



## Financial Strategies and Key Factors contributing to the success or failure of Start-ups – A study in Indian perspective

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### Abstract

Startups play a pivotal role in the development of entrepreneurship culture, product development, innovation, and employment generation. These enterprises complement overall economic transformation and contribute to developing and strengthening the entrepreneurial ecosystem in any economy. The twenty-first century is the era of Startups, where young entrepreneurs are setting up innovative ventures to generate quality goods and services and become employment generators rather than employment seekers. Though such ventures are created to grow and become unicorns, many times they face numerous challenges to pick up and grow at the desired pace. One major challenge many Startups face is the generation of the required amount of investment and tapping into innovative and sustainable financial sources. Generally, the financial sources for such ventures remain as Bootstrapping, Family and Friends, Angel Funds, Private Equity, Accelerator Funding, Loans & Credits, Venture Capital Funds, and Government Grants. Tapping into any one or some of these sources sometimes becomes a challenge, and these budding ventures fail to sustain and grow at the expected momentum. Similarly, skill development programs are other options that help to train the masses and make them employable in their home countries or sometimes abroad. The East Asian miracle has been a glaring example of valuable skill development programs launched by the East Asian countries, where the youth of these economies could find easy employment in their home countries and abroad as well. Such initiatives are also sometimes plagued by the lack of the required amount of funds and fail to deliver the expected results. The present study is about the financing of Startups and skill development programs launched by India in 2015 and 2016. The study focuses on identifying innovative financial sources for the Startups and skill development programs in India and formulating strategies for tapping into innovative financial sources. The study is based on primary and secondary data, and the collected data has been analyzed using statistical tools like correlation, regression, and chi-square tests.

**Keywords:** Start-up ecosystem, Financial resources, Financial strategies, Success factors, Failure factors, Entrepreneurship.

### 1. Introduction

The start-up landscape is a dynamic and ever-evolving ecosystem, brimming with both immense potential and inherent risk. While countless ventures emerge with innovative ideas and the promise of uninterrupted growth, a significant portion ultimately fall short of achieving long-term success. Understanding the financial intricacies and factors that contribute to the rise and fall of start-ups is crucial for aspiring entrepreneurs, investors and policymakers. Despite the abundance of promising ideas, statistics indicate a sobering reality that a high percentage of start-ups fail within their first few years. Studies on Start-up failure rates suggest that failure rates can range from 20% to 90% depending on the industry and definition of success used. This highlights the need for a deeper understanding of the forces at play, allowing stakeholders to navigate the challenges and increase the odds of a successful venture. Start-ups are the driving force of innovation and entrepreneurship in any economy, offering a dynamic platform for the growth and success of new ideas, technology and business models (Sullivan, 2023). They frequently act as catalysts for social change, employment creation and upheaval of existing sectors. Their significance is primarily derived from their capacity to question established norms and propel progress across multiple industries. A notable element of start-ups is their ability to promote and encourage innovation. India is the fourth largest economy in the global start-ups landscape after USA, China and UK having a large number of start-ups fostering economic growth and employment. All over the world, these ventures are facing financial hardships and ups and downs before attaining the growth stage. Success or failure of the start-ups to a larger extent depends upon the financial strategies they follow and managing the success and failure factors effectively. This research delves into this critical area through an empirical evaluation and analysis, aiming to identify the financial aspects and key elements that influence the success and failure of the start-ups globally and in India.

## 2. Literature Review

Gartner and Carter-Divis (1996) conducted a study in which they investigated the significance of market timing in the success of high-technology companies. They emphasized the essential role that market timing plays in determining the resulting outcomes of these ventures. An investigation of the potential of entrepreneurship as a field of study was conducted by Shane and Venkataraman (2001), who emphasized the significance of this field in terms of understanding the dynamics involved in launching a new organisation. Within the scope of their research, Feldman and Francis (2002) explored the impact that human capital has on the performance of start-ups. More specifically, they focused on the significance of talent and skills in determining the level of success that a company achieves. Wadhwa and Aggarwal (2009) conducted a study in which they explicitly investigated entrepreneurial alertness and its link with previous work experience and education in terms of detecting possibilities. A study was carried out by Reynolds and Curtin (2004) to investigate the influence that market timing has on the performance of high-technology start-ups. The findings of this study offer insights into the implications that market timing has for achieving success. An investigation on the nature of the relationship between the organizational structure of start-ups and their level of success was carried out by Cooper and Dunkelberg (1988). The findings of their study provide 5 important insights into the structural factors that have an effect on the outcomes of these firms. To provide a perspective that focuses on the process of obtaining success in beginning a firm, McMullen and Shepherd (2006) investigated the activities done by entrepreneurs and the development of possibilities. They did this by examining the actions that those entrepreneurs took. A study on entrepreneurial awareness and opportunity recognition was carried out by Brush, Greene, and Hart (2001). The study focused on the significance of prior knowledge in identifying opportunities. An exhaustive study of the dynamics of start-up success and failure was carried out by Stam and Wennberg (2009). They did this by consolidating significant findings from earlier studies. According to Zott and Amit (2009), the process of value generation in e-business was investigated, with a particular focus on the impact that complementarities and network effects have on the success of new initiatives. Chandler and Hanks (2001) conducted a study to investigate the impact that market timing has on the success of entrepreneurs. The findings of this study provide valuable insights into the ways in which market timing affects the outcomes of ventures. In his study, Bhidé (2011) investigated the dynamic economy and the effects it has on creativity and prosperity in a society that is interconnected. Baum (2013) conducted research on the significance of networks in the process of establishing and advancing start-ups. They placed a strong emphasis on the significant role that social relationships play in this process. A process theory of entrepreneurship was published by Shepherd and Williams (2015). This theory emphasizes the role of entrepreneurial action in the process of opportunity development. Bhawe (2014) conducted a research on the influence of social networks on the performance of start-ups, with a particular focus on the significance of interpersonal ties. A research project was carried out by Kollmann and Kuckertz (2006) with the purpose of investigating the influence that business model innovation has on the success of start-ups, with a specific emphasis on the strategic significance of this factor. A study conducted by Nambisan and Baron (2021) investigated the role that digital entrepreneurship plays in the creation of possibilities, with a particular focus on the revolutionary potential of digital technology. Nielsen and Nielsen (2013) conducted research to determine the impact that an entrepreneurial approach has on the success of new businesses, with a specific emphasis on the significance of a strategic orientation. Zaveri (2023) offered empirical evidence on the impact of market timing on the success of start-ups in the Indian economy. This evidence provided useful insights into the disparities that exist between regions. Gibson et. al (2011) conducted a systematic review to investigate the impact that digitalization has on the success of start-ups. They summarized the most significant findings from the existing body of research after conducting their investigation. The researchers Giones and Brem, A. (2017) carried out a comprehensive evaluation with the objective of analysing the influence of entrepreneurial excitement on the achievements of start-ups. The emphasis of their research was placed on the strategic and motivational repercussions that this occurrence presents. Zhang and Liu (2022) conducted research to study the role of business model adaptation in the success of start-ups. They focused on the ability of business models to transform in response to shifting circumstances. Within the scope of their research, Wadhwa and Kotha (2006) investigated the influence that digital transformation has on the achievement of success by start-ups. They emphasized the critical importance of embracing digital technology as a mandatory strategic requirement. A study was carried out by Zhang and Yang (2023) to investigate the ways in which financial restrictions influence the success of start-ups. The findings of this study provide useful insights into the challenges that are brought about by limited financial resources. Hao and Sprenger (2001) carried out research to investigate the significance of intellectual property rights in the success of start-ups. More specifically, they focused on the role that these rights play in protecting and optimizing inventive assets.

### 2.1. Rationale and Scope of the Study

The literature review narrated in the preceding part presents the diverse factors that lead towards the success of the start-ups without giving a concrete view or direction about the factors that lead towards success or failure of the start-ups and their financial strategies. Different studies have offered differed views and aspects about making a start-up successful. Finances, business models, markets, technology, digital transformation, intellectual property and many more have been described as the success and failure factors. The literature also testifies that no such study has been conducted in the past that gives a snapshot of the factors that lead towards the success or failure of the budding ventures. Financial strategies are further more critical aspect of the budding ventures and no study in the past has highlighted the sources and process of financing start-ups very lucidly. An unsuitable capital structure may prove to be fatal for the health and growth of any new venture. Many entrepreneurs commit serious blunder by raising more funds through debt and put themselves and the venture in distress. This state of affairs gives us a reason to conduct the present study where we have attempted to surface the relevant factors and aspects which need to be taken care of if any new venture has to achieve the success and grow on the path of progress. The study is based upon the primary and secondary data collected from diverse sources and analysed using suitable tools. The primary data has been collected from 250 Startups operating in India using a questionnaire. The questionnaire was circulated through a Google form to the Startups operating in India and finally 250 ventures have responded to the

document. The secondary data has been collected from diverse published sources like Start-up India website, Ministry of commerce, GOI publications and some published research papers. The time period of the secondary data spans over five years, i.e., between 2019-2023.

2.2. Objectives of the Study

2.2.1. The Study Has Been Conducted with the Following Objectives

- 1. To study and identify the innovative and cost-effective sources of funds for start-ups globally and in India.
- 2. To compare the sources of finance for such initiatives available globally and suggest the best possible options for India;
- 3. To identify the factors causing success or failure of the Start-ups.

3. Research Methods and Methodology

As stated above, the study has been based upon the primary and secondary data collected from diverse sources. To collect the primary data, a survey was designed to elicit information on the financial challenges and success and failure factors faced by the start-ups and the accessibility of various financial sources, including traditional and innovative funding options. Thereafter, respondents were selected through random sampling process to ensure relevant expertise and engagement with the start-up financing. Keeping in view the objectives of the study, we collected the primary data through a structured questionnaire distributed via Google Forms to a sample of 250 respondents, including entrepreneurs (start-ups), financial experts and investors engaged in start-up ecosystem in India.

To supplement the primary data, secondary data was collected from the credible platforms such as the Start-up India and Skill India portals, Government publications, reports from financial institutions like the Reserve Bank of India and global databases including Crunchbase, Dealroom and World Bank reports. For the data analysis, various statistical tools and techniques were employed. Descriptive statistics were calculated to summarize the pace of start-up growth and the sources of finance being utilised by the Start-ups. For further analysis statistical tools namely correlation, regression and chi-square test have been used.

4. Analysis and Discussion

As stated above, the present study is based upon both primary and secondary data which has led to understanding the Start-ups landscape and draw meaningful inferences about these enterprises in general and about India in particular. The following part presents the results of secondary data analysis followed by primary data outcome.

4.1. Funding Needs of the Start-Ups

Start-ups need funding for multiple requirements like prototype creation, product development, team hiring, office space and admin expenses, raw material and equipment, working capital, marketing and sales, legal and consulting services, licensing and certifications. As stated above, largely there are two broad sources of funding the Start-ups, debt and equity. Besides these sources, financial grants from government other agencies also play a pivotal role. Table 1 presents the Stages of Start-ups and sources of funding. Level of availability of funds from diverse sources decides the growth of these venture in any economy.

Table 1. Stages of Start-ups and sources of funding.

Ideation (Pre-seed stage)	Validation	Early traction	Scaling	Exit options
<ul style="list-style-type: none"><li>▪ Bootstrapping/Self-financing</li><li>▪ Family &amp; friends</li><li>▪ Business Plan/Pitching Events</li></ul>	<ul style="list-style-type: none"><li>▪ Incubators</li><li>▪ Government loan schemes</li><li>▪ Angle investor</li><li>▪ Crowd funding</li></ul>	<ul style="list-style-type: none"><li>▪ Venture Capital Funds</li><li>▪ Banking/NBFCs</li><li>▪ Venture debt funds</li></ul>	<ul style="list-style-type: none"><li>▪ Venture Capital Funds</li><li>▪ Private equity/Investment firms</li></ul>	<ul style="list-style-type: none"><li>▪ Mergers &amp; Acquisitions</li><li>▪ Initial Public Offering (IPO)</li><li>▪ Selling Shares</li><li>▪ Buy back</li></ul>

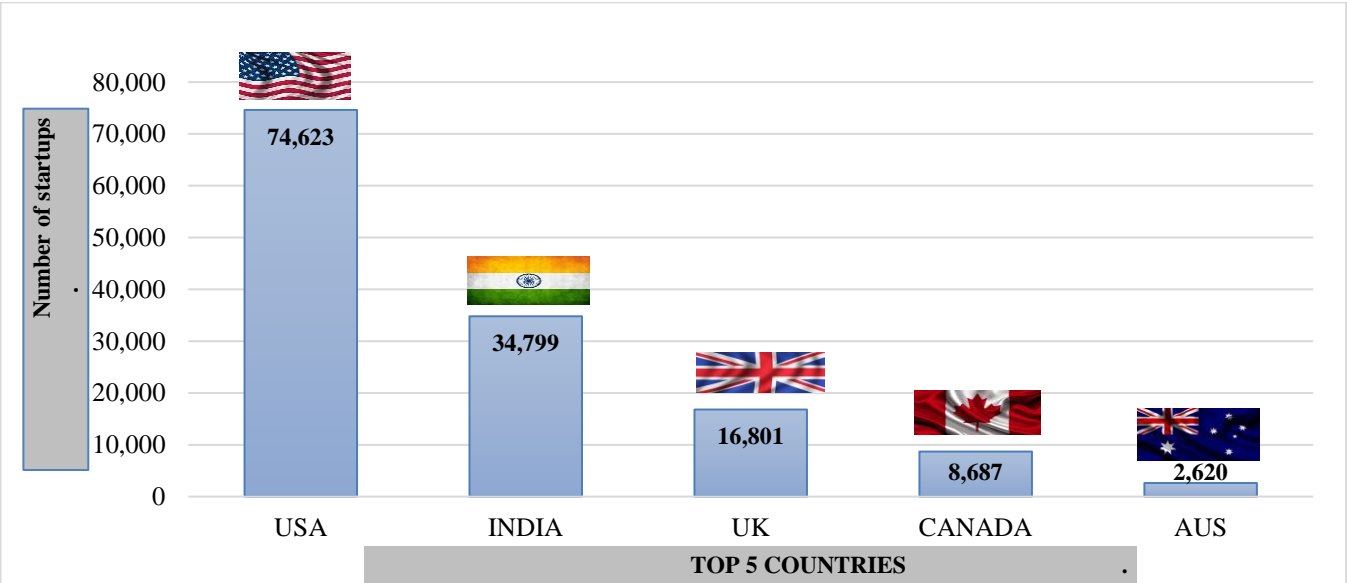


Figure 1. The top 5 Countries with the greatest number of Start-ups in 2023.

Figure 1 above, presents a snapshot of the number of Start-ups in five major economies of the world including India in 2023. The glaring fact is that India ranks second in the Start-up landscape of the world. The growth of start-ups in any economy largely depends upon success and failure factors.

4.2. The Paradox of Start-Up Success and Failure

The paradox of Start-up success and failure epitomises the volatile and uncertain nature of entrepreneurial endeavours. Start-ups embody the pinnacle of creativity and the possibility for revolutionary achievements (Nemetz, 2020). However, they also encounter substantial dangers and frequently experience failure. This paradox emphasises the intricate interaction of several elements that influence the outcome of companies and emphasises the inherent difficulties of managing the entrepreneurial environment (Nelson, 2024). Figures 2 and 3 present the reason and key factors why Start-ups succeed.

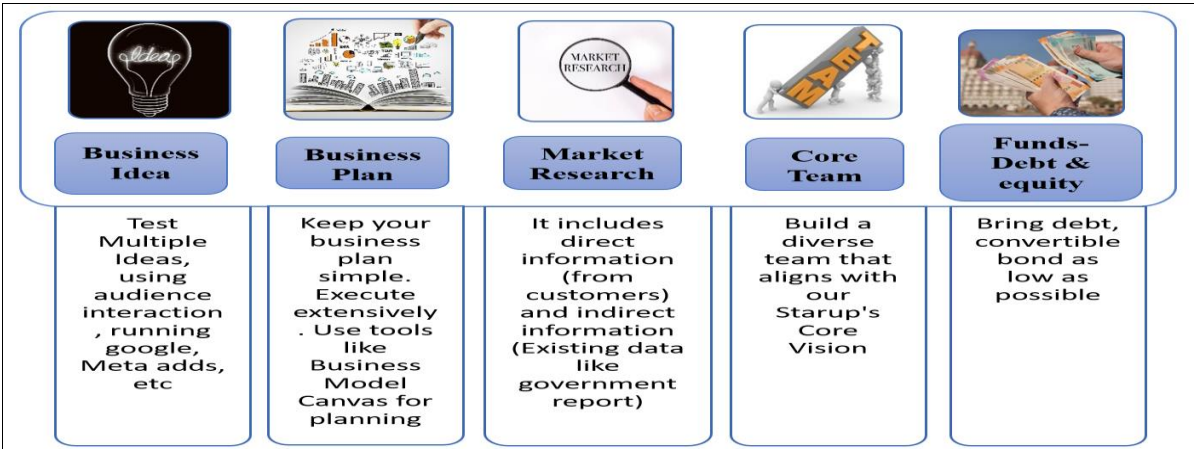


Figure 2. Top Reasons Why Start-ups Succeed.

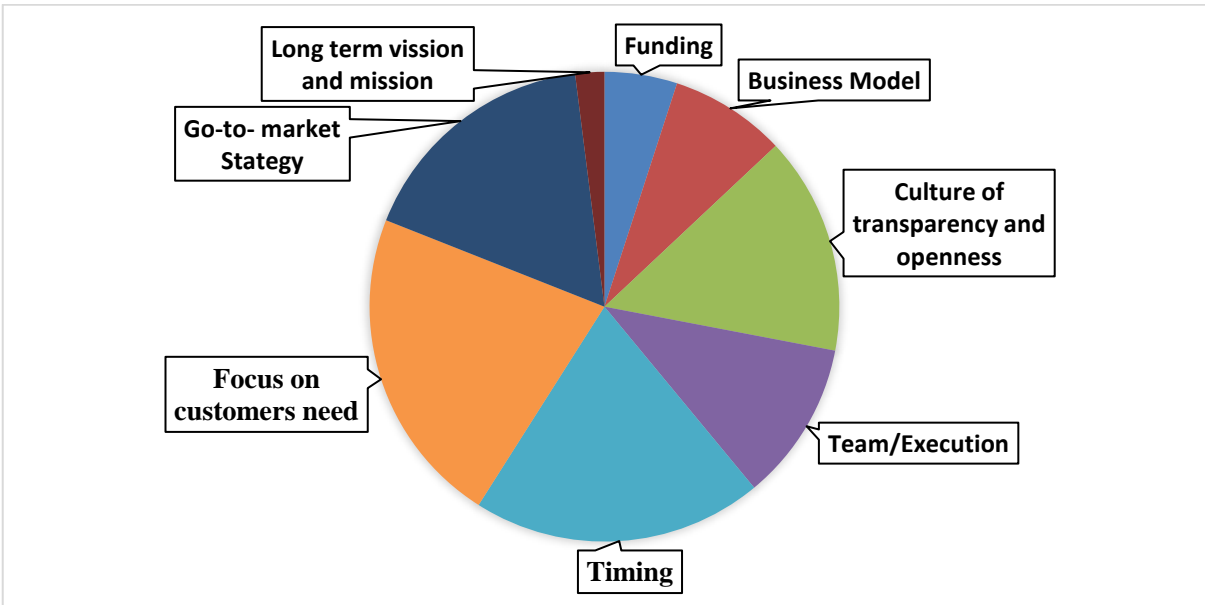


Figure 3. Key Factors Influencing Start-up Success.

The dichotomy of achieving success or failure in start-ups also mirrors the wider social perspectives on risk-taking and failure. Although achievements are praised and given incentives, failures are frequently vilified and perceived as indications of incompetence or insufficiency (Faleye, 2023) Nevertheless, this viewpoint neglects to recognize the inherent unpredictability and trial-and-error process that is inherent in entrepreneurship. Accepting failure as an inherent aspect of the entrepreneurial process helps cultivate an environment that promotes creativity, adaptability, and knowledge acquisition. Figures 4 and 5 below present Start-ups failure by time and key contributing to the failure of Startups.

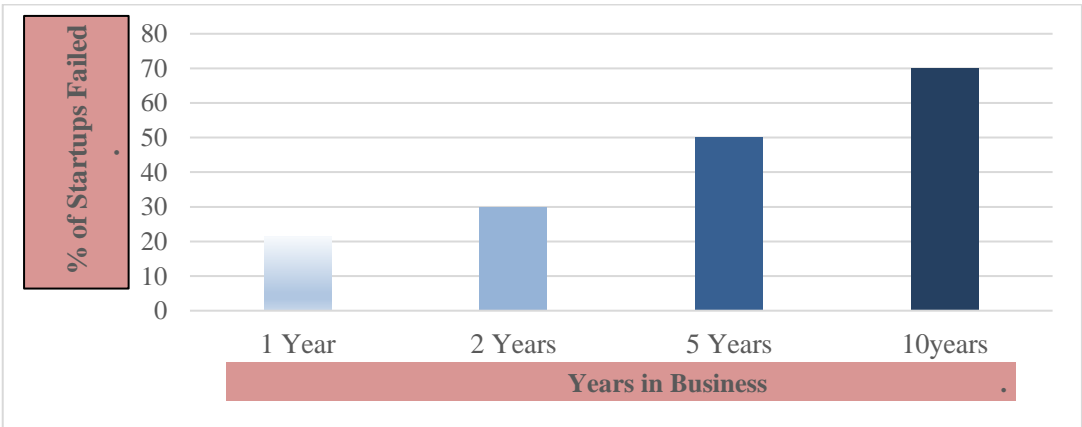


Figure 4. Start-up Failure Rate by Time.

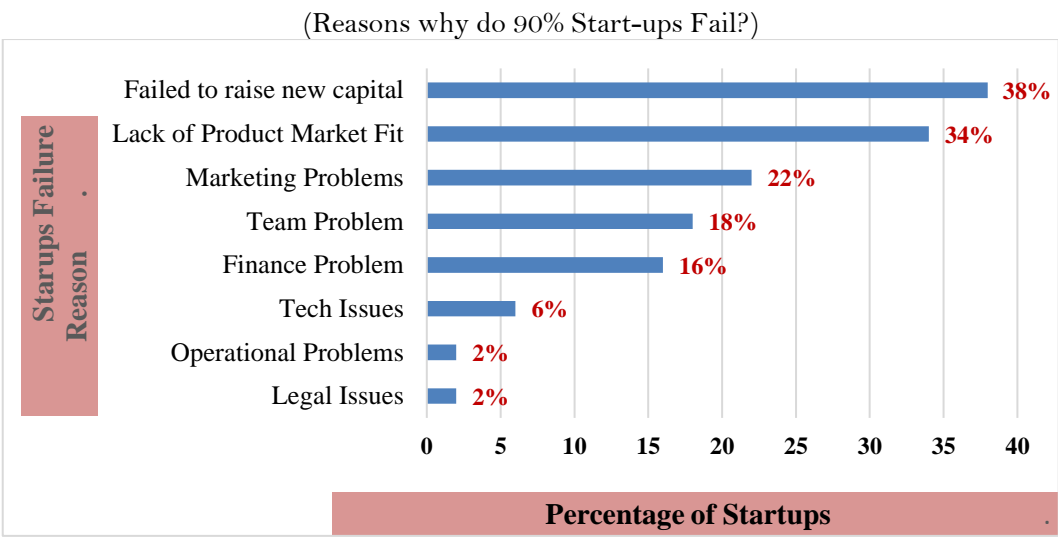


Figure 5. Key Factors Contributing to Start-up Failure.

4.3. Discussion Based on Primary Data Analysis

After having discussed the Start-ups’ landscape, we discuss the primary data outcome in the followings part. As stated above we have conducted a survey and collected primary data from 250 Start-ups from India on the various aspects starting with the general background of the Start-ups, product/service profile, markets targeted and financial strategies of these enterprises. The discussion starts with the descriptive analysis followed by correlation, regression and Chi-square analysis and the outcome and inferences drawn on the basis of the entire analysis.

4.3.1. Region of Start-Ups Location in India

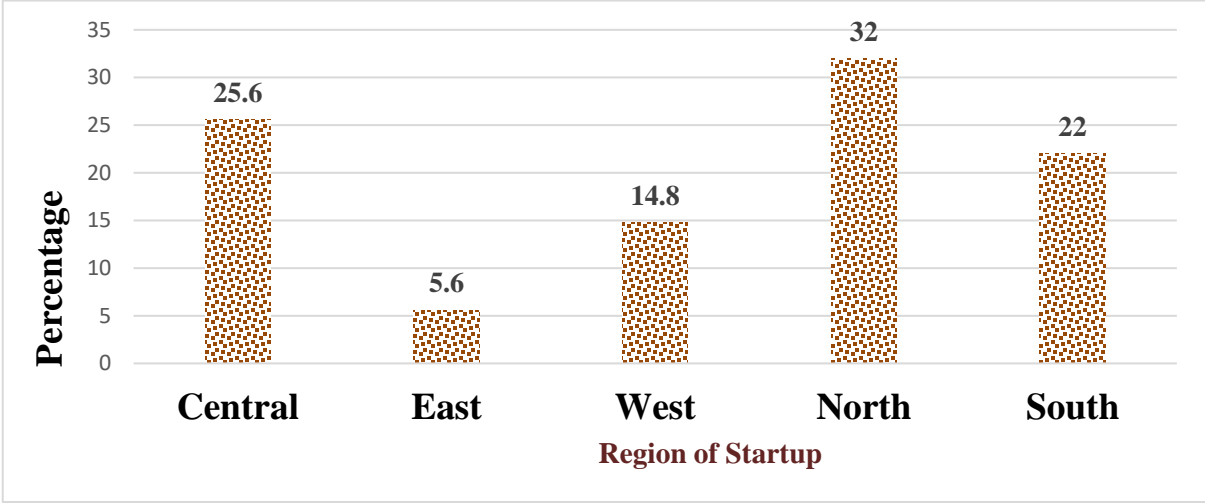


Figure 6. Region-wise spread of Start-ups in India.

As shown above in the Figure 6, the data on the regional distribution of start-ups provides valuable insights into the geographic landscape of entrepreneurial activities. A significant 32% of the surveyed start-ups (80 respondents) are based in the Northern region, indicating that this area is a major hub for entrepreneurial ventures. The North's prominence may be attributed to various factors, including access to larger markets, better infrastructure, and a concentration of educational and financial resources that facilitate start-up growth.

Following the North, the Central region accounts for 25.6% (64 respondents), positioning it as another important area for start-ups activity. This suggests that the Central region offers favourable conditions, such as supportive local policies or a growing ecosystem for new businesses.

The South region, with 22% (55 respondents), also demonstrates a significant presence of start-ups. This region is often known for its technological innovation and robust educational institutions, which can contribute to a vibrant start-up ecosystem.

In contrast, the West and East regions have lower representations, with 14.8% (37 respondents) and 5.6% (14 respondents), respectively. The West may still offer opportunities for growth, but it seems to lag behind in comparison to the North and Central regions. Meanwhile, the East's relatively low percentage may reflect challenges such as infrastructure issues or fewer resources available for entrepreneurs.



4.3.2. Legal form of Business

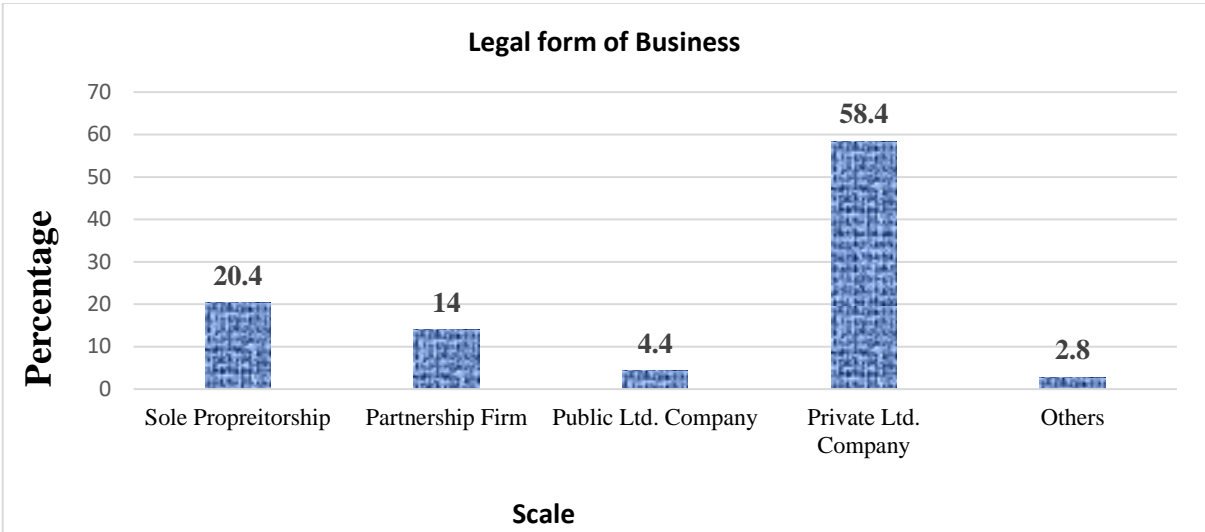


Figure 7. Legal form of Business.

As presented in Figure 7, the data regarding the legal forms of businesses among the surveyed Start-ups illustrates a clear preference for certain structures, reflecting the entrepreneurs' strategic choices based on their operational needs and objectives. Notably, 58.4% of the respondents (146 Start-ups) identified as Private Limited Companies. In contrast, 20.4% (51 respondents) operate as Sole Proprietorships, indicating a significant number of individuals pursuing their ventures independently.

14% (35 respondents) identified as Partnership Firms, which typically allow for shared responsibilities and resources among partners. Only 4.4% (11 respondents) registered as Public Limited Companies, which generally requires more regulatory compliance and is often pursued by larger entities looking to raise capital from the public. Finally, 2.8% (7 respondents) categorized their business as Others, which could include alternative legal structures such as cooperatives or non-profit organizations.

Overall, the data reflects a predominance of private limited companies among start-ups, highlighting a trend toward liability protection and structured growth.

4.4. Market Segment Targeted by the Start-ups

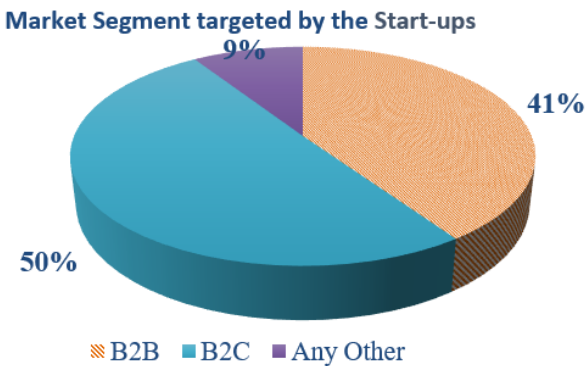


Figure 8. Market segments.

Crucial insights into the start-up business strategies are uncovered by data on the market segments targeted by the surveyed start-ups. As shown in Figure 8, with a heavy leaning toward selling directly to individual consumers, 50.4% of the respondents (126 start-ups) concentrate on the B2C (Business-to-Consumer) segment. Alternatively, out of all the start-ups that were surveyed, 40.4% (or 101 people) are focused on the B2B (Business-to-Business) market. Opportunities for larger transaction volumes and long-term contracts are common in this segment, which may indicate that these Start-ups are striving for stability and consistent revenue streams. Remaining 9.2% (23 respondents), listed their market as Any Other category.

4.5. Stage of the Venture

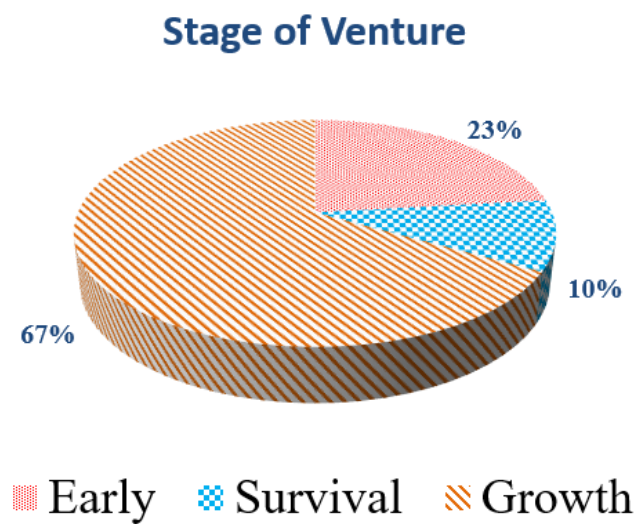


Figure 9. Stage of the Venture.

The data regarding the stage of venture for the 250 surveyed Start-ups as shown in Figure 9 reveals significant insights into their development trajectories. Among the respondents, the growth stage is the most prevalent, with 167 participants (66.8%) identifying their ventures as being in this phase, followed by early and survival stages indicating that these ventures are trying hard to grow and sustain for long.

4.6. Sector of Operations

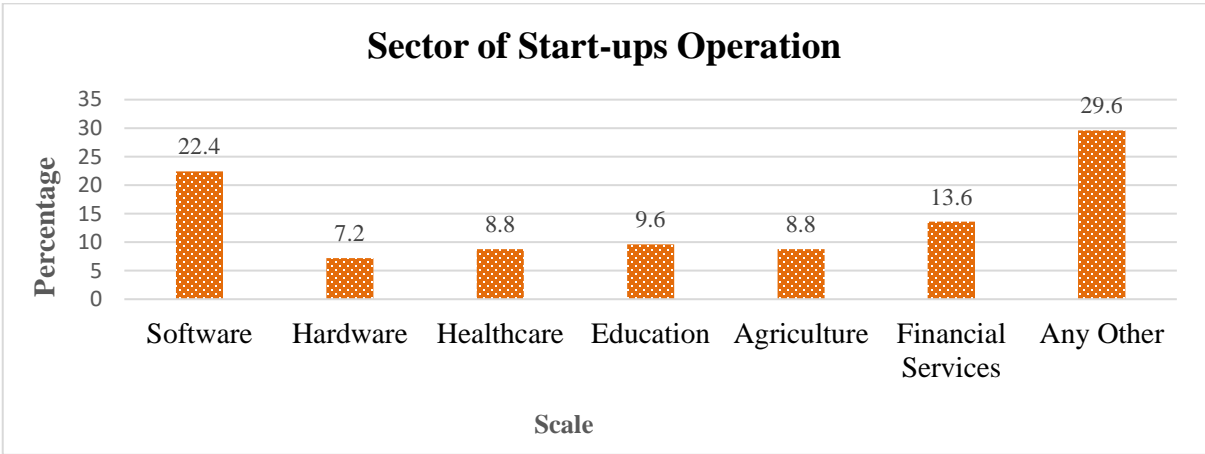


Figure10. Sector of Operations.

The data presented in Figure 10 offers insights into the sectors in which Start-ups operate, highlighting the diversity and focus areas of entrepreneurial ventures among 250 respondents. The sectors evaluated include software, hardware, healthcare, education, agriculture, financial services, and other categories, providing a comprehensive overview of the Start-ups landscape. Software is the biggest sector in which these ventures operate more.

4.7. Innovativeness

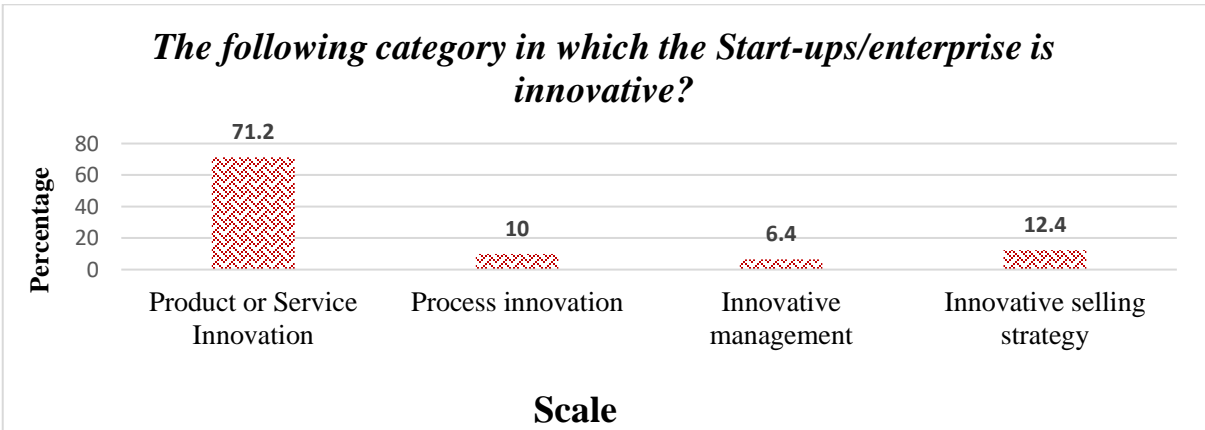


Figure 11. Enterprise innovativeness.

The data examines the domains of innovation in start-ups, as reported by 250 participants. As shown in figure 11, the assessed categories encompass product or service innovation, process innovation, innovative management, and innovative sales strategy. The findings provide significant insights into the primary focus of innovation among these enterprises, emphasizing the areas where entrepreneurs are striving to differentiate themselves and enhance value.

4.8. Sources of Funding Start-Up

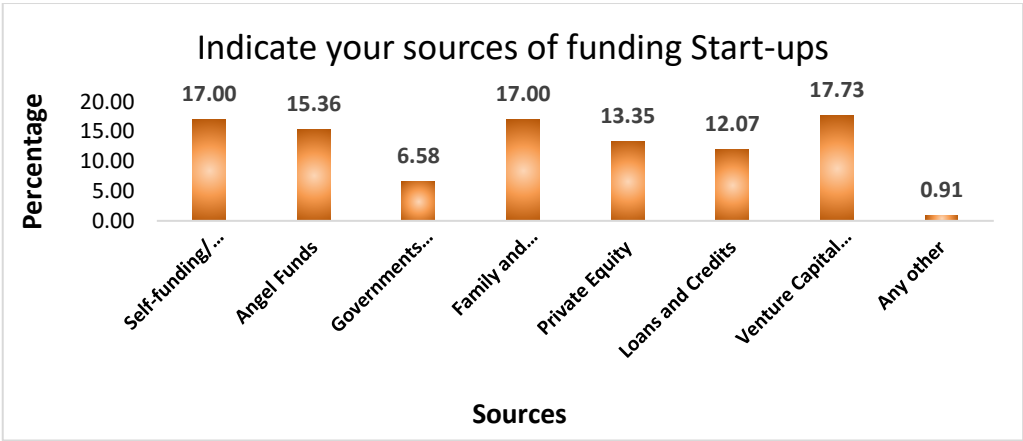


Figure 12. Sources of funding.

As shown in figure 12, the data offers a breakdown of the various sources of funding that Start-ups utilize, based on responses from 547 participants. The distribution covers a wide range of financing options, such as self-funding or bootstrapping, angel funds, government grants, family and friends, private equity, loans and credits, venture capital funds, and other miscellaneous sources. The percentages represent the proportion of Start-ups using each funding method, providing insight into the most and least common sources of financial support in the Start-ups ecosystem. Self, family funding and venture capital are the leading sources of funds for these ventures in India.

4.9. Role of Government in Empowering Start-ups

Table 2. Government empowering Start-ups.

Descriptive Statistics							
Opportunities	N	Min.	Max.	Mean	S.D.	Skewness	Kurtosis
Funding schemes and tax incentives from government for start-ups	250	1	5	2.96	1.102	-.293	-.544
Relaxation in various laws related to licensing and clearances	250	1	5	3.12	1.125	-.178	-.733
Government Efforts in building a strong and sound business environment and attract FDIs	250	1	5	3.26	1.035	-.547	-.303
Exposure of start-ups through events and summits conducted across the country	250	1	5	3.21	1.172	-.450	-.669

The data provided examines the role of the government in empowering start-ups through four key factors namely funding schemes and tax incentives, relaxation of laws related to licensing and clearances, government efforts in creating a strong business environment and attracting foreign direct investments (FDIs), and exposure of start-ups through events and summits. As shown in table 2, the responses from 250 participants are measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with mean scores and other statistical descriptors offering insight into how these factors are perceived.

The first factor, funding schemes and tax incentives from the government for start-ups, has a mean score of 2.96. This score suggests that, on average, respondents hold a neutral or slightly negative view of the government’s efforts in this area. The second factor, relaxation in various laws related to licensing and clearances, has a mean score of 3.12, indicating a slight tilt toward agreement, though the overall sentiment remains fairly neutral.

Government efforts in building a strong business environment and attracting FDIs have a mean score of 3.26, making it the most positively viewed factor in the dataset.

Lastly, the exposure of start-ups through events and summits conducted across the country has a mean score of 3.21, reflecting a slightly positive perception of the government’s role in this area.

In summary, the data reflects a generally neutral to slightly positive perception of the government’s role in empowering start-ups, with the most favourably viewed aspect being its efforts to create a strong business environment and attract FDIs. Overall, opinions are fairly dispersing across all four factors, indicating diverse perspectives on the effectiveness of government initiatives in supporting start-ups.

4.10. Problems Faced in Raising the Funds

Table 3. Problems faced in raising the funds.

Descriptive Statistics								
Particulars	N	Min.	Max.	Mean	S.D.	Variance	Skewness	Kurtosis
Lack of awareness about financial sources	250	1	5	3.08	1.250	1.563	-.222	-.911
Lack of collateral security	250	1	5	3.34	1.162	1.350	-.366	-.713
Rigid terms in the repayment schedule	250	1	5	3.36	1.093	1.195	-.474	-.436
Strict eligibility criteria for getting a loan	250	1	5	3.37	1.209	1.462	-.463	-.752



The data presented in table 3, provides a statistical overview of the problems faced in raising funds, as measured by responses to a survey of 250 participants. Four key issues were evaluated: lack of awareness about financial sources, lack of collateral security, rigid repayment terms, and strict eligibility criteria for loans. Each problem was rated on a Likert scale from 1 to 5, where 1 likely represents the Strongly Disagree and 5 represents the Strongly Agree. Starting with lack of awareness about financial sources, the mean score is 3.08, indicating a moderate level of concern among respondents. The second issue, lack of collateral security, received a mean score of 3.34, indicating a slightly higher level of concern compared to the first issue. For rigid terms in the repayment schedule, the mean score is 3.36, close to the previous issue, showing that it is also a significant concern for the respondents. The final issue, strict eligibility criteria for getting a loan, has the highest mean score at 3.37, indicating that it is seen as the most significant problem among the four issues. Overall, all four issues show a moderate level of concern, with respondents slightly more inclined to rate the problems on the higher end of the scale, as indicated by the negative skewness across the variables. This data highlights that while these issues are all seen as challenges in raising funds, none stands out as drastically more problematic than the others, although strict eligibility criteria and repayment terms are slightly more concerning.

4.11. Further Analysis

In the subsequent part we have performed deeper analysis using correlation, regression and chi-square analysis for better understanding of the context of the present research. These are many variables on which these tools have been applied and interesting results observed but for the sake of managing length of the paper we are presenting most relevant part of analysis in this paper. The analysis on the most relevant variables has presented in the following part.

4.12. Correlation Analysis

We have tried to check the correlation between following two important variables.

- Total revenue generated by your start-up in the last 3 years?
- Awareness of entrepreneurs on Incentives and Schemes by the Government

These questions were asked in the questionnaire to know about revenue generated by these ventures and Government incentives. This relationship may help to understand whether government schemes have any impact on the revenue generation by these ventures or not?

Table 4. Correlation between revenue generation by the Start-ups and government incentives.

Correlations			
		Statement 14	Statement 24
Statement 14	Pearson Correlation	1	0.046
	Sig. (2-tailed)		0.472
	N	250	250
Statement 24	Pearson Correlation	0.046	1
	Sig. (2-tailed)	0.472	
	N	250	250

The data provided presents the correlation between two variables, Statement 14 in the questionnaire, which measures the total revenue generated by start-ups in the last three years, and Statement 24, which assesses entrepreneurs' awareness of government incentives and schemes. The table 4 includes Pearson correlation coefficients, significance levels (p-values), and sample sizes (N = 250 for both statements).

The Pearson Correlation coefficient between Statement 14 (revenue) and Statement 24 (awareness of government incentives) is 0.046. In this case, the coefficient of 0.046 indicates a very weak positive correlation between the revenue generated by start-ups and the entrepreneurs' awareness of government schemes. Essentially, this weak correlation suggests that higher awareness of government incentives has a minimal relationship with the revenue performance of start-ups over the last three years. The p-value associated with this correlation is 0.472, which is far above the conventional threshold of 0.05 used to determine statistical significance. The p-value of 0.472 suggests that the correlation between revenue and awareness of government schemes is not statistically significant. The data implies that entrepreneurs' awareness of government incentives and schemes does not have a significant impact on their revenue generation. This could suggest that simply being aware of government programs is not sufficient to boost the financial performance of start-ups. Entrepreneurs may need more than just awareness—they likely require deeper engagement with government programs, better utilization of available incentives, or other factors like strong business models, market conditions, and innovative strategies to improve their revenue streams.

5. Regression Analysis

5.1. Regression Analysis Has Been Performed on the Important Variables as Follows

- Problems faced in raising the funds
- Role of Government in empowering Start-ups.

Table 5. Regression analysis.

Variables Entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	S27 <sup>b</sup>	.	Enter

Note: a. Dependent Variable: S25  
b. All requested variables entered.

Table 6. Model Summary.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.580 <sup>a</sup>	0.337	0.334	0.819

Note: a. Predictors: (Constant), S27.

Table 7. ANOVA.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.497	1	84.497	125.822	.000 <sup>b</sup>
	Residual	166.547	248	.672		
	Total	251.044	249			

a. Dependent Variable: S25

b. Predictors: (Constant), S27

Table 8. Coefficients.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.345	0.179		7.513	0.000
	S27	0.563	0.050	0.580	11.217	0.000

Note: a. Dependent Variable: S25.

The data examines the relationship between two variables, "Problems faced in raising funds" (Statement 27 in the questionnaire) and the "Role of Government in empowering Start-ups" (Statement 25 in the questionnaire). A regression analysis was conducted to determine whether difficulties in securing funding significantly impact perceptions of government support in empowering start-ups.

The model as given in tables 5-8 reveals a correlation coefficient (R) of .580, indicating a moderate positive relationship between the variables. An R Square value of .337 suggests that approximately 33.7% of the variance in perceptions of government's role in empowering start-ups can be explained by the difficulties faced in raising funds. This is a substantial portion, implying that challenges in fundraising may strongly influence how start-up founders view government support.

The ANOVA results show a highly significant F-value of 125.822 with a p-value of .000. This indicates that the model is statistically significant, meaning the relationship between funding difficulties and perceptions of government support is not due to random chance. The low p-value confirms that there is a meaningful association between these two variables.

The coefficients table further clarifies the strength and direction of this relationship. The unstandardized coefficient (B) for Statement 27 is .563, which suggests that for each unit increase in the problems faced in raising funds, there is an associated increase of .563 units in the perception of government's role in empowering start-ups, after accounting for other factors. The standardized beta coefficient of .580 confirms that this effect is strong and positive, and with a t-value of 11.217 (p = .000), the predictor is highly significant.

In summary, the regression analysis shows that greater challenges in raising funds are significantly associated with a stronger perception of government empowerment in start-ups. This relationship could suggest that as start-ups face more obstacles in securing capital, they might look more critically at the government's role and support systems designed to empower and assist emerging businesses. The findings highlight the need for enhanced government support mechanisms to alleviate funding difficulties, which could positively influence start-ups perceptions and potentially lead to a more conducive environment for entrepreneurial growth.

5.2. Chi-Square Test

Further to check the observed and expected outcomes about success and failure of the start-ups and their funding strategies the chi-square test was applied on the following relevant variables.

- In which of the following categories is your enterprise is innovative?
- How did you get to know about the funding sources for your Start-ups?

Table 9. Observed and expected values of the relevant variables.

Statement 9			
Scale	Observed N	Expected N	Residual
1. Product or Service Innovation	178	62.5	115.5
2. Process innovation	25	62.5	-37.5
3. Innovative management	16	62.5	-46.5
4. Innovative selling strategy	31	62.5	-31.5
Total	250		
Statement 15			
Scale	Observed N	Expected N	Residual
1. Friends	82	50.0	32.0
2. Newspaper	26	50.0	-24.0
3. Advertisement	43	50.0	-7.0
4. Bank	41	50.0	-9.0
5. Any Others	58	50.0	8.0
Total	250		
Test Statistics			
	Statement 9	Statement 15	
Chi-Square	286.416 <sup>a</sup>	35.880 <sup>b</sup>	
df	3	4	
Asymp. Sig.	.000	.000	

**Note:** a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 62.5.  
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

In analysing the relationship between the two variables, "Statement 9" and "Statement 15 in the questionnaire," using the Chi-Square test, we gain insights into patterns of innovation within enterprises and the sources from which Start-ups learn about funding options. The Chi-Square test is used here to determine whether there is a significant difference between the observed and expected frequencies in different categories.

The statement regarding innovation categorises the type of innovation that enterprises engage in, with four categories: product or service innovation, process innovation, innovative management, and innovative selling strategy. The observed frequencies for these categories are compared to the expected frequencies of 62.5 for each category, based on the total sample of 250 responses. From the data, we can see that the largest observed number (178) falls under "Product or Service Innovation," with a significant positive residual of 115.5, indicating that more enterprises than expected identified themselves as innovative in this category. In contrast, fewer enterprises than expected reported process innovation (observed = 25, residual = -37.5), innovative management (observed = 16, residual = -46.5), and innovative selling strategy (observed = 31, residual = -31.5). The Chi-Square value for this test is 286.416 with 3 degrees of freedom and a significance level (p-value) of .000. Since the p-value is less than 0.05, this suggests that there is a statistically significant difference between the observed and expected frequencies in these categories. In other words, the distribution of innovation types in enterprises is not uniform, with a clear preference for product or service innovation.

The Statement funding sources examines how Start-ups learned about funding sources, with five categories: friends, newspaper, advertisement, bank, and other sources. The observed frequencies are again compared to the expected frequency of 50 for each category. The most frequently reported source of information about funding is "Friends" (observed = 82, residual = 32), followed by "Any Others" (observed = 58, residual = 8). On the other hand, "Newspaper" (observed = 26, residual = -24) and "Bank" (observed = 41, residual = -9) were fewer common sources than expected, and "Advertisement" (observed = 43, residual = -7) is close to the expected frequency. The Chi-Square value for this test is 35.880 with 4 degrees of freedom and a significance level (p-value) of .000. As with Statement 9, the p-value here indicates a statistically significant difference between the observed and expected frequencies, suggesting that Start-ups do not rely on funding information sources uniformly. The data show a significant leaning towards informal sources like friends and other sources, as opposed to more formal channels like newspapers or banks.

Both statements show statistically significant differences in the categories analysed, as evidenced by the low p-values in the Chi-Square tests. For the first statement, enterprises are much more likely to innovate in terms of products or services, while process and management innovations are less frequent. For the second statement, Start-ups tend to rely more heavily on informal networks, like friends and other miscellaneous sources, for information about funding, rather than formal or institutional sources like banks or newspapers. These findings provide valuable insights into the areas where enterprises innovate and how Start-ups gather critical information for growth, emphasizing the role of product innovation and personal networks in shaping business strategies.

6. Conclusions and Suggestions

While trying to identify sources of funds available globally and in India to fund start-ups, we have observed that there are multifarious sources of funds for these ventures ranging from self-funding to Venture capital including government support and private equity. Financial strategies formed by these ventures make a significant difference in the long-term sustenance of these ventures. In different eco-systems, funds come from different sources to start-ups. Long-term sustenance of these ventures depends upon the non-debt sources of funds. Bootstrapping, family and friends, private equity, and Government support may be the preferred sources of funds in normal course. Venture capital should be tapped after all as it involves high cost and undesirable commitments. Globally Venture capital and private equity may be preferred sources but in Indian scenario, internal funds play a critical role to fund and support these ventures. After collecting data from 250 start-ups, we have tried to check the correlation between total revenue generated by these ventures and government support and observed that government support is insignificant and largely these ventures survive on their own. Regarding problems faced by these ventures in fund raising in India and government support, we observed that government supports these ventures in fund raising to some extent but the government support is not very significant. Regarding innovation

and knowledge about funding sources, we observed that largely these ventures are innovative in product and service innovation and sources of funds they know from informal sources rather than formal. Finally, the success and failure of these venture depends upon number of factors like source of funds, team of people, product or service they deliver, long term strategy, vision and mission etc. When these factors are not properly taken care of, these ventures fail to take off or sustain. So, to sustain Start-ups, the entrepreneurs must adhere to appropriate sources of funds, form a righteous team, have long term strategy and vision, focus upon regular innovation and value addition and after all the effective customer service. The business model should be such which gives these ventures a reason to succeed and sustain for the long term in the market. In this entire process, the effective Government support and empowerment is quite critical and most desirable.

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