" Indian Startup Ecosystem approaching escape Velocity – A study on Technology based Indian Startup."

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Abstract

India has seen the amazing advancement of the innovation based startup ecosystem in recent years. This period was set apart by the initiation of thousand and thousands of new startups companies, sky-ascent of unicorns with a complete market valuation of over US$ 32 Bn and the emergence of category leaders in areas of different industry verticals like ***Robotics, Analytics, Edu-tech, Health-tech, Fin-tech, enterprise product , travel and hospitality, Food tech , Media & Ent- Tech SCM & Logistics and Manufacturing*** etc. and all these are technologies based domain. Advancement in technology is the key factors behind the success of tech based startup ecosystem. The cutting edge technology like Artificial Intelligence(AI) , Machine Learning , Deep Learning , Block Chain, Cloud Computing , Augmented Reality and Virtual Reality are the few name on which majority of tech based startup are running their business model. If the landscape continues to evolve at this space then by the end of 2020 we are expecting more than 11500 tech. based startups to get established in India and generating employment opportunities for more than 2,50,000 young populous. The startup ecosystem also testified the mushrooming effect of a notable base of startups building solutions for India targeting to determine grass root level of social problems. This paper is focused on key indicators such as opportunities existing in domestic market, factors behind the success and failure of startups , challenges faced by new startup founders , the current state of startup ecosystem as of today with respect to global expansion and a glimpse on various policies announced and implemented by our Government and the current status of startup ecosystem.

Key Words : Ecosystem , Startups , Accelerators , Incubators , Angel Investors , Crowd-funding , Industry Verticals.

Introduction

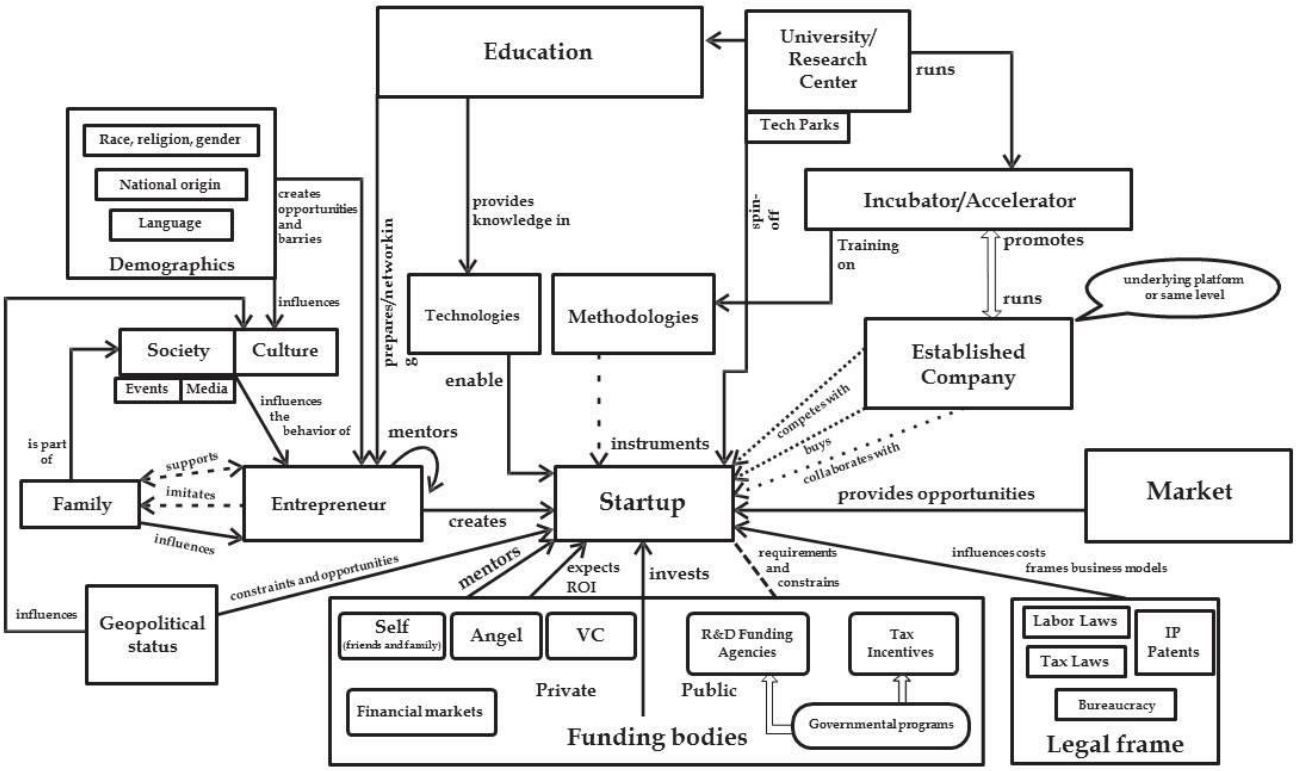
India has a lot of young talent and a huge potential to grow . From a single unicorn in 2012 India is having more than 26 Unicorns as of now and we are expecting to have more than 100 unicorns by 2025 as per Industry experts. Technology base innovation and disruption across various sectors is increasing rapidly and most of these startups are being driven by young entrepreneurs . In 2018, as per a report published by Inc42 , we have

nearly 30 ***"Soonicorns"*** startups which is having potential to become unicorn by 2020. Indian tech startup ecosystem recaptured energy after the slow performance in past two years. The year 2018 was set apart with emotional increment in number of unicorns, resurgence in ventures, and quick development in trend setting innovation in startups environment. India keeps on being the third prominent startup ecosystem environment on the planet, with the general startup base in India assumed to cross 7500, a development of 12-15% from a year ago. Different markers point that the Indian start-up ecosystem is moving towards a escape velocity and is setting itself up for a time of supported development. The absolute number of Indian unicorns dramatically increased, with 10 new companies being added to the rundown in 2018 – most astounding number in any year till date. The quantity of cutting edge innovation new companies expanded by half from 2017, with Data Analytics, Artificial Intelligence and IoT seeing the preferable selection. Indian start-up ecosystem kept on drawing in financial specialist enthusiasm with nearly $4.2 Bn of subsidizing in 2018 (Jan to Sep), showing 108% development over a similar period in 2017.

The quantity of new startups incepted in 2018 is probably going to increase to 1200+ from 1000+ in 2017. Aside from the development, we are beginning to see an inexorably heterogeneous blend of new businesses – number of female entrepreneurs has increased to 14% in 2018 from 11% a year ago, more Tier 2/Tier 3 urban areas are rising as start-up centers, and progressively experienced experts are taking innovative course.

As we noticed that the technology based startup ecosystem in India reaps notable focus and attention right from the government's 'Startup India, Standup India' scheme to access to private funding, it is the right time to estimate the current state of Indian technology based startup ecosystem in terms of its powers to actively participate and drive the upcoming global innovation and disruption of some of the industries. Since our government is also pushing the startup environment and providing all support to nurture and grow the budding startup. First time in history that National bank SBI has launched an application called YONO which means " You Only Need One", this is a single point of Contact(SPOC) for all Finance related issues. Similarly RBI has launched a regulatory sandbox for their Fintech Startups to test the business model, in the same way Market regulator SEBI has started and Insurance Regulator IRDAI has started the concept of regulatory sandbox. Technology and Innovations are overturning workflow and processes in the financial services industry in all aspects. Almost every type of financial activity and service from banking to payments to wealth management to loans, stock trading and more is being re-re-shaped by these technology based startups. Likewise, the tech startup community is winding up progressively worldwide – Indian new companies (both B2B and B2C) are extending to different markets, and worldwide goliaths are floating towards India. Indian tech based startup are expanding their wings in various countries.

Conceptual Framework of Startups Ecosystem:



Literature Review

Harms, R., Kraus, S., & Reschke, C. H. (2007). The objective of this paper is to provide a complete structured view of the utilisation of the configuration approach in the context of new and small enterprises. There are a little, yet a critical number of studies that manage the observational distinguishing proof and examination of new pursuit types. Be that as it may, specialists are simply starting to tap the capability of the arrangement methodology. All the more solidly, design investigations are still rather heterogeneous, and no studies manages the ID of advancement arrangement with regards to new pursuits yet. A consciousness of the presence of various sorts of new businesses can prompt progressively instructed choices in new speculation the board.

Lingelbach, D., Patino, A., & Pitta, D. A. (2012). The objective for this paper is to build up a theoretical system, situated in business enterprise hypothesis, which clarifies how showcasing develops in new companies established by individuals from the Millennial age. Plan/philosophy/approach - Following a writing audit, from which recommendations are determined, a prior procedure model of hierarchical speciation is adjusted to showcasing by Millennial business people. Discoveries - A four-organize cycle model of pioneering advertising by Millennials is created, comprising of empowering through asset shortage, holding through web-based social

networking, new item presentation through gradual stealth, and duplicating through variety, determination, and maintenance. Research impediments/suggestions - Model improvement would be upgraded through experimental information. Down to earth suggestions - Marketers in pioneering firms established by Millennials can pursue a couple of straightforward principles to upgrade advertise entrance. Asset shortage is something to be looked for, not maintained a strategic distance from.

Rabelo, R. J., & Bernus, P. (2015). In his paper author presents a holistic model of building Innovation ecosystem and studies various aspects of development process.

This paper gives an examination as systematization of life cycle forms associated with sending development environments. In this paper the creator introduces a general survey of the present condition of instruction and learning, and dependent on a methodical writing audit represents the components that impact the transformative production of such a biological system.

The examination displayed a first endeavor to set up the structure of development environments. The point was to make an all encompassing perspective and represent the unpredictability associated with that building procedure. One of the ends came to after the writing survey was that an effective advancement environment is the consequence of a long development, and there is no single medicine that suits all cases. This paper speaks to the principal aftereffects of continuous research. Future research means to build up an increasingly formal structure of the advancement biological system and the development procedure, which considers the blend of arranged and rising/circulated procedures of environment advancement.

Mulloth, B., Kickul, J. R., & Gundry, L. K. (2016. There has been intense neglect in most of the literature dealing with social entrepreneurship on the relationship between social entrepreneurship and technological innovation. The purpose of this paper is to provide new insights into that relationship by using the case of Prezi, a Budapest- Hungary based mission-driven software company. Using the example of Prezi, the authors show that social entrepreneurial activities and projects could act as an important innovation source for technology-based enterprises.The authors use the case of Prezi and describe several of Prezi's socially driven projects and show how they impact those involved with the company to continuously innovate and solve problems that have positive impact in the community as well as their core product offering.

Mansoori, Y. (2017). The goal of this paper is to explore how the instructions of the lean startup methodology impact entrepreneurs. It investigates what happens when such instructions are performed by entrepreneurs in the context of a "prescriptive accelerator". The intention is to shine a light onto the devices by which these instructions are acquired and then employed by entrepreneurs and to outline in some detail the implications of adhering to the lean startup methodology.

Spender, J. C., Corvello, V., Grimaldi, M., & Rippa, P. (2017). Startup organisations represent a dominant engine of open innovation (OI) processes. The objective of this paper is to represent a first step in building a map of the state-of-the-art knowledge of the "startups in an OI context" phenomenon. Through the selection and review of appropriate literature, this study aims at heightening our understanding of the theme and at providing paths for future research.

The dissected writing has been amalgamated in seven sub-points, which have been assessed as the most applicable in clarifying the wonder of new companies in connection to OI. Implications for research, for chiefs and for arrangement producers close the paper.

The audit delivered important information for the two supervisors and strategy chiefs. The paper permits a superior comprehension of the job of new businesses in OI forms. This upgraded information can help supervisors of enormous firms just as policymakers engaged with OI in settling on their choices. In addition, the relationship of OI methodologies for startup supervisors have been singled out.

Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2018). Digital economy is of high topicality as mechanical progressions and advances in framework make different openings for business people. Network's incredible thoughtfulness regarding new advanced plans of action is protested next to no exploration with respect to circumstances, difficulties and achievement elements of computerized business enterprise. The reason for this paper is to accumulate the best in class writing on computerized business enterprise and to give a state-of-the-art aggregation of key points and techniques talked about in the pertinent writing. Besides, in view of discoveries of the orderly writing audit, an exploration plan pointing at further research open doors for researchers who are working in a similar field will be advertised.

Islam, M., Fremeth, A., & Marcus, A. (2018). Business specialists have reported that beginning time new companies depend on sign to represent the changes in their statuses that they should make when they cross hierarchical life cycle starts. In any case, beginning time new companies in creating industry settings will in general have couple of good flag whereupon to depend. Open offices can assume a profitable job in this procedure, earlier research has not adequately inspected how new businesses successfully influence this help.

In this paper, the creators built up a skeleton to think about the capacity that sign can perform for beginning period new companies when they win esteemed government investigate grants.

Objectives of the Study:

- ✓ To understand the different Component of Startup ecosystem in India and their role.
- ✓ Analyze the Factors responsible for the slow progress as well as success and failures of Startup in India.
- ✓ To study the policy initiatives and schemes initiated by the Indian Government and the role of other agencies in boosting the Startup ecosystem in India.
- ✓ To understand the current state of Technology based Indian Startup.

Research Methodology:

The study is based on secondary data. The secondary data required for the studies were collected from various international journals , Published online books , government website (startupindia.org) , websites of various media companies like Inc42.com, IndianWeb2.com, NASSCOM , yourstory.com and various publications related to the topic under study.

Research Analysis /Findings

A fruitful start-up can't begin a business just with enthusiasm and a thought. An abnormal state of initiative aptitudes with clear comprehension of market, incredible relational abilities, development to see things in right point of view alongside the capacity to go for broke are required with respect to the entrepreneur (Aggarwal,2017). Absence of mindfulness, various clearances, chaotic market, poor framework in Tier 2/3 urban communities, absence of coaching, stringent leave approaches, defilement/formality, mechanical hazard, administrative snags and absence of changes keeping pace with the quick advancing business sector changes are a portion of the difficulties.

THE CURRENT STARTUP SCENARIO IN INDIA

It is to be noticed that consistently in excess of 800 innovation new businesses are being set up in India. By 2020, it is evaluated that around 11,500 tech-new companies will be built up with work capability of around 250,000 specialized individuals (NASSCOM, 2015). It is excellent to take note of that India is among the main five nations on the planet regarding new companies with 10,000+ driven by US with 83,000+ containing 43% tech-based firms with 9% overseen by ladies business visionaries. The quantity of hatcheries additionally has crossed 100 of every 2014-15 to offer lift to the startup adventure (Grant Thornton, 2015).

Growth of Unicorns in India

- India has the highest no. of unicorn startups after US and China with 18 unicorns out of 250+ total unicorns globally
- 8 Indian start-ups turned Unicorn in 2018 (till Sep.), highest addition in a single calendar year.
- India has the highest no. of unicorn start-ups after US and China with 18 unicorns out of 250+ total unicorns globally

- The Indian unicorn list is expected to add 10+ members by 2020. Some of the prominent names are Druva, Rivigo, Big Basket, Delhivery, Mobikwik and Practo.

Indian Start-up Ecosystem: Achievements at a glance

- Tech Start-ups incepted during 2013-18, overall base growing at 12-15% =7200 -7700
- Tech Start-ups added in 2018; steady and sustained growth in new Tech Start-ups. = 1200+
- Tech Unicorns added in 2018; Highest addition in a single calendar year ever = 8
- Total funding received by Tech Start-ups in 2018 (Jan-Sep); More than 100% YoY growth = 4.3 Bn $
- Increase in no. of Advanced Tech Startups since 2017 = 50%
- New Direct Jobs created; = 40,000
- Active Incubators/Accelerators in 2018, with a YoY growth of 11%= 201%

(Source: zinnov research,yourstore,inc42,Track in,NASSCOM reports)

Current Startups scenario at a glance

	2014	2015	2016	2017	2018
No. of Startups	3100+	4200+	4750+	5200+	7200+
Global Ranking	4th	3rd	3rd	3rd	3rd
New Startup Added	800	1200	1400	1000	1200
Business Focus	59%B2C 37%B2B 4% Both	83%B2C 17%B2C	77% B2C 03% B2B 20% Both	47%B2C 40%B2B 13%Both	43% B2B 57% B2C
No. of Incubator/Accelerators	80+	110+	140+	190+	210+
Declared Unicorn	Snapdeal/OLA/Inmobi	Paytm/Quickr	Hike/Shopclues	ReNew	udaan/SWIGGY/OYO/zomato/freshworks/paytm Mall/PolicyBazar/

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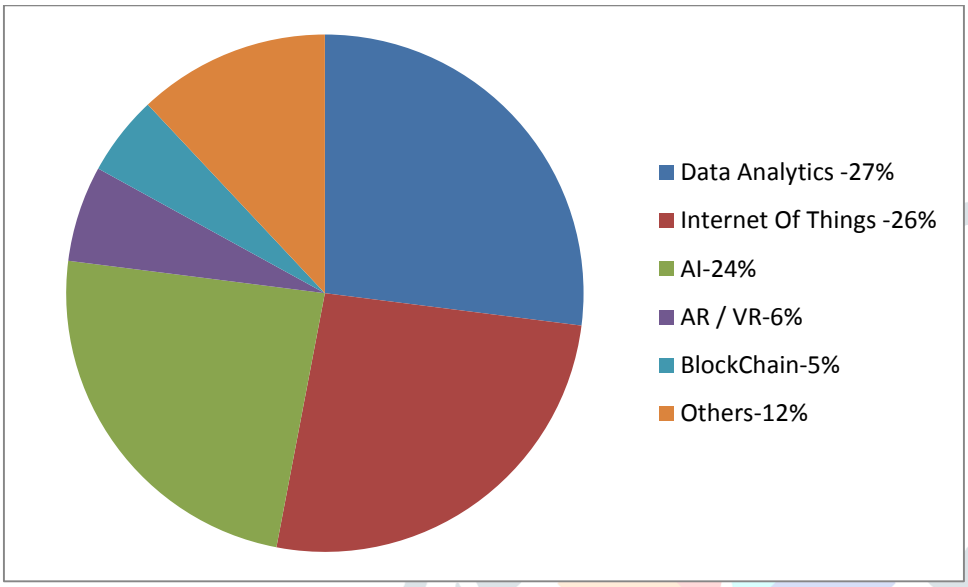
(Data collected by various websites , journals, online books and Composed by Author)

Advanced Tech Analysis (2013-2018)

Advanced Technology start-up pool is expanding rapidly at 40% CAGR since 2013



(source : NASSCOM annual report 2018, Inc42.com,yourstore research).

Global Expansion:

- ✓ India is developing into a Global Tech Start-up hub.
- ✓ 400+ Cross Border Tech Start-ups.
- ✓ Below startups are Build in India, built for the world

Startup	Country for built	Funding
avaamo	US	24$mn
Telr	Singapore	3$mn
COVE	Singapore	10$mn
Infoworks	US	20$mn
αICs	US	3$mn
HOOQ	Singapore	95 $mn

(source : NASSCOM annual report 2018, Inc42.com,yourstore research).

Funding Landscape -2018

Activities(Events)	Funding
No. of Active Investors	**500+**
No. of Deals(Overall)	**451**
Avg. Funding per Deal	**USD 9.4 Mn**
Seed Stage Funding	**USD 151 Mn**
Early Stage Funding	**USD 1.0 Bn**
Late Stage Funding	**USD 3.0 Bn**
Total Funding	**USD 4.2 Bn**
No. of Startup funded	**1200+**

Country Comparison:

	USA	China	India
No. of Unicorn	126	77	18
Unicorn in 2018	25	20	8
Avg. time to become Unicorn	6-8(yrs)	4-6(yrs.)	5-8(yrs.)
Avg. Valuation per Unicorn $bn	3.5(approx.)	3.8(approx.)	2.4(approx.)

(source : NASSCOM annual report 2018, Inc42.com,yourstore research).

Emergence of Asia as a Start-up Hotspot

- China's share of global unicorns has risen from 14% to 35%
- India produced 8 unicorns in 2018
- 30% increase in funding to Asia Pacific countries in the past 4 years

Conclusion

India announced 2010-20 as the Decade of Innovation. Innovation is the key to success for tech based startup ecosystems and results for more industrialization and more opportunities. That increases the per capita income of a country. But the great problems in Indian markets are that they are unorganized and fragmented. There is a lack of unambiguous and transparent and clean policy motives, lack of communications sources, lack of knowledge and exposure. Startup ecosystems require a combination of friendly operational, regulatory and taxation issues that affects the working of the business environment very much. Funding is not a big challenge for these budding startups , we have seen many cases that at one end startup founders are able to get funds for their startups and at other ends various funded startups are moving towards closure.

Our study on the cause of failure and the mode of exit by startup founders will help the promised entrepreneurs to take enough forethoughts to avoid failure. The decrease in failure rate will minimize the cost of failure and it can avail the benefit to the ecosystem. In particular, the learning obtained from failed experiences and lesson

learned will enable the ecosystem to minimize the cost of failure, and it can offer guidance to potential entrepreneurs.

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