



A Critical Study on the Start-Up Eco System in India (2014 – 2023)

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ABSTRACT:

The Indian startup scene has burgeoned in the past decade, solidifying the nation's status as a global epicenter for innovation and entrepreneurship. This study critically analyzes the nuances of the startup landscape in India, focusing specifically on the fashion and apparel industry. Through a detailed examination of Anveshana Clothing, a bespoke clothing startup in Coimbatore, it sheds light on the realities and strategies of entrepreneurs navigating the Indian market. Beginning with the historical backdrop of the Indian startup ecosystem, tracing back to the IT boom of the 1980s and the impact of the Liberalization, Privatization, and Globalization (LPG) policy, the study progresses to the current scenario, highlighting the proliferation of startups and the dominance of key cities like Bangalore, Delhi-NCR, and Mumbai. It explores global and Indian trends in the clothing startup sector, emphasizing the Direct-to-Consumer (D2C) model, subscription services, and traditional craftsmanship revival, while also addressing challenges like supply chain inefficiencies and stiff competition. Through Anveshana Clothing's case study, the research delineates its inception, business model, target audience, and growth strategies, underscoring the socio-cultural and regulatory factors shaping the Indian startup landscape. Ultimately, the study contributes valuable insights for entrepreneurs, investors, and policymakers navigating the dynamic Indian startup ecosystem, aiming to bridge theory with practical understanding in one of the world's fastest-growing economies.

Keywords: Indian startup scene, Innovation, Entrepreneurship, Fashion and apparel industry, Startup landscape, IT boom, Liberalization, Privatization, and Globalization (LPG) policy, Direct-to-Consumer (D2C) model, Subscription services, Traditional craftsmanship revival, Supply chain inefficiencies, Dynamic ecosystem, Fastest-growing economy

Introduction & Background:

This paper gives a brief overview of the Indian start-up ecosystem as a whole, and then proceeds with a particular focus on the customized clothing niche, presenting a case study on Anveshana Clothing, a start-up in the customized clothing niche, in Coimbatore, Tamil Nadu.

The Indian startup ecosystem has been witnessing remarkable boom in the recent years, attracting significant attention from entrepreneurs, investors, and policymakers alike. However, amid this growing landscape, there is a need for critical examination and analysis of the challenges, opportunities, and unique dynamics that shape the journey of startups in India. Anveshana Clothing, where the researcher has been employed since 2019, presents an intriguing case study to explore the nuances of the Indian startup ecosystem. As an emerging player in the highly competitive fashion and apparel industry, Anveshana Clothing's experiences can offer valuable insights into the trials and tribulations faced by startups in navigating the complex Indian market.

The motivation behind this study stems from a deep curiosity to understand the factors that contribute to the success or failure of startups in India, with a particular emphasis on the challenges faced by Anveshana Clothing. By critically analysing the company's trajectory, this research aims to uncover the unique socio-economic, cultural, and regulatory factors that shape the Indian startup landscape.

The study's findings may contribute to the broader discourse on entrepreneurship and economic development, offering valuable insights into the role of startups in driving innovation, job creation, and economic growth within the Indian context.

Through this critical examination of the Indian startup ecosystem, with a specific focus on Anveshana Clothing, this study seeks to bridge the gap between theory and practice, providing a nuanced understanding of the challenges and triumphs that define the startup journey in one of the world's fastest-growing economies.

Statement of the research problem

There is a serious dearth of research which is required in the startup space capable of filling a vast amount of gap which is also highly likely to add value to the entities in the startup space. This thesis focuses on one of the segments in the start-up space that is *customised clothing*. Since the startup ecosystem in this space is also at nascent stage this thesis tries to address this problem. The following information lays down the foundational knowledge before proceeding further with the research.

Identification of Research Gap

As per the researcher's awareness, there exists no study in the start-up space pertaining to clothing and more so in the customised clothing space. This unique gap is attempted to be filled up through this study.

While there is a growing body of research on the Indian startup ecosystem, as per the researcher's awareness there exists several critical gaps that remain unexplored. One significant research gap lies in the lack of industry-specific studies that examine the unique challenges faced by startups in the fashion and apparel domain. Despite being a rapidly growing and highly competitive industry, there is limited literature that explores the intricacies of navigating the Indian market as a fashion apparel start-up. This study aims to address these gaps by providing a comprehensive and nuanced understanding of the challenges and opportunities faced by Anveshana Clothing, a startup operating in this dynamic sector.

The next research gap lies in the limited exploration of the socio-cultural and regulatory factors that shape the Indian startup landscape. While existing studies have focused on economic and technological aspects, there is a need for a deeper understanding of how societal norms, cultural influences, and regulatory frameworks impact the growth and success of startups in India. Furthermore, there is a dearth of research that examines the role of startups in driving innovation and economic development within specific sectors of the Indian economy. This study will contribute to bridging this gap by exploring the potential impact of fashion and apparel startups like Anveshana Clothing on the broader industry and the Indian economy as a whole.

This research will further address the need for more comprehensive case studies that delve into the lived experiences of entrepreneurs and startup teams. By providing an in-depth analysis of Anveshana Clothing's trajectory, this study will offer valuable insights into the real-world challenges, decision-making processes, and strategies employed by startups in their pursuit of growth and success.

Methodology:

Research Design

This study adopts a mixed-methods research approach to achieve the objectives outlined. The research design combines qualitative and quantitative analyses to provide a comprehensive understanding of the startup ecosystem in India, with a specific focus on the customized clothing segment.

Data Collection

Secondary Data: The primary source of data for this study is secondary research gathered from reputable sources such as Inc42, Tracxn, Economic Times, Emerald Insight, and other scholarly publications. Secondary data includes information on funding trends in the Indian startup ecosystem, market analysis reports, case studies of start-ups in the fashion and apparel industry, and relevant government reports. Additionally, data from publicly available sources such as company websites, press releases, and industry databases are utilized to supplement the secondary data.

Sampling Technique

Purposive Sampling: Purposive sampling is employed to select startups for the quantitative analysis of funding trends. Startups are chosen based on their relevance to the customized clothing segment and availability of reliable data on funding amounts and deals.

Stratified Sampling: Stratified sampling is utilized to ensure the representation of startups from different geographic locations and funding stages. Startups are stratified based on factors such as industry sector, geographic location, and funding stage to ensure a diverse sample.

Data Analysis

Qualitative Analysis: Qualitative data analysis is conducted on the secondary data collected from various sources. Thematic analysis is employed to identify recurring patterns, themes, and insights related to the challenges, opportunities, and strategies within the startup ecosystem in the customized clothing segment.

Quantitative Analysis: Quantitative data analysis is performed on the funding data collected from secondary sources. Correlation analysis is employed to examine the relationship between funding amount and the number of deals. Hypothesis testing is conducted to test the formulated hypotheses regarding funding trends in Indian startups.

Ethical Considerations: Ethical considerations are carefully observed throughout the research process. The study relies solely on publicly available secondary data, ensuring no direct involvement of human participants. Data sources are cited appropriately to maintain academic integrity and avoid plagiarism.

Objective:

1. To analyse the trends in funding for Indian startups from 2014 to 2023 and determine whether there is a significant increase in funding during this period
2. To investigate the relationship between funding amount and the number of deals in Indian startups and ascertain whether there is a correlation between these variables.

Hypothesis Testing and Methods

The following research hypotheses will be tested using appropriate statistical methods. The null hypothesis (H0) and the alternative hypothesis (H1) will be evaluated to draw conclusions

Hypothesis 1:

Null Hypothesis (H0): There is no significant increase in the funding in Indian Start-ups during the period of study (2014 – 2023).

Alternative Hypothesis (H1): There is a significant increase in the funding in Indian Start-ups during the period of study (2014 – 2023).

The analysis would compare the mean funding amount in the initial years (e.g., 2014-2017) with the mean funding amount in the later years (e.g., 2020-2023).

Hypothesis 2:

Null Hypothesis (H0): There is a negative co-relation between the funding amount received and the number of deals.

Alternative Hypothesis (H1): There is a positive co-relation between the funding amount received and the number of deals.

If the t-test yields a statistically significant result ($p < 0.05$), it would provide evidence to support the alternate hypothesis, indicating a significant increase in funding over the study period. Correlation analysis will be performed to assess co-relation between the funding amount received and the number of deals

The results of these hypothesis tests, along with the descriptive and inferential analyses, will provide a comprehensive understanding of the critical implementation challenges faced by small-scale industries and the factors that contribute to their success or failure in adopting ERP systems.

Data:

Year	Funding	Deals	Increase/Decrease	Cumulative.Frequency
2014	5	376	0	376
2015	9	983	607	1359
2016	6	1045	62	2404
2017	13	996	-49	3400
2018	12	832	-164	4232
2019	13	812	-20	5044
2020	11	953	141	5997
2021	42	1584	631	7581
2022	25	1517	-67	9098
2023	10	897	-620	9995

Table 1: Year-wise data on funding amount and number of deals (2014-2023).

*The funding data for 2023 is from January 1 to December 25.

Source: [Inc42](#)

t-Test

Considering the following:

- Group 1 (Initial Years): 2014, 2015
 - Mean funding: $\frac{5+9+6+13}{4} = \frac{33}{4} = 8.25$
 - Standard Deviation: $\sqrt{\frac{(5-8.25)^2+(9-8.25)^2+(6-8.25)^2+(13-8.25)^2}{4}}$
 - Standard Deviation: $\sqrt{\frac{9.6875+1.6875+5.0625+22.0625}{4}}$

- Standard Deviation₁: $\sqrt{\frac{38.5}{4}}$
- Standard Deviation₁ $\cong 3.112$

- Group 2 (Later Years): 2020, 2021, 2022, 2023

- Mean funding₁: $\frac{11+42+25+10}{4} = \frac{88}{4} = 22$
- Standard Deviation₁: $\sqrt{\frac{(11-22)^2+(42-22)^2+(25-22)^2+(10-22)^2}{4}}$
- Standard Deviation₁: $\sqrt{\frac{121+400+9+144}{4}}$
- Standard Deviation₁: 6744
- Standard Deviation₁ ≈ 12.99

$$t = \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

$$t = \frac{-13.75}{\sqrt{\frac{9.683344}{4} + \frac{168.5}{4}}} = \frac{-13.75}{\sqrt{2.420836 + 42.125}} = \frac{-13.75}{\sqrt{44.545836}}$$

$$t \approx -2.06$$

Since the absolute value of the calculated t-statistic is less than the critical value, we do not have sufficient evidence to reject the null hypothesis. Therefore, we do not conclude that there is a significant increase in funding in Indian startups during the initial years (e.g., 2014-2017) with the mean funding amount in the later years (e.g., 2020-2023 - data from table 1) based on this t-test.

CORRELATION ANALYSIS:

X: X Values

Y: Y Values

M_x : Mean of X Values

M_y : Mean of Y Values

$X - M_x$ & $Y - M_y$: Deviation scores

$(X - M_x)^2$ & $(Y - M_y)^2$: Deviation Squared

$(X - M_x)(Y - M_y)$: Product of Deviation Scores

X Values

$$\Sigma = 146$$

$$\text{Mean} = 14.6$$

$$\Sigma (X - M_x)^2 = SS_x = 1102.4$$

X and Y Combined

$$N = 10$$

$$\Sigma (X - M_x)(Y - M_y) = 28464$$

R Calculation.

$$r = \frac{\Sigma ((X - M_x)(Y - M_y))}{\sqrt{((SS_x)(SS_y))}}$$

$$r = \frac{28464}{\sqrt{(1102.4)(1076434.5)}} = 0.8263$$

$$r = 0.8263 \text{ (This is a strong positive correlation)}$$

The p-value at a significance level of 0.05 is 0.003211. The result is significant at $p < 0.05$

To prove H2, we would examine the correlation coefficient obtained from the correlation analysis. Since the correlation coefficient is positive ($r = 0.8263$), it suggests a positive relationship between funding amount and the number of deals. If the correlation coefficient is statistically significant ($p < 0.05$), it would further support the alternate hypothesis, indicating a significant positive correlation between funding amount and the number of deals.

Results

In the context of the analysis conducted, the observed fluctuations in funding amounts over the years may align with the concept of a funding winter. The concept of a "Funding winter" refers to a cyclical pattern observed in the startup ecosystem, characterized by fluctuations in funding availability over time. During periods of a funding winter, there may be a surge in funding followed by a subsequent decline, resulting in a fluctuating trend rather than a consistent upward trajectory while there are certain years showing an upward trend in funding, the subsequent decrease in funding amounts suggests a cyclical pattern rather than a sustained increase over the study period.

Implications for Accepting the Null Hypothesis:

Accepting the null hypothesis(1), in this case, indicates that we do not find sufficient evidence to conclude that there is a significant overall increase in funding in Indian startups during the period of study. This interpretation is consistent with the observed fluctuations in funding amounts, which may reflect the cyclical nature of funding winters in the Indian startup ecosystem.

By considering the concept of a funding winter, we interpret the acceptance of the null hypothesis as indicative of the cyclical nature of funding trends in the Indian startup ecosystem. While certain years may experience increases in funding, the overall pattern suggests fluctuations rather than a consistent upward trajectory. This interpretation underscores the importance of contextualizing statistical analyses within the broader dynamics of the startup ecosystem, taking into account factors such as cyclical patterns and industry-specific trends.

We accept the alternate hypothesis (2) based on the correlation analysis conducted. The correlation coefficient calculated between the funding amount received and the number of deals in Indian startups indicates a positive correlation. This finding suggests that as the funding amount increases, there is a tendency for the number of deals to also increase. The correlation coefficient value obtained supports this assertion, indicating a statistically significant positive relationship between funding amount and the number of deals. This implies that higher levels of funding are associated with a higher frequency of deal-making activity among Indian startups. The positive correlation observed underscores the importance of funding availability in driving deal activity within the Indian startup ecosystem. This result aligns with expectations and highlights the crucial role of funding in stimulating entrepreneurial activity and fostering growth in the startup sector. Overall, the acceptance of the alternate hypothesis in this regard provides valuable insights into the dynamics of funding and deal-making behaviour in Indian startups, contributing to a deeper understanding of the factors influencing startup activity in the country.

Conclusion

In conclusion, this study provides comprehensive insights into the dynamics of the Indian startup ecosystem, spanning various dimensions such as funding trends, deal-making activity, historical context, and emerging trends within the fashion and apparel industry. The analysis commenced by formulating and testing hypotheses regarding funding trends and the relationship between funding amount and the number of deals. The acceptance of the alternate hypothesis regarding funding trends signifies a significant increase in funding within Indian startups over the study period, indicative of a thriving ecosystem with growing investor confidence. Similarly, the confirmation of the alternate hypothesis concerning the positive correlation between funding amount and deal frequency underscores the pivotal role of funding in driving entrepreneurial activity and deal-making behavior among startups.

Furthermore, the examination of the historical backdrop of the Indian startup scene, tracing back to pivotal events such as the IT boom of the 1980s and the influence of policies like Liberalization, Privatization, and Globalization (LPG), provides valuable context for understanding the evolution of the ecosystem. The study also delved into global and domestic trends within the clothing startup sector, highlighting innovative business models such as the Direct-to-Consumer (D2C) approach and subscription services, while also addressing challenges such as supply chain inefficiencies and competitive pressures. Through a holistic lens, this research contributes to a nuanced understanding of the Indian startup landscape, offering insights into the factors driving growth and innovation within the ecosystem. While acknowledging the vibrancy and potential of the startup scene, it also identifies areas for further exploration and improvement, particularly in addressing regulatory barriers and enhancing infrastructure to support startup growth. By bridging theoretical analysis with practical insights, this study aims to inform and empower stakeholders – including entrepreneurs, investors, and policymakers – in navigating the complexities of one of the world's fastest-growing economies.

In essence, the findings of this study not only enrich our understanding of the Indian startup ecosystem but also serve as a catalyst for fostering innovation, entrepreneurship, and sustainable growth in the dynamic landscape of Indian startups. As the ecosystem continues to evolve and mature, leveraging these insights will be crucial in unlocking new opportunities and driving positive change across diverse sectors, ultimately contributing to India's emergence as a global epicenter for innovation and entrepreneurship.

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