Growth Pattern and Trends in Startup Funding in INDIA

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Abstract: ***This paper presents the trend and growth pattern of startup ventures, their types and different stages of funding in India. The prime objective of this research was to study growth pattern of the startups and stages of funding received by these startups. The analysis has shown Indian start-up companies prefer primarily funding in four different stages, such as early stage, growth stage, expansion stage and bridge funding. The result has also shown that maximum funding was received in the expansion stage in the financial years. Bridge funding is becoming more and more prevalent, almost 10 per cent of deals. Further, it is noticed that the entrepreneurs find financial support from other funding sources, after the initial experimental phase. The results of chi-square test revealed that there is no significant association between stages of funding and level of development of startup. Further, the test also revealed no significant association between financing methods and professional qualification of promoters of startup.***

Index Term: Startup companies, Early Stage, Growth Stage, Expansion Stage, Bridge Funding, etc.

I. INTRODUCTION

A startup company is a newly founded entrepreneurial venture which is quintessentially unique, rapidly growing business that aims to meet the market demand by developing or offering an innovative and extraordinary product, service or processes. A startup is usually a company, such as a small business, a partnership or an organization deliberately designed to swiftly develop a commercially viable business model. More often than not, it is synonymous with high-tech projects, development and production, distribution of new products, processes or services. It uses technologies, like, computers, e-commerce, mobile communication, Internet, or robotics to make a niche for them in the market. It usually comprises the design and execution of the innovative and out of the box processes of the development, validation and research for target markets. The term 'startup' became global during the dot.com bubble in the late 1990s, when colossal number of internet-oriented companies proliferate. Besides, technology-oriented projects, by their very nature, have the greatest potential for growth (mashable.com, 2013).

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Research revealed a fascinating fact that a majority of technology-bound start-ups are mainly located in urban areas. The reason is obvious as there is greater demand for both product and services in the urban areas. However, there are majority of start-up ventures in traditional business sectors. At the global level, the startup scenario is more or less similar. Due to intense globalization, there is immense research contributing to the importance and ways of financing entrepreneurial ventures (formal and informal). The liberalization policy of Government of India has also influenced the overall investment scenario in start-ups, using either external or internal financing sources, which was evidenced in the research by Korostelevae and Mickiewicz (2010). The empirical evidence from the Global Entrepreneurship Monitor research from 2001 to 2006 revealed that among 54 nations, the total investment in start-up companies is determined by the economic development of the country. It was also observed with higher growth in GDP and per capita income, significant financial opportunities for investment in entrepreneurial operations are being created.

II. STARTUP IN INDIA

With the onset of LPG in the early nineties, India became mostly popular as an IT outsourcing destination. In the early 90s', India was considered as the most favoured destination for carrying on various back-end jobs due to availability of cheap and easy labour. This phase continued for almost two decades. Towards the beginning of the third decade, the Government of India started a movement for startup ventures keeping in pace with the growth in the economy and market demand. Startup in the area of software technology in India started almost three decades back. For example, Microsoft Accelerator Bangalore for software services and global delivery model, the dotcom era, the rise of product Startup and growth of startup ecosystem. Other important milestones included decision to start an R&D center by US-based Texas Instruments in Bengaluru in 1985. This center further served to be an incubator for many of the budding entrepreneurs and the inauguration of the accounting software Tally in 1986. With an objective of becoming a nation of job creators instead of being job seekers, the Indian Prime Minister launched the initiative formally on January 16, 2016 from Vigyan Bhawan, New Delhi and the prime motive of this initiative was to foster entrepreneurship culture and promotion of innovation by providing an ecosystem that is conducive for growth of Start-ups. Against this background, this research aims to study the development of start-up companies, its trends and growth pattern in funding received from different sources.

III. PROBLEM STATEMENT

Review of available literatures revealed that more than 90% of young companies (Startup) fail globally and the reason is primarily attributed to funding (Marmer, et al., 2011). Only 1 out of 12 companies survived and succeeded introducing their product or service (*Source: Startup Genome Report*). Therefore, this paper intends to study the trends and growth pattern in funding received by Indian start-ups and to analyze the stages of funding received by start-ups in India.

IV. OBJECTIVES OF THE STUDY

- To study the trends and growth pattern in funding received by Indian start-ups.
- To analyze the startup deals struck and funding received in different Stages of Startups in India.

V. HYPOTHESES OF THE STUDY

H_{01}: There is no significant association between the level of development of the startup and stages of funding used by Indian start-ups.

H_{02}: There is no significant association between professional qualification of the start-up promoters and the stages of funding.

VI. REVIEW OF LITERATURE

Atherton (2012) demonstrated that the financing source of startups (formal or informal) dependents on multiple factors and observed an immense disparity between the highly capitalized and undercapitalized start-ups. One of the biggest hindrance faced by majority of startup entrepreneurs is finding investment funds to expand or launch a startup, remarked by Berger, Cowan, Frame (2011). Startup founders first proceed to internal sources of financing (their own funds), followed by use of external financing sources, revealed in a study by Whittam and Wyper (2007). The enterprises which has been funded from their own sources, friends, and family resources in their start-up, are not any smaller in size as compared to the start-ups funded by bank loans, concluded by Colombo and Grilli (2005) in their study on correlation between the size of start-up companies and potential funding sources. In another study, Davila, Foster and Gupta (2000) observed that companies which were using Venture funds as the financing source grew faster than those that had used some other financing source. Maurya (2012) revealed that Bootstrapping and Lean Startups are complementary and both cover techniques for building low-burn startups by eliminating waste through the maximization of existing resources first before expending to acquisition of new or external resources.

VII. RESEARCH METHODOLOGY

The study employed the use of secondary data which is collected from the Annual Indian Startup Funding Reports 2015-16 to 2018-19. The collected data from this source have been compiled and used with due care as per the requirement of the study. The choice of secondary data is informed because data from such a source is free from bias, accurate and provides opportunity for replication. All the start-ups which are reported in the above-mentioned reports and received funding are considered for this study. Hence, analysis of all the start-ups are made for these years. Descriptive statistical analysis used to analyze the gathered data and inferential statistics is used to test the hypotheses of the study. These methods helped process the compiled data, analyze and interpret the result. Data analysis was performed using Microsoft Office Excel and SPSS 20.

VII. RESULT AND DISCUSSION

The result and discussion is explained in three parts. The first part explains about trends and growth pattern in funding received by Indian Startup. The second part presents the sector and trade-wise distribution of Startup in Indian ecosystem. The third part portrays the stages of funding received by Indian Startup.

A. Growth Pattern and Trends in Funding Received by Indian Startup

In this section, the growth pattern and trends in funding received by Indian Startup are outlined. The quarterly break-down of number of deals struck and funds received by the Startup is presented in Table- 1.

Table 1: Growth Pattern and Trends in Funding Received by Startup

Year	Quarter	No. of Startup	Total Funding/ Investment (Amoutn InUS $ Bn)
2015-16	Q1	171 (18.23%)	1.7 (18.89%)
	Q2	208 (22.17%)	1.8 (20%)
	Q3	283 (30.17%)	3.8 (42.22%)
	Q4	276 (29.43%)	1.7 (18.89%)
		938 (100%)	**9.0 (100%)**
2016-17	Q1	289 (28.33%)	1.3 (32.5%)
	Q2	257 (25.19%)	0.8 (20%)
	Q3	250 (24.51%)	1.3 (32.5%
	Q4	224 (21.96%)	0.6 (15%)
		1020 (100%)	**4.0 (100%)**
2017-18	Q1	173 (21.95%)	2.8 (30.6%)
	Q2	217 (27.53%)	3.6 (38.8%)
	Q3	192 (24.36%)	1.3 (13.9%0
	Q4	206 (26.14%)	1.5 (16.4%)
		788 (100%)	**9.33 (100%)**
2018-19	Q1	90 (39.64%)	0.4 (07.64%)
	Q2	84 (37.00%)	4.5 (74.63%)
	Q3	31 (13.65%)	0.6 (09.86%)
	Q4	22 (09.69%)	0.4 (07.84%)
		227 (100%)	**6.11 (100%)**

(Source: Compiled from Annual Indian Startup Funding Report 2016 & 2017, https://trak.in/india-startup-funding-investment-2015/december-2017/ https://trak.in/india-startup-funding-investment-2015/april-2019/)

It is observed that the maximum number of startup deals were struck (289) in the first quarter of 2016 and total funding received was to the tune of US $ 1.3 Bn. This was followed by the third quarter in which 283 startup deals were struck and funds received to the tune of US $3.8 Bn. A year to year basis comparison revealed that in 2016-17, maximum number of startup deals were struck, whereas maximum funding was received in the year 2017-18. There has been a positive growth in terms of number of startup deals till 2017-18 and thereafter, it started declining. Whereas the funding received has witnessed a negative growth during 2016-17 and 2018-19 in comparison to their respective previous years. The reason for decline in number of deals and startup funding in 2018 may be attributed to world-wide economic slowdown.

The sector and trade-wise distribution of Startup is presented in Table -2.

Table-2: Sector & Trade Wise Distribution of Startups

Technology Based Startup		**Non-Technology Based Startups**	
Trade	**Percentage (%)**	**Trade**	**Percentage (%)**
E-Commerce	33%	Engineering	17%
B2B	24%	Construction	13%
Consumer Internet	12%	Agri-Products	11%
Mobile App	8%	Textile	8%
Others	13%	Printing & Packaging	8%
		Transport & Logistics	6%
		Outsourcing & Support	5%
		Others	32%

***Source*:** Compiled from Annual Indian Startup Funding Report

An insight into the data contained in table revealed that in the technology-based category, majority (33%) of the startup belong to the category of E-Commerce. This was followed by B2B (24%), Consumer Internet (12%) and Mobile App (8%) respectively. Whereas, in the non-technology based category, 17% of the Startup were found to be in engineering trade, which was followed by Construction (13%), Agri Products (11%), Textile (8%), Printing and Packaging (8%), transport and Logistics (6%) and Outsourcing and Support (5%) respectively.

B. Startup funding & Deal Size

Table-3: Startup Funding and Average Deals Struck

Year	(Amount in US $ Mn.)		Year	(Amount in US $ Mn.)	
2015	Average Deal Size	09.5	2016	Average Deal Size	03.9
	Total Deal Size	9211		Total Deal Size	4047
2017	Average Deal Size	11.84	2018	Average Deal Size	26
	Total Deal Size	9330		Total Deal Size	6116

(Source: Compiled from Annual Indian Startup Funding Report, https://trak.in/india-startup-funding-investment-2015/December-2017/2018/)

The startup funding and the average deal size struck between 2015 and 2018 is presented in Table -3. The data table reveals that the maximum average deal size (26 Million US $) was received in the 2018 followed by (11.84 Million US $) in 2017. The total deal size was maximum (9330 Million US $) in 2017 followed by (9211 Million US $) in 2016.

C. Startup Deals Struck and Funding Received

The details of startup deals struck by funding received in different stages is presented in Table-4.

Table-4: Startup Deals Struck by Funding received in different Stages

Year	**2015-16**		**2016-17**	
Stages of Funding	Deals Struck (in %)	Funding Received (in %)	Deals Struck (in %)	Funding Received (in %)
Early Stage	63	6	54	13
Growth Stage	18	28	22	28
Late Stage	7	60	14	43
Bridge Funding	12	6	10	16
Year	**2017-18**		**2018-19**	
Stages of Funding	Deals Struck (in %)	Funding Received (in %)	Deals Struck (in %)	Funding Received (in %)
Early Stage	47	8	53	22
Growth Stage	16	31	12	17
Late Stage	24	53	29	46
Bridge Funding	13	8	6	15

***Source**: Compiled by Researcher*

It is quite evident from the data presented in the table that funding for maximum deals (54%) were struck at the early stage whereas maximum funding (51%) was received at late stage. At the growth stage 17% of the deals were struck and 26% of the funding was received. Similarly, at the late stage, only 19% of the deals were struck. Bridge funding is becoming more and more prevalent, almost 10 per cent of all deals at this stage. This may signify unexpected burn rate of some startups.

The data presented in the table revealed that majority of the promoters (35%) were graduate engineers. This was followed by Master in Business Administration (26%), Other Graduates (15%), Post Graduate Engineers (10%) and others (10%). Thus, it can be said that the promoters of the Startup were highly qualified, 35% of them were possessing technical qualification and 26% of them were having management degrees.

Table- 5:
Results of the Chi Square test: Relationship between Stages of Funding and Level of Development of Startup

		Levels Development of Startup
Stages of Funding	Chi Square	15.127
	Degree of freedom	30
	Significance	0.941

Since, the p-value is greater than our chosen significance level ($\alpha = 0.05$), the null hypothesis is not rejected. Therefore, it is concluded that there is not enough evidence to suggest an association between level of development of startup and the stages of funding. (Chi-square =15.127, df = 30, p-value = 0.941) (*Refer Table- 5*)

Table-6:
Results of the Chi Square test: Relationship between Financing Methods and Professional Qualification

		Professional Qualification
Funding Method	Chi Square	28.080
	Degree of freedom	30
	Significance	0.443

Since the p-value is greater than our chosen significance level ($\alpha = 0.05$), the null hypothesis is not rejected. Rather, it is concluded that there is not enough evidence to suggest an association between level of development of startup and the stages of funding. (Chi-square = 28.080, df = 30, p-value = 0.443) (*Refer Table-6*).

VIII. CONCLUSION

It is seen that a very small number of startups succeed after the market launch of products or services and continues to develop and make profit. Startups, which are associated with high-tech projects, often seen losing its way from the founding stage of the start-up to achieving business success. Data on the number of start-up companies is based solely on the information gathered by searching the information received from Annual India Startup Funding Report. The dearth of earlier research against which the results of this study could be compared to is indeed a limiting factor. Despite these limiting elements, this analysis has shown Indian start-up companies prefer primarily funding in four different stages, such as early stage, growth stage, expansion stage and bridge funding. The result has also shown that maximum funding was received in the expansion stage in both the financial years. Bridge funding is becoming more and more prevalent, almost 10.2 per cent of all deals. The study also concluded that immediately after surviving the first experimental phase, the startup entrepreneurs gain enough courage to find financial support from other funding sources, such as venture capital and seed investments. Further, the association between professional qualification of startup promoters and the stages of funding; the association between professional qualification of startup promoters and stages of funding, found to be not significant.

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