelerating the growth of the startup. The accelerator may take a set amount of seed equity from the startups in their cohorts in exchange for capital and mentorship. An incubator is a workspace created to offer early-stage startups access to all resources they need under one roof. They provide office space, mentoring, business services, funding, and networking opportunities to the incubatees. (Source: Startup India Kit, October 2019, DPIIT, GoI).

² As per the Gazette notification G.S.R. 364 (E) dated 11th April, 2018, an entity shall be considered as a startup up to seven years from the date of its incorporation/registration (in the case of startups in the

the DPIIT list and could also participate in the survey by downloading the survey questionnaire from RBI website.

4. Major Findings

Keeping in view the objectives, the pilot survey collected information on certain important aspects such as profiles of the startups and their founders, nature of products, sources of funds and future plans. Salient observations on these aspects are presented below.

4.1 Startup Sector in India: The Contours

The summary profile of the survey respondents is presented below.

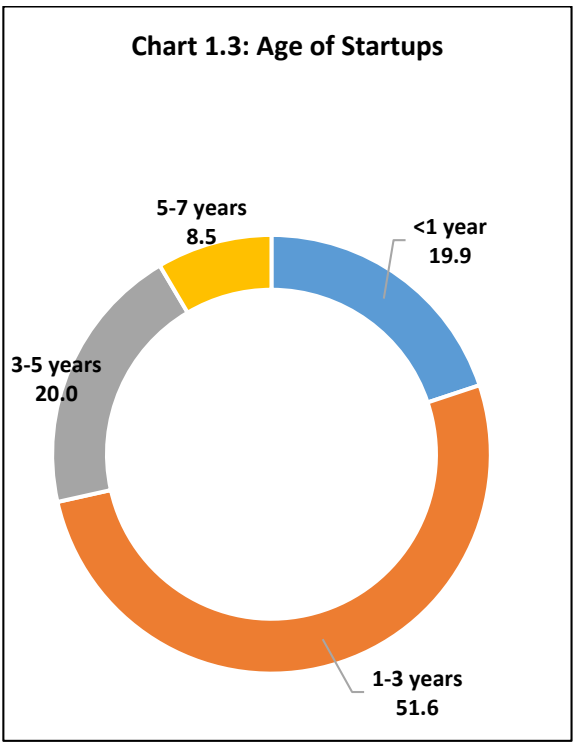
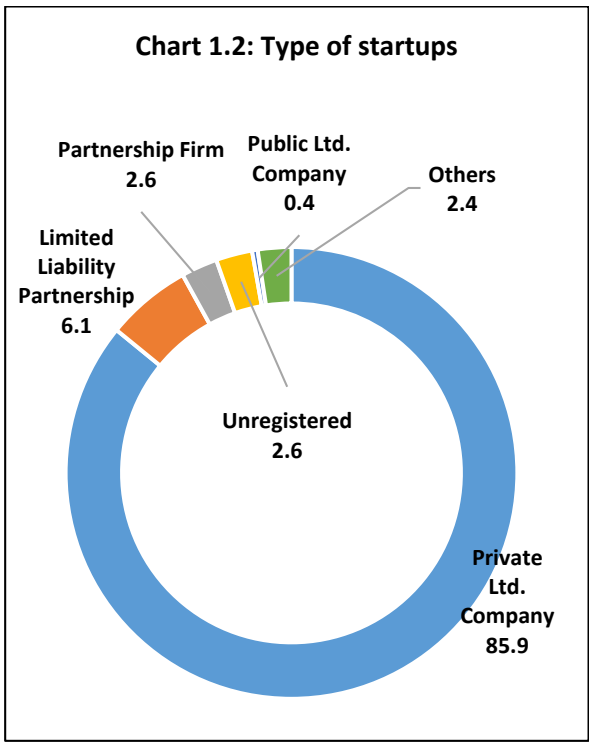
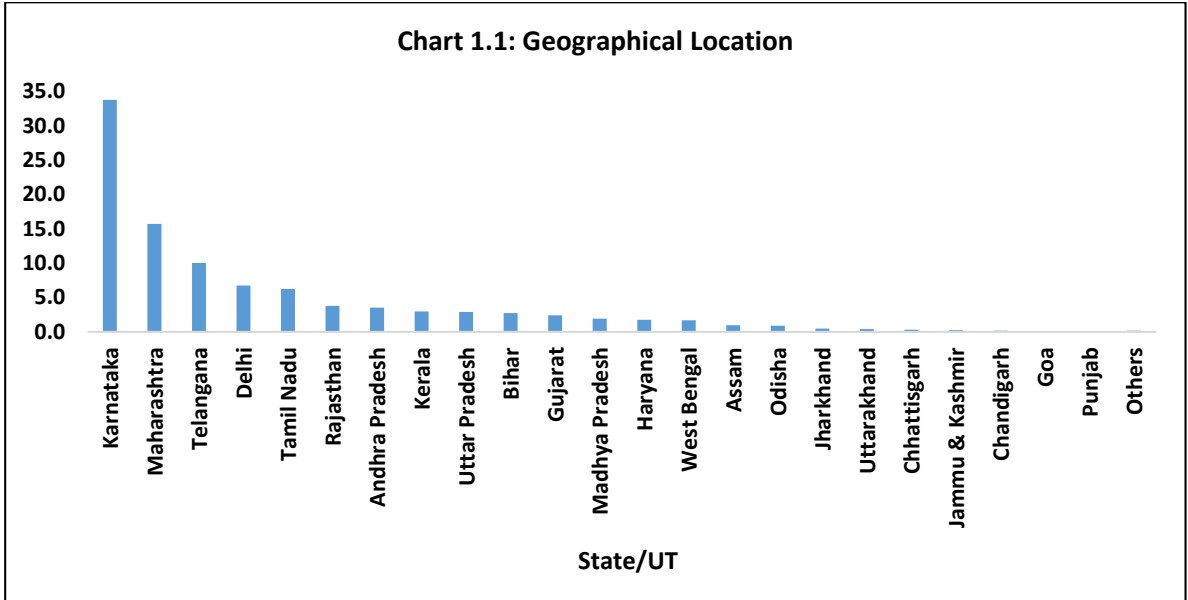
4.1.1 Nearly three-fourths of the participants were from the states of Karnataka, Maharashtra, Telangana, Delhi and Tamil Nadu, indicating large concentration of the startup sector in India in a few states (Chart 1.1).

4.1.2 Private efforts spearhead the startup sector in India: nearly 86 per cent of the participating startups were private limited companies (Chart 1.2).

4.1.3 Over 70 per cent of the participating startups were set up in the last three years (*i.e.*, in the period from 2016-17 to 2018-19) (Chart 1.3).

biotechnology sector, the period is upto ten years from the date of its incorporation/registration) if it is incorporated as a private limited company (as defined in the Companies Act, 2013) or registered as a partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2008) in India; turnover of the entity for any of the financial years since incorporation/registration has not exceeded Rs. 25 crore; entity is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation; the Gazette notification however provided that an entity formed by splitting up or reconstruction of an existing business shall not be considered a 'startup'. This pilot survey was launched in November 2018 and followed the above criteria. Subsequently, in the notification G.S.R. 127(E) dated 19th February, 2019, the seven years' period was increased up to ten years across all sectors of startups and turnover limit was increased to not exceeding Rs. 100 crore.

**Distribution of the Participating Startups: State/UT, Type and Age
(per cent share in total no. of participating startups)**

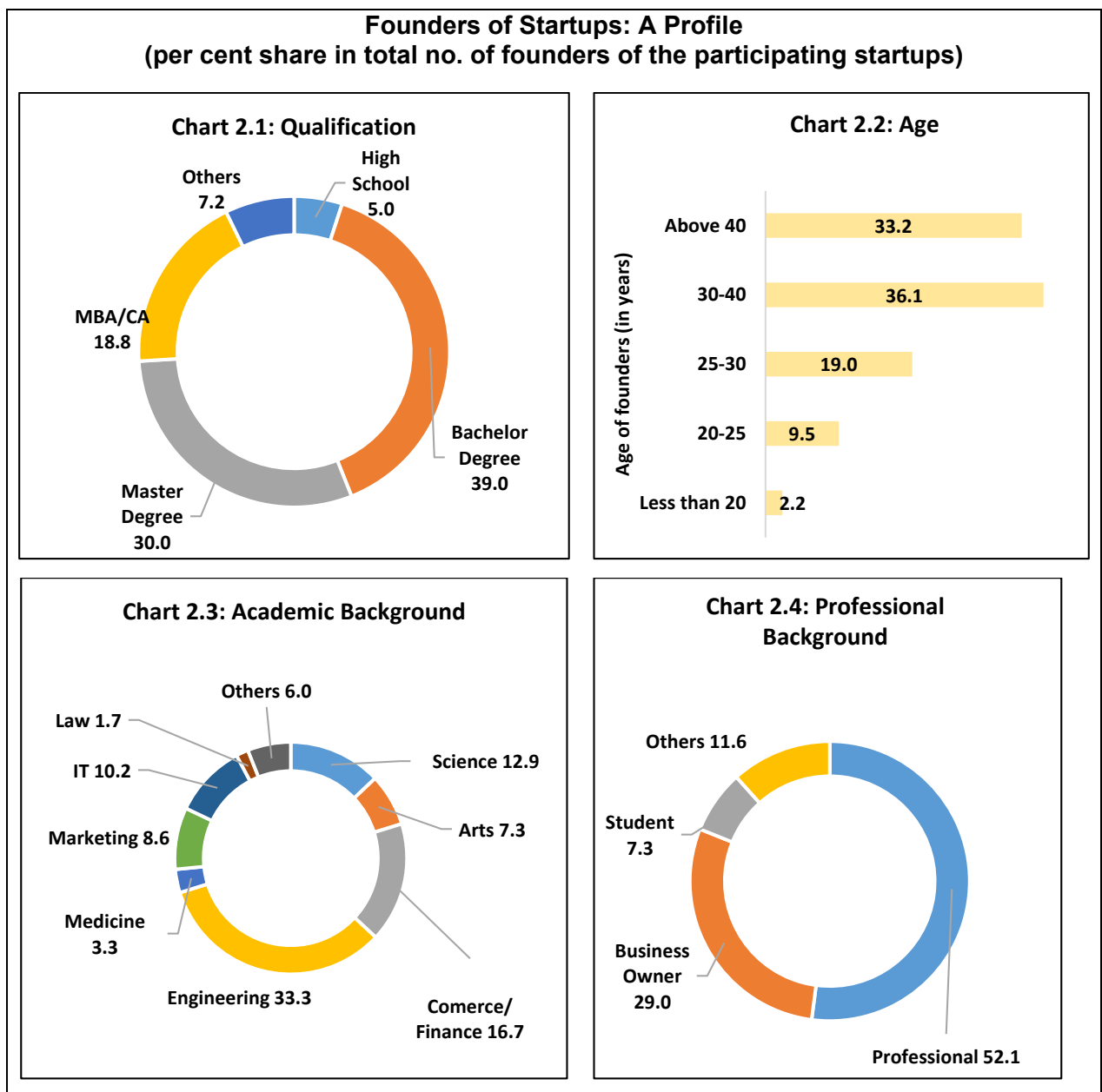


4.2 Profile of Founders

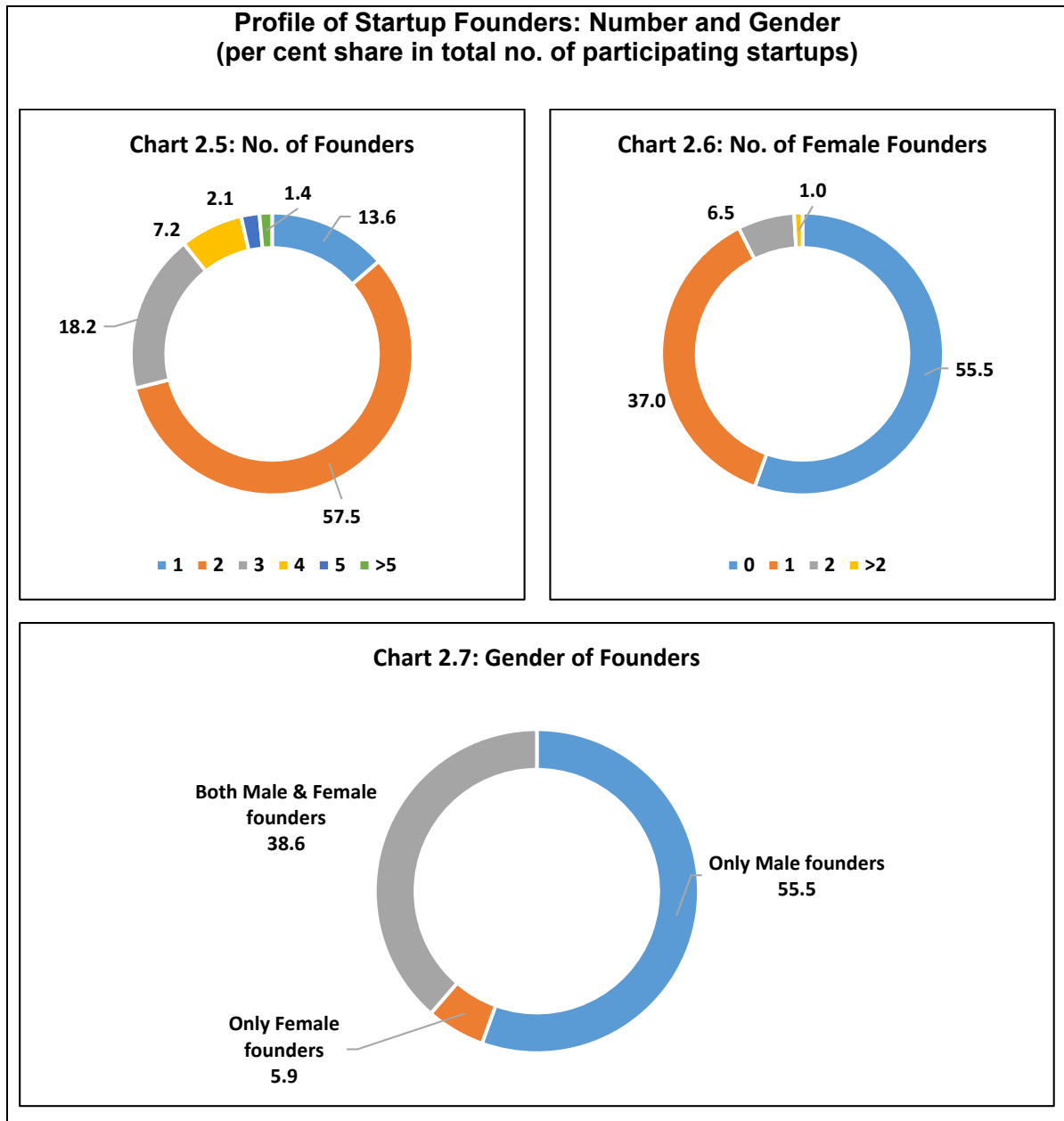
Founders of the startup sector are business initiators and the entrepreneurs, and a gist of their profile is given below.

4.2.1 Nearly 88 per cent of the founders had academic qualification of at least a bachelor's degree (Chart 2.1). Over 10 per cent of the founders were below 25 years of age and another 55 per cent were in the age group 25 to 40 years (Chart 2.2).

4.2.2 One third of the founders had academic background in engineering (Chart 2.3). A majority of the founders had professional experience and 7.3 per cent of the founders were still students (Chart 2.4).



4.2.3 Most of the startups had at least two co-founders (Chart 2.5). Nearly 45 per cent of the participating startups had at least one female founder (Chart 2.6). In all, 5.9 per cent of the participating startups were founded by only females in comparison to 55.5 per cent by only male founders. The remaining 38.6 per cent of the participating startups had both male and female as co-founders (Chart 2.7).



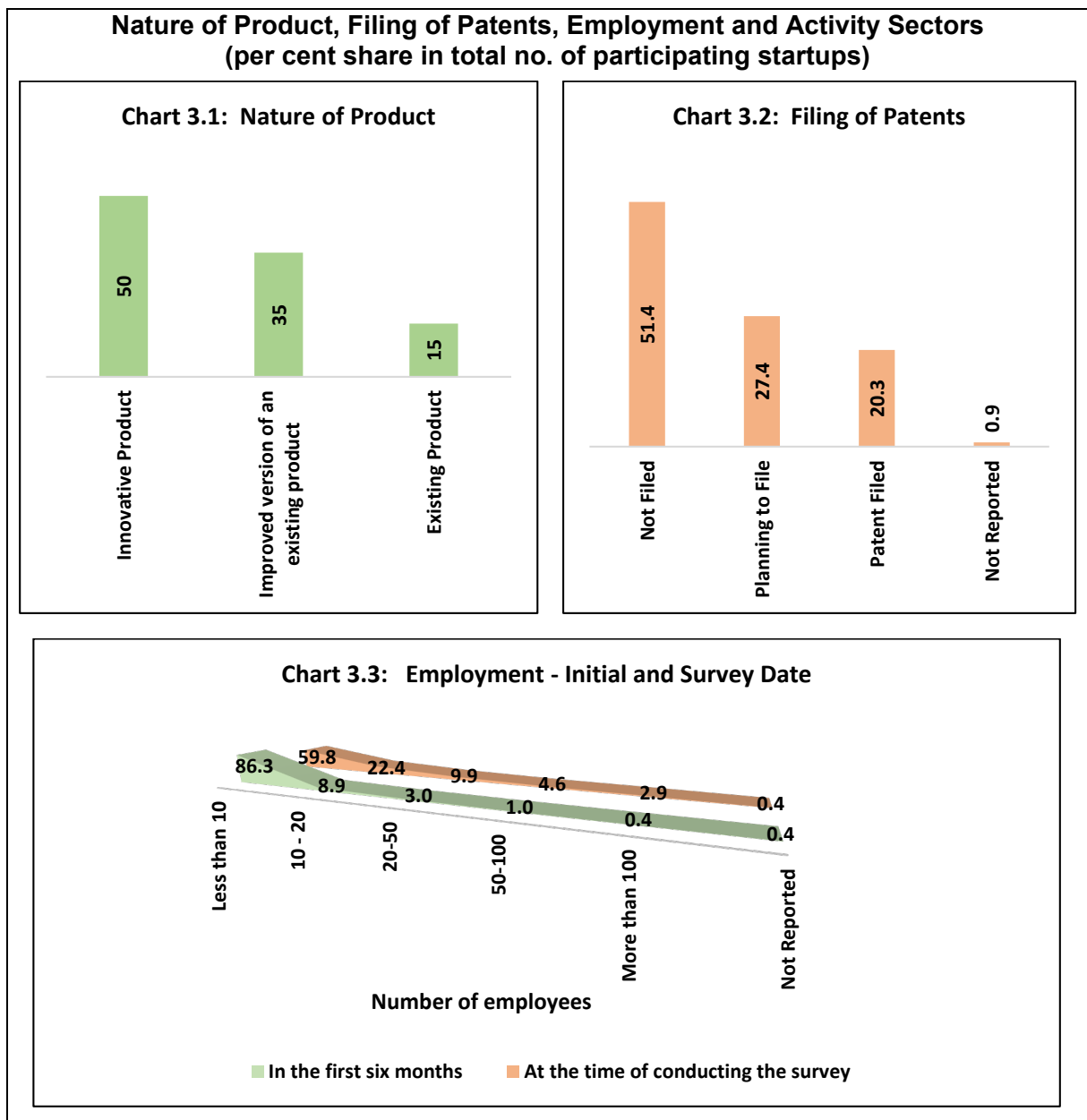
4.3 Product Innovation and Sectoral Spread

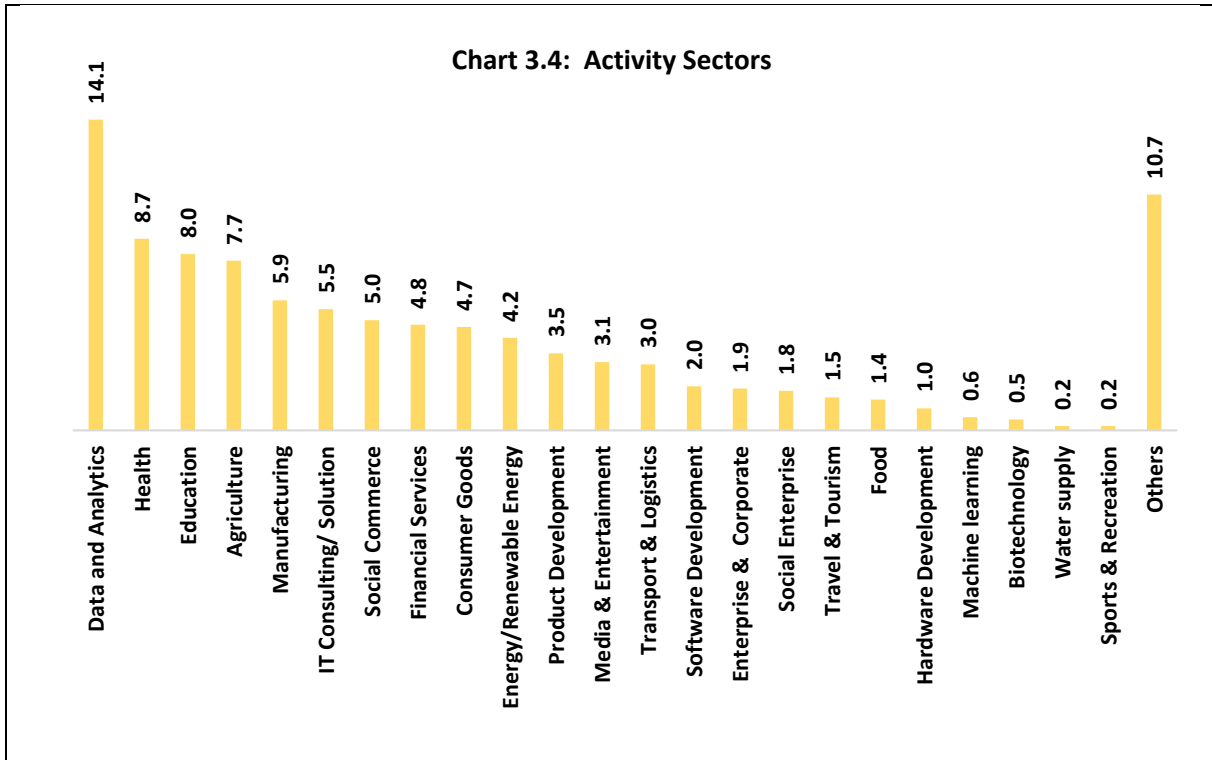
Product innovation often drive startups, who develop entrepreneurship, propel productivity gains and create employment opportunities across economic sectors. The pilot survey reflected on some of these aspects, which are presented below.

4.3.1 Around half of the participating startups dealt in innovative products and over 20 per cent had filed patents for their products whereas another 27 per cent were planning to file patents (Charts 3.1 and 3.2).

4.3.2 Only 14 per cent of startups had more than 10 employees in the first six months of their operation but, as the sector matured, this share increased to nearly 40 per cent at the time of conducting the survey (Chart 3.3).

4.3.3 Startups worked in diverse areas of activities, where emerging sectors had a fair share (Chart 3.4). Data analytics was the leading sector followed by health, education and agriculture.

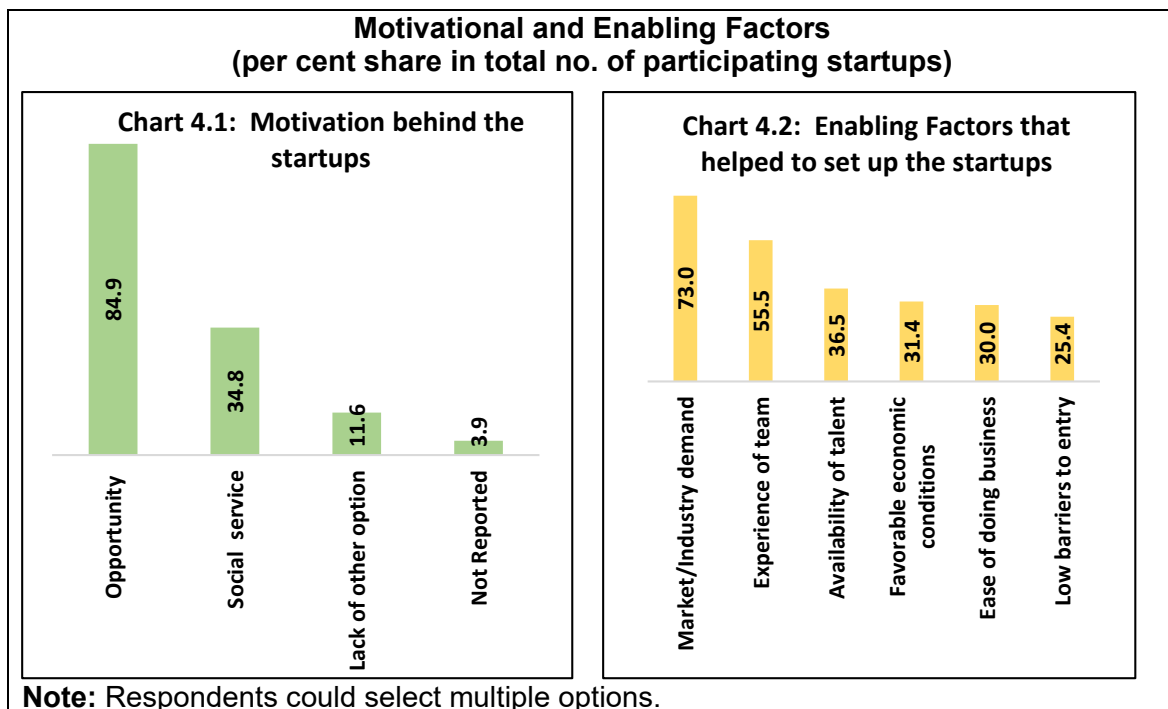




4.4 Motivation and Professional Support

The pilot survey shed light on the motivation behind the startup founders' entrepreneurial spirit.

4.4.1 An overwhelming majority of the startups aimed to capitalise on available opportunities. Many of them were inspired by multiple reasons and a substantial section of them also intended to serve social causes (Chart 4.1). Their efforts were facilitated by favourable market/industry demand perception as well as reassurances on human resources in terms of internal experience and availability of talent (Chart 4.2).



4.4.2 Entities were accessing professional support mainly from mentors & advisers. They also enlisted support of chartered accountants/company secretaries.

4.5 Technology, Customers and Markets

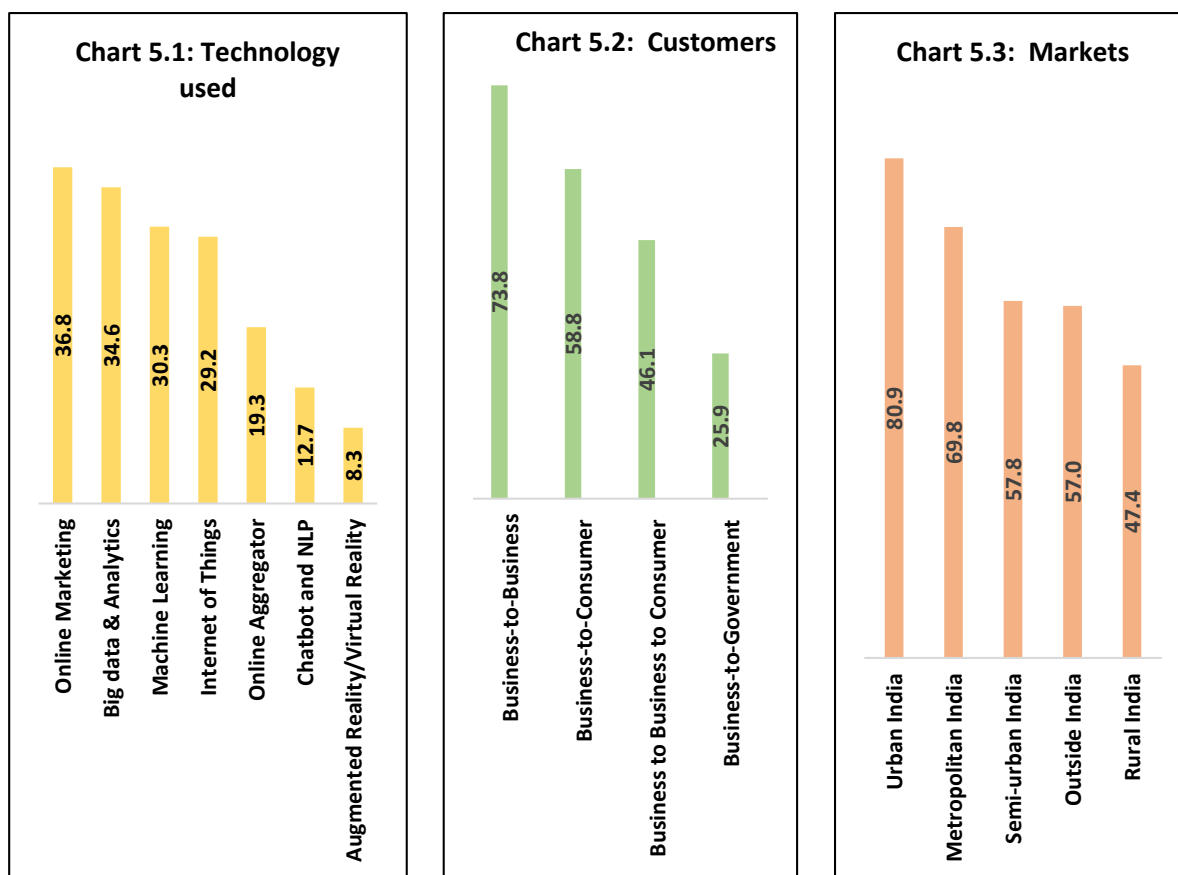
Use of the latest or innovative technology often helps startup business in differentiating from others and taking advantage *vis-a-vis* the traditional business, which they need to supplement with sound strategy for marketing their innovative products. Major features on these aspects are presented below.

4.5.1 Around a third of the startups used online marketing, big data analytics, machine learning and internet of things (IoT) for their business (Chart 5.1).

4.5.2 Most of the respondents targetted business to business (B2B) and business to consumer (B2C) channels for selling their products (Chart 5.2).

4.5.3 Startups targetted both domestic and foreign markets: for business within India, they targetted both urban and rural markets, with a preference for the former (Chart 5.3).

Technology, Customers and Markets
(per cent share in total no. of participating startups)



Note: Respondents could select multiple options.

4.6 Sources of Funds

Following are the major features of capital support for entrepreneurial activities of the participating startups.

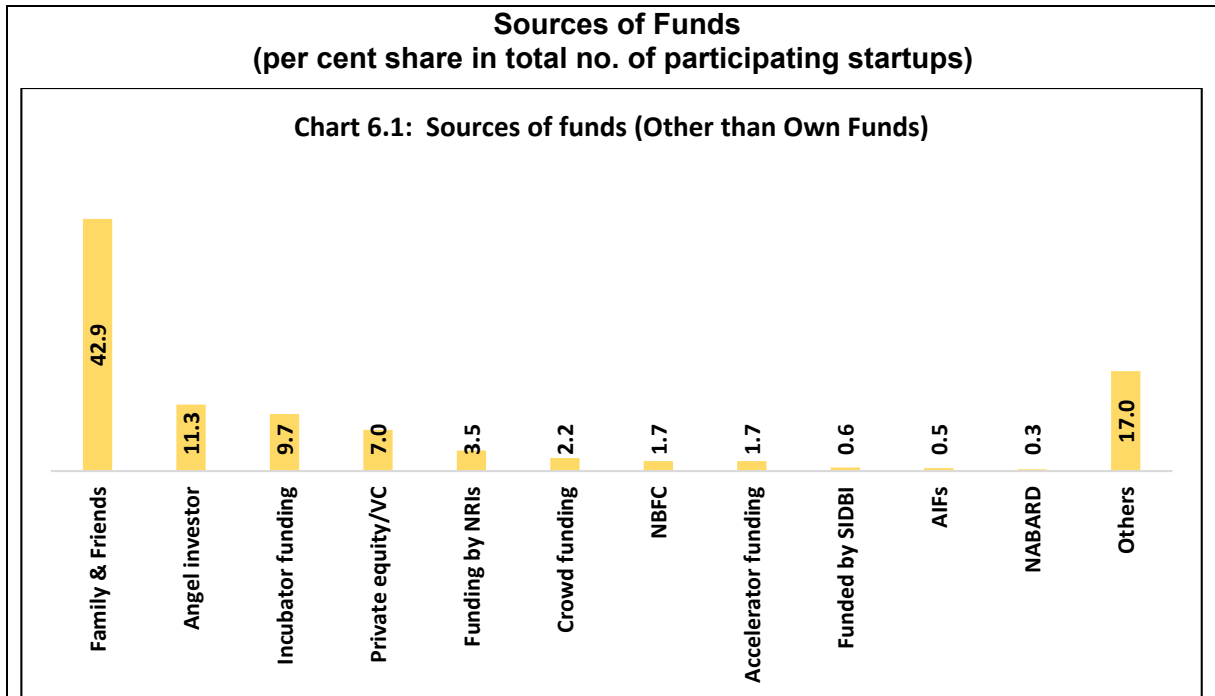
4.6.1 Families & friends emerged as the largest source of funding (around 43 per cent), apart from own funds (Chart 6.1).

4.6.2 About 13 per cent of the startups received international funding (Chart 6.2).

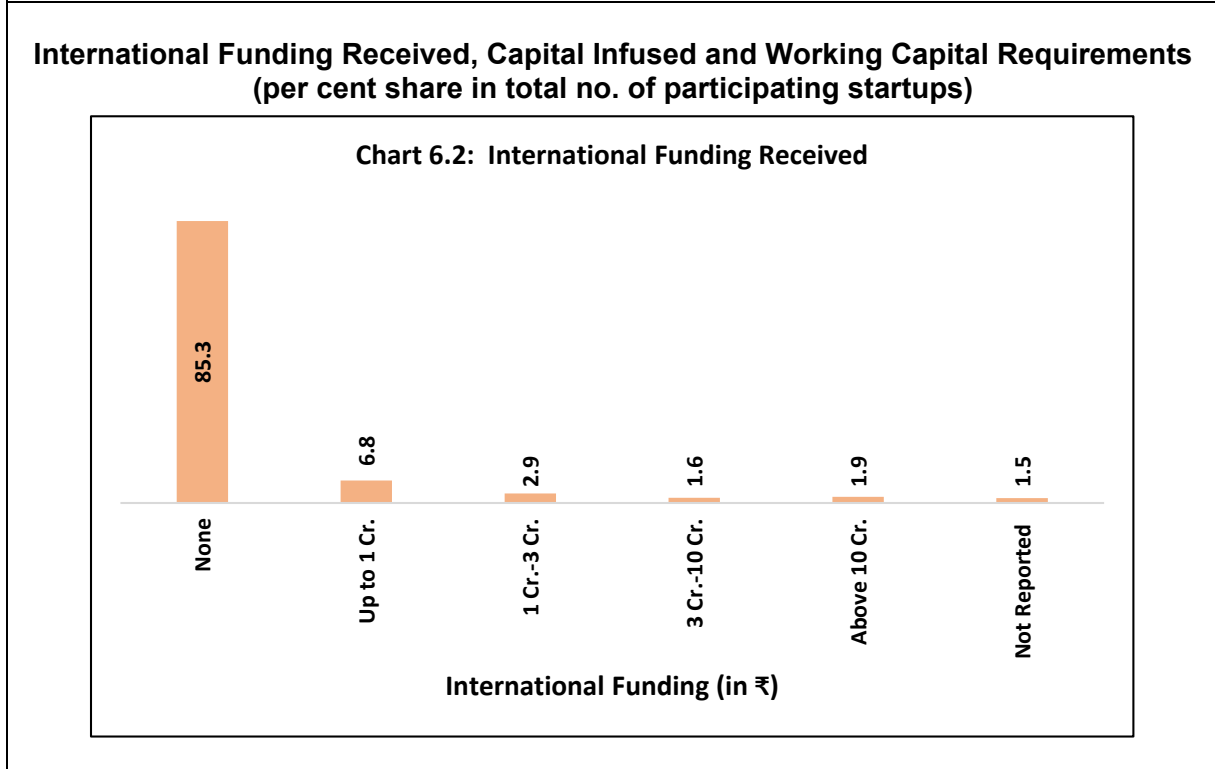
4.6.3 Over three-fourths of the startups had up to ₹ one crore of capital investment, whereas around 41 per cent infused capital up to ₹ 20 lakhs each. On the other hand, nearly 5 per cent startups infused capital above ₹ 10 crore each (Chart 6.3).

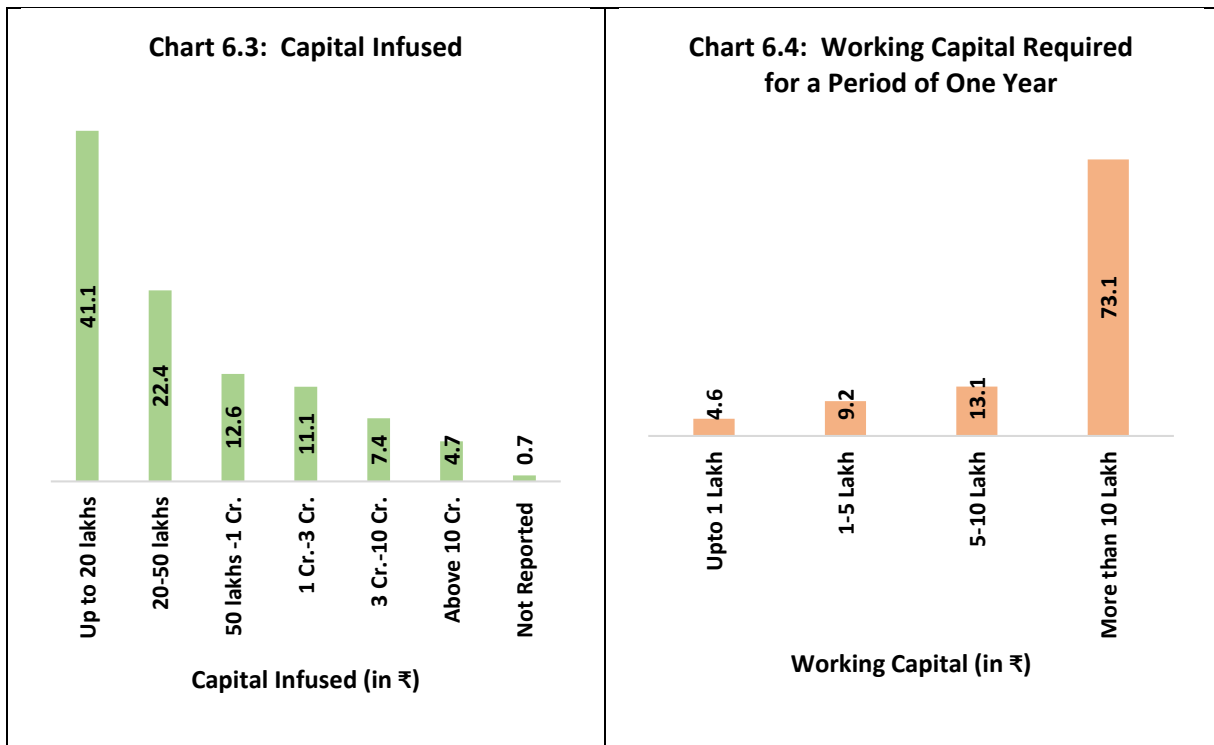
4.6.4 Nearly three-fourths of the startups had working capital requirements of more than ₹10 lakh for a year (Chart 6.4).

4.6.5 Around 36 per cent of the participating startups availed loans from institutions (including banks). Only 1.7 per cent of the startups availed external commercial borrowings.



Note: Respondents could select multiple options.



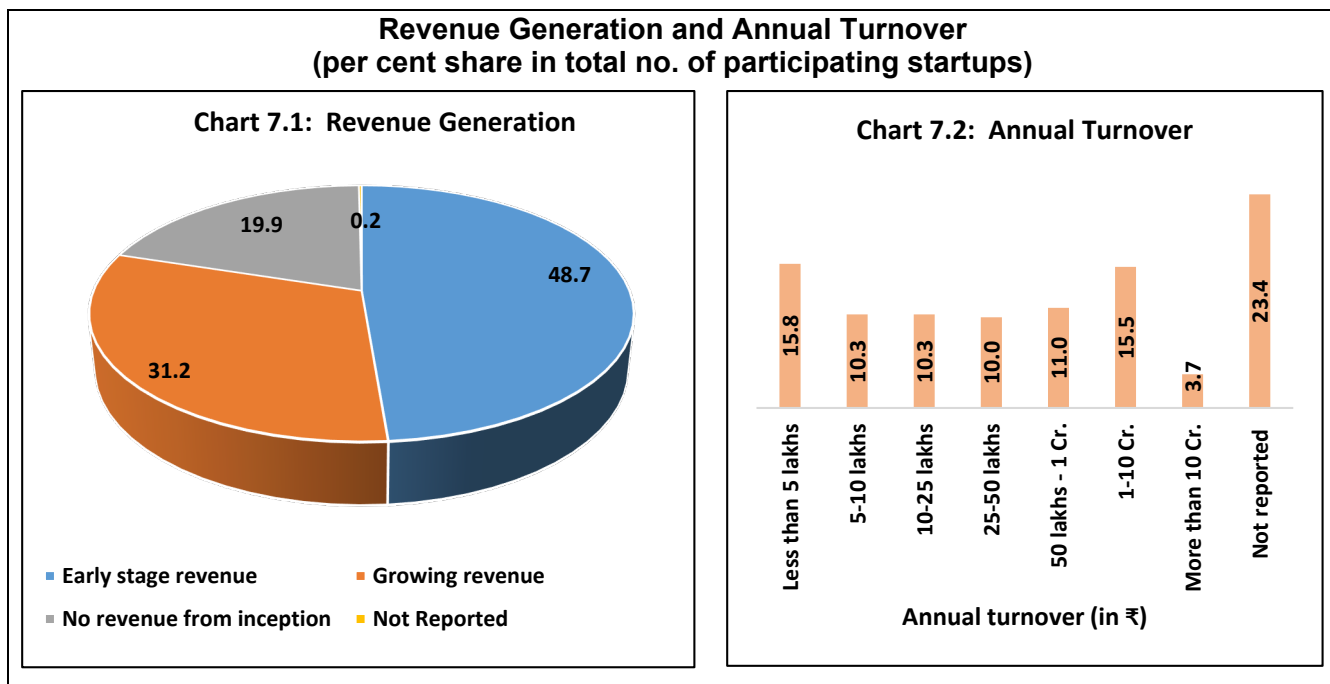


4.7 Financial Performance and Constraints Reported

The pilot survey also endeavoured to get some ideas about the financial performance of the participating startups. Following are the noteworthy observations in this regard.

4.7.1 Almost a half (49 per cent) of the respondents informed that they were in early stage of revenue generation while another 31 per cent were in growing stage (Chart 7.1). Of the remaining startups, which were yet to generate any revenue, as high as 86 per cent were aged below three years.

4.7.2 While one-fourth of the respondents reported annual turnover up to ₹ 10 lakhs, nearly one-fifth reported annual turnover above ₹ 1 crore (Chart 7.2). Nearly a quarter of the respondents did not report turnover.



4.7.3 Access to new markets, finance and lack of skilled labour/technology/talent/distribution channel were some of the constraints cited by the respondents.

4.8 Future plans

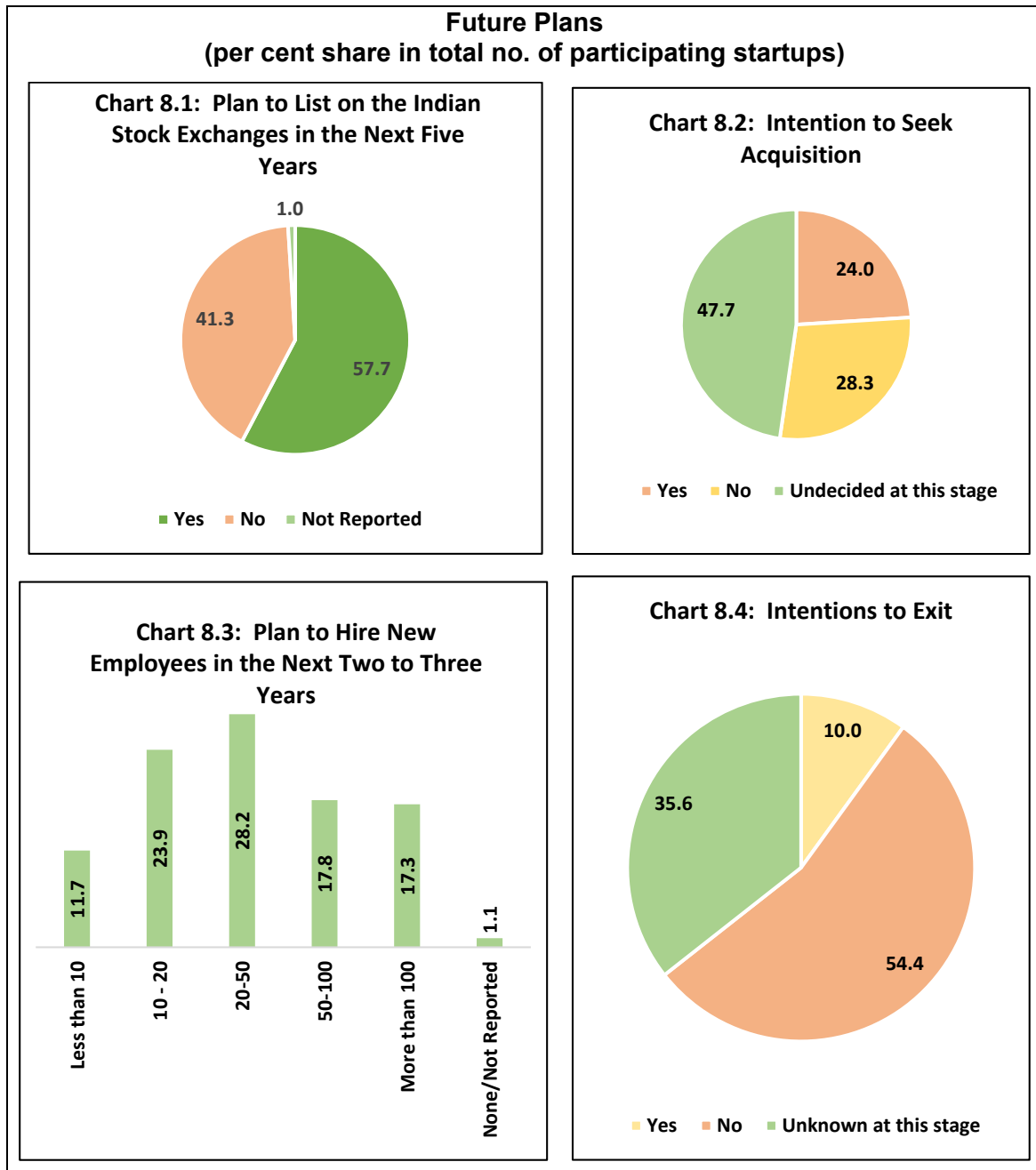
The participating startups were asked about their future plans and a summary of their feedback is given below.

4.8.1 Almost 58 per cent of the startups had plans to get listed on the Indian stock exchanges in the next five years (Chart 8.1). Most of these startups were in health, software development, IT consulting/solution sectors and were of age less than three years.

4.8.2 About 24 per cent of the respondents intended to seek acquisition at a later date (Chart 8.2). Such startups were mostly in product development, software development and IT consulting/solution sectors and were of age less than three years.

4.8.3 Over 63 per cent of the respondents reported to have plans to hire at least 20 new employees in the next two to three years (Chart 8.3). These startups were mainly from software development, IT consulting/solution and health sectors and were of age less than three years.

4.8.4 About 10 per cent of the respondents had intentions to exit (Chart 8.4). Funding requirements and market conditions were reported as major reasons for such intentions.



5. Conclusion

This pilot survey shed light on certain important aspects of the startup sector in the Indian economy. Participants reported market/industry demand and team experience as the most important factors for setting up the startups. The survey revealed that

startups were able to augment employment generation as they grew. Data and analytics, health, education and agriculture were major startup sectors in the country. Some of the constraints cited by the startups pertained to access to new markets, finance and lack of skilled labour/technology/talent/distribution channel. Future plans of the startups included hiring staff for supporting business expansion, getting listed on the Indian stock exchanges and seeking acquisition, among others.

ABBREVIATIONS

AIF	Alternative Investment Funds
B2B	Business to Business
B2C	Business to Consumer
CA	Chartered Accountant
DPIIT	Department for Promotion of Industry and Internal Trade
ECB	External Commercial Borrowing
Gol	Government of India
IT	Information Technology
IoT	Internet of Things
MBA	Master of Business Administration
NABARD	National Bank for Agriculture and Rural Development
NBFC	Non-Banking Financial Companies
NLP	Natural Language Processing
NRI	Non-Resident Indian
RBI	Reserve Bank of India
SEBI	Securities and Exchange Board of India
SIDBI	Small Industries Development Bank of India
UT	Union Territory
VC	Venture Capital

RESERVE BANK OF INDIA
DEPARTMENT OF STATISTICS AND INFORMATION MANAGEMENT
MUMBAI-400051

Survey on Indian Startup Sector-Questionnaire

Year _____

A. General Information on the Startup

1. Name of your Startup _____
2. Address (optional):
 _____ City: _____
 State: _____ Pin: _____
 Email: _____ Contact no: _____
 CIN _____(21 digits)
3. Certificate Number as recognised by DIPP as startup(if any) _____
4. Total number of founder(s) in your Startup _____
5. Total number of female founder(s) in your Startup _____
6. Number of the founder(s) in age intervals given below (write number inside the box as applicable)
 a. Less than 20 b. 20-25 c. 25 - 30 d. 30- 40 e. Above 40
7. Age of the Startup (in years)
 a. Less than one b. 1 - 3 c. 3 - 5 d. 5 - 7
8. Number of founder(s) with qualification given below (write the number inside the box as applicable)
 a. High school b. Bachelor degree c. Masters degree
 d. MBA/CA e. Others
9. Academic background of the founder(s) (write the number inside the box as applicable)
 a. Science b. Arts c. Commerce/Finance
 d. Engineering e. Medicine f. Marketing
 g. Information Technology h. Law
 i. Others _____(please specify)
10. Background of the founder(s) (write the number inside the box as applicable)
 a. Professional b. Business Owner c. Student
 d. Others (Please Specify) _____
11. Type of your startup
 a. Private Ltd. Company b. Public Ltd. Company c. Partnership firm
 d. Limited Liability Partnership e. Unregistered f. Others
12. If registered in India, mention the state in which your Startup has been registered

13. If registered abroad, mention the country in which your Startup has been registered _____

B. Description of the Startup

14. Sector that best describes your Startup (you can tick more than one, in order of priority ,1 being top)

- | | | | | | |
|-------------------------|--------------------------|----------------------------|--------------------------|----------------------------|--------------------------|
| a. Agriculture | <input type="checkbox"/> | b. Social Commerce | <input type="checkbox"/> | c. Consumer Goods | <input type="checkbox"/> |
| d. Data & Analytics | <input type="checkbox"/> | e. Education | <input type="checkbox"/> | f. Media & Entertainment | <input type="checkbox"/> |
| g. Financial Services | <input type="checkbox"/> | h. Energy/renewable Energy | <input type="checkbox"/> | i. Transport& Logistics | <input type="checkbox"/> |
| j. Sports & Recreation | <input type="checkbox"/> | k. Health | <input type="checkbox"/> | l. Enterprise & Corporate | <input type="checkbox"/> |
| m. Social Enterprise | <input type="checkbox"/> | n. Food | <input type="checkbox"/> | o. Water supply | <input type="checkbox"/> |
| p. Manufacturing | <input type="checkbox"/> | q. Product Development | <input type="checkbox"/> | r. Hardware Development | <input type="checkbox"/> |
| s. Biotechnology | <input type="checkbox"/> | t. Machine learning | <input type="checkbox"/> | u. IT Consulting/ Solution | <input type="checkbox"/> |
| v. Software Development | <input type="checkbox"/> | w. Travel & Tourism | <input type="checkbox"/> | x. Others (please specify) | <input type="checkbox"/> |

15. Which option will be more suitable for your product:

- | | |
|--------------------------------------------|--------------------------|
| a. Already exists in the market | <input type="checkbox"/> |
| b. Improved version of an existing product | <input type="checkbox"/> |
| c. New Innovative Product | <input type="checkbox"/> |

16. Whether your Startup has filed for patents

- | | | | | | |
|--------|--------------------------|-------|--------------------------|---------------------|--------------------------|
| a. Yes | <input type="checkbox"/> | b. No | <input type="checkbox"/> | c. Planning to file | <input type="checkbox"/> |
|--------|--------------------------|-------|--------------------------|---------------------|--------------------------|

17. Which of the following helped you to set up the Startup (you can tick more than one, in order of priority ,1 being top)

- | | | | |
|-----------------------------------|--------------------------|---------------------------|--------------------------|
| a. Favourable economic conditions | <input type="checkbox"/> | b. Ease of doing business | <input type="checkbox"/> |
| c. Market/Industry demand | <input type="checkbox"/> | d. Availability of talent | <input type="checkbox"/> |
| e. Low barriers to entry | <input type="checkbox"/> | f. Experience of team | <input type="checkbox"/> |
| g. None of the above | <input type="checkbox"/> | h. Other | <input type="checkbox"/> |

18. Which stage is your Startup currently at

- | | | | | | |
|---------------------|--------------------------|--------------------|--------------------------|-------------------------------|--------------------------|
| a. Idea/Concept | <input type="checkbox"/> | b. Beta /Prototype | <input type="checkbox"/> | c. Early revenue | <input type="checkbox"/> |
| d. Growing revenues | <input type="checkbox"/> | e. Maturity | <input type="checkbox"/> | f. Expanding to new market(s) | <input type="checkbox"/> |

19. Professional support accessed by your Startup (you can tick more than one, in order of priority ,1 being top)

- | | | | | | |
|-----------------------|--------------------------|-------------------------------------------------------|--------------------------|---------------------|--------------------------|
| a. Mentors & Advisors | <input type="checkbox"/> | b. Lawyers/Business Consultants | <input type="checkbox"/> | c. Local Government | <input type="checkbox"/> |
| d. Industry Connect | <input type="checkbox"/> | e. CA (Chartered Accountancy) /CS (Company Secretary) | <input type="checkbox"/> | | <input type="checkbox"/> |
| f. None of the above | <input type="checkbox"/> | | | | |

20. Personal motivation for setting Startup

- | | | | | | |
|----------------|--------------------------|-------------------|--------------------------|-------------------------|--------------------------|
| a. Opportunity | <input type="checkbox"/> | b. Social service | <input type="checkbox"/> | c. Lack of other option | <input type="checkbox"/> |
|----------------|--------------------------|-------------------|--------------------------|-------------------------|--------------------------|

21. Is your Startup under any incubator / accelerator/Investor/Gol No
a. Yes b.

22. Is your Startup under any international incubator / accelerator/Investor

- | | | | |
|--------|--------------------------|-------|--------------------------|
| a. Yes | <input type="checkbox"/> | b. No | <input type="checkbox"/> |
|--------|--------------------------|-------|--------------------------|

23. Your target market (you can tick more than one, in order of priority ,1 being top)

- a. Rural India b. Semi-urban India c. Urban India d. Metropolitan India
 e. Outside India
24. Which types of Customer targeted by your Startup (you can tick more than one, in order of priority ,1 being top)
 a. B2B b. B2C c. B2B2C d. B2G
25. What technology is your Startup making use of (you can tick more than one, in order of priority ,1 being top)
 a. Big data & Analytic b. Machine learning c. IoT (Internet of Things)
 d. AR (Augmented reality)/VR (virtual reality) e. Online Aggregator
 f. Chatbot and Natural Language Processing (NLP) g. Online Marketing
 h. None of the above

C. Finance and Performance of the Startup

26. How your Startup is funded (you can tick more than one, in order of priority ,1 being top)
- a. Own funds b. Family & Friends c. Funding by NRIs
 d. Angel investor e. Crowd funding f. Private Equity / VC
 g. Funded by SIDBI h. AIFs (through SEBI) i. NBFC
 j. NABARD k. Incubator Funding l. Accelerator Funding
 m. Others
27. In case the Startup expected some financial concession from Government, did it materialise?
 a. Yes b. No c. No comments
 If 'No comment' please mention the possible reason _____
-
28. Capital infused to your Startup so far (in Rupees)
 a. Less than 20 lakhs b. 21-50 lakhs c. 50 lakhs -1 Cr. d. 1 Cr-3 Cr
 e. 3 Cr-10 Cr f. Above 10 Cr
29. International funding received by your Startup (in Rupees)
 a. < 1 Cr. b. 1Cr. -3 Cr c. 3 Cr.-10 Cr. d. Above 10 Cr.
 e. None
30. Working capital required for a period of one year (in Rupees)
 a. Upto 1 Lakh b. 5 Lakh c. 10 Lakh d. More than 10 Lakh
31. Institution from which you received loan easily (you can tick more than one, in order of priority ,1 being top)
 a. Public Sector Banks b. Private Sector Banks c. Non-Bank Financial Companies
 d. ECB e. Others f. Not Applicable
32. Your willingness to convert your loan to Equity
 a. Yes b. No c. Undecided
33. Is your Startup generating revenue

- a. Early revenue b. Growing revenue c. No revenue

34. In which year of operation did your Startup started generating revenue(turnaround time) _____

35. Annual turnover of your Startup, if applicable (in Rupees)

- a. Less than 5 lakhs b. 5-10 lakhs c. 10-25 lakhs
 d. 25-50 lakhs e. 50 lakhs - 1 crore f. 1-10 crore
 g. 10-25 crore h. > 25 Crore i. None

36. Did your Startup make any profit in the last three year

2015-16	2016-17	2017-18 (as on date)
a. Yes <input type="checkbox"/> b. No <input type="checkbox"/> c. N.A <input type="checkbox"/>	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/> c. N.A <input type="checkbox"/>	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/>

D. Employment in the Startup

37. Number of employees in your Startup in the first six months (on roll/on contract).

- a. Under 10 b. 10-20 c. 20-50 d. 50-100 e. Over 100

38. Number of employees in your startup now

- a. Under 10 b. 10-20 c. 20-50 d. 50-100 e. Over 100

E. Challenges faced by the Startup

39. Do you think filing registration for regular compliance (GST/Tax/Employee PF Fund /RoC/Tax Filing etc) is a smooth process in India.

- a. Yes b. No

40. Do you think policies in India for Startups are helpful?

- a. Yes b. Need more simplicity

If "Yes" which is/are the most beneficial policy/policies _____

Otherwise please state/suggest which policies will help you the most _____

41. Challenge(s) to scale up your business (you can tick more than one, in order of priority ,1 being top)

- a. Access to finance b. Accessing new market c. Lack of distribution channel
 d. Lack of skilled labour/ Technology/ Talent e. Process of approval from Nodal Agency
 f. Regulatory prescriptions g. None of the above

F. Future Plan of the Startup

42. If not already listed, do you plan to list your Startup on the Indian Stock Exchange in the next five years?

- a. Yes b. No

43. Does your Startup have an intention to exit?

- a. Yes b. No c. Unknown at this stage

if yes, what are the issues or challenges that affect your Startup to exit (you can tick more than one, in order of priority ,1 being top)

- a. Market conditions
- b. Funding requirement
- c. General economic situation
- d. Government Policies
- e. Growing presence of foreign startups
- f. Need to continually innovate to keep ahead
- g. Other

44. Does your Startup have an intention for seeking an acquisition?

- a. Yes
- b. No
- c. Undecided at this stage

45. How many new employees are you planning to hire in the next two to three years?

- a. Under 10
- b. 10-20
- c. 20-50
- d. 50-100
- e. Over 100
- f. None

Disclaimer: Information received through this questionnaire will be used for RBI internal purpose only. The data furnished in the questionnaire will be kept confidential and only consolidated aggregate will be published by Reserve Bank of India.