

TECHNICAL BUSINESS INCUBATOR AND INDIAN ECOSYSTEM

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Abstract : Encouraging company growth and addressing problems of economic development in India through improving entrepreneurial base and dispersion of intellectual capital is a matter of gravity on everyone's mind. Knowing the potential of Incubators to transform the local regional and national economies and giving rise to self-sustaining communities, there is perhaps a constant need for evaluation of incubation systems not just considering their goals of producing successful firms but also concentrate renewed endeavor to evaluate incubator contributions to long term incubate graduate success, but the variance in the operability and output of incubators in a developing nation such as India and abroad demands for Indian start-up centric research to leverage Indian technical entrepreneurial ecosystem. Technical Business incubator models in India need to adapt to the needs of the local Indian community, economy, and academia demands not only for the social, economic and political betterment of the nation but also for its own growth.

Index Terms - Enterprises, Economy, Incubation, Organisation component, formatting, style, styling,

I. INTRODUCTION

Despite drawbacks due to ranking low in several indices such as high corporate tax and other above-mentioned points, India is witnessing a 40% year over year growth in the numbers of institutions catering towards the set-up and development of emerging businesses due to the Y.O.Y growth of 10-12% anticipated in the Indian start-up base. These institutions in particular help promising ventures with money and maybe advice. These institutions are namely Angel investors, Incubators and Accelerators [1].

An angel investor is typically a successful entrepreneur who willingly extends support to ventures having potential with financial resources they assist their portfolio firms in an unstructured manner, often providing advice and introductions as needed. Their limited involvement and mentorship are reflected due to the lack of structure. Incubators on the other hand are organizations that provide fledgling companies access to early stage money but primarily provide infrastructure, expert advice, and valuable network of people, shared logistics, and physical services complemented with shared business support and business consulting assistance or expertise [2]. They assist ventures, define and build their initial products, identify promising customers secure capital, and employee resources. Accelerators like incubators provide a plethora of networking opportunities and a small amount of seed capital. These institutions have their main goals set to groom the start-ups to become valuable in the eyes of investors.

The discrepancy between incubators and accelerators lies in words: Duration Cohorts, Business Model, Selection and Education Mentorship and Network Development.

Researchers and Experts alike concur to the fact that the uncompromising timeline and binding to the strict graduation dates established by accelerators forces nascent ventures to adapt and learn to operate in market forces. Longer durations in Incubators seem to conjure co-dependent relationships which embodies ventures that will inevitably fail when faced with the real market. But the short duration adversely affects Networking, Up-skilling and bonds between the cohorts of tenants giving Business Incubators a massive Vantage point in perspective of Intellectual capital, and Network development. Angel investors gravely deprive ventures of valuable mentoring and advice.

II. BUSINESS INCUBATOR REVENUE ODELS

The revenue model adopted by the various Business Incubators maybe either of the three or a combination of the ones enumerated below:

- Landlord Model: The revenue is amassed from the rental payment of the tenants and client fees for the consultation and other services.

- Equity Based Model: the incubator taking an equity position in its most optimistic client firms and has the potential to generate revenues from sharing in client success or royalty agreements on gross sales and brokerage fees on raising finance. This method however requires substantial initial investment and a great deal of patience, as it may take up to 10 years to generate revenues.
- Sponsor Funding based Model: The third, and most common, method is to rely on ongoing sponsor funding, such as the university, government at the federal / state / local levels, of private foundation or industry support.
- In Indian the most common form of incubator is the urban-based Technology Business Incubators (TBIs) which have scope to generate decent income through the rentals and allied services offered to tenant companies. Most TBIs have some unique approach of reaching and attaining self-sufficiency as the recurring operational grant from NSTEDB is available only during the first five-year period.[3][5]

Apart from the impetus from the government a major percentage of the contribution for incubator comes from the academic front and the independent corporate sectors. The common observed features in the different Technical business Incubator/Accelerator ecosystem in India is shown below:

	TBI with Corporate Support	Independent TBI	TBI Supported by academic Institutions	Govt. Supported technical Business incubators
Key aspects	Company focused Specialized Technology Focus. Key verticals are: Edu-tech, Fin-tech, Health-tech, retail	Company focused Specialized Technology Focus. Key verticals are: Edu-tech, Fin-tech, Health-tech, retail	Knowledge focus Key verticals are: Manufacturing, Energy, hi-tech, Health-tech, Rural support	Knowledge focus. Key vertical are: Manufacturing, Energy, hi-tech, Health-tech, Rural support
Features	Shared Resources, Developer tools, Co-innovation Contact with investors. Business Mentoring	Shared Resources, Developer tools Co-innovation Contact with potential investors., Business mentoring.	Offline Space, libraries, and Research labs Alumni Support Faculty and Industry mentorships opportunities. Access to Seminars and boot-camps	Offline Space, libraries, and Research labs Alumni Support Faculty and Industry mentorships opportunities. Access to Seminars and boot-camps

Table 1: Technical business Incubator/Accelerator ecosystem in India

From the staggering rise of start-ups and the flagship initiative Start-up and Stand-up India by the Indian Governments with an objective to build a strong ecology for nurturing innovation indigenously that will lead to greater number of employment opportunities for Indians and sustainable economic growth. The nation has been witnessing a healthy growth in the business to business start-ups focused on verticals like health-tech, e-commerce, fin-tech and aggregators.[4]

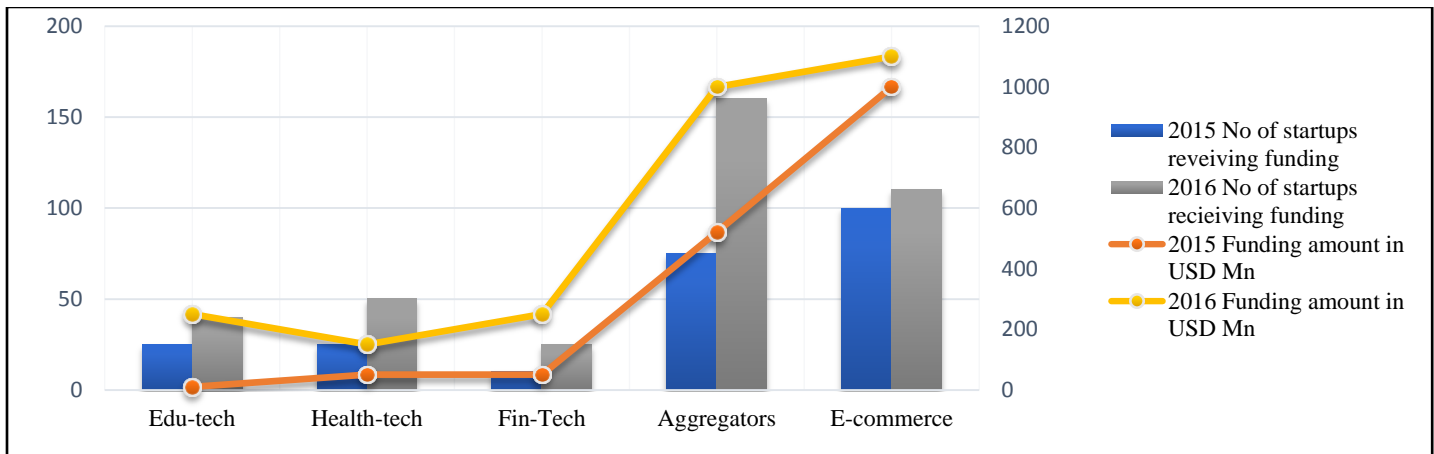


Figure 1 Indian Start-up verticals and funding

III. BUSINESS INCUBATION SUCCESS FACTORS

- Location and affiliation or connection to a University: This factor is crucial to an incubator's success due to the ready availability of resources, facilities and talent pool such as students and university faculty with specializations. Incubators can take advantage of the laboratories, conference rooms and other facilities.[6]
- Access to Science and Technology expertise and facilities: The environment of the incubator plays a crucial role in nurturing the young incubates. Presence of Science Parks, Tech-Conference Centres all contribute to the ready availability of ideas, equipment and cognitive development of the client companies.[6][7]
- Feasibility Study: Conducting Feasibility study before commencing the operations allows the incubator to be prepared before-hand. It allows the manager to be prepared with a timeline and set of benchmarks to assist in verification of performance at various stages. It also helps in verifying the commitment of finances. [8][9]
- Business plan development: The strategic business plan through acquisition of technologies, equity financing, and marketing tactic.
- Access to funding: No business can successfully run without funds. Without sufficient seed funding in the early stages the founder's vision wouldn't materialize.[9]
- Involvement of Private sector: Private sector companies have the power to subcontract incubates, they might provide for arrangements such as participation for the trainee programmers. They help in building the incubators network.
- Links to other SME programs in the nation: The different Small to Medium Scale industries in the nation need to network with each other facilitating dispersion of knowledge and experience.[10]
- Networking: The establishment of mutually beneficial relationship with other businesses and potential clients for dispersion of knowledge and experiences. Networking helps in establishing market presence and also widens market prospects.
- Screening of technical, Business and market potential of Applicants: The inspection of the background of the applicants allows the incubator to select companies which fit perfectly into their criteria, ie clients with similar objectives and goals. It facilitates the projects are feasible for the incubator. The potential is enhanced when the incubator and the tenant company complement each other.
- Employing Local experts and consultants: Most incubators tend to be sponsored from other developed countries; hence it is critical to employ local experts familiar with the home-ground. A local champion and sponsor also need to be identified to continue with the incubator after the international sponsor recedes.
- Conduct continual evaluation tests through various stages of the incubation: The real test to any business is its capability to identify and acknowledge its changing environment and changing needs with progress. The chances of success of incubators improve substantially when actions are taken to reshape according to test results of incubator evaluation.
- Exit criteria: The incubator should have some exit terms. Incubators must graduate to not prolong their stay in the incubator denying other potential clients of the experience. Client failing to meet deadlines and not showing any signs of progress may be asked to evacuate. Establishment of such criteria forces tenants to set milestones and stick to them.

IV. RESEARCH FRAMEWORK

The research is essentially focused on withdraw factors from universally applicable factors which contribute to the success of Technical Business incubators and identify and analytically verify factors befitting Indian conditions from the set. The research runs an inductive approach accumulating factors from literature in conjunction with analytical study procedure.

There have been countless instances and initiatives of incubators across India, but the lack of utilisation of their collective lessons from their success or failure reasons adversely affects other Indian initiators and slows optimum performance. The

entrepreneurial ecosystem in nations abroad show little similarity to the Indian conditions. Technical Business incubator models in India need to adapt to the needs of the local Indian community, economy, and academia demands.

On careful study of the various Technical business incubators, the types of incubators could be classified over various factors ranging from its technical or management disposition, revenue collection, and its value addition capabilities.

The study model considered in the study are depicted below in the figure 2.

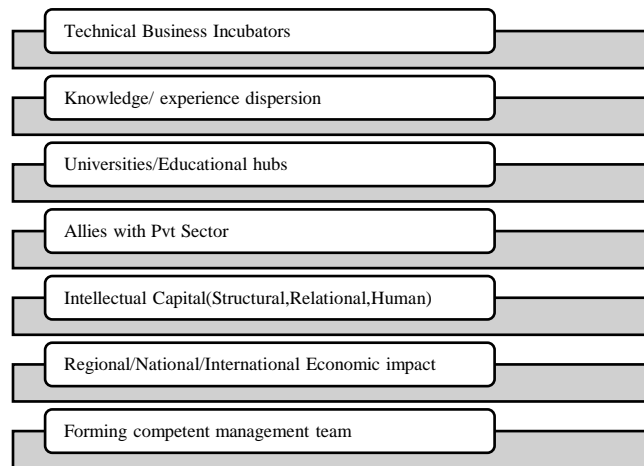


Fig 2: Study model for business incubation

Several Indian incubators are associated to renowned government universities rendering young entrepreneurs with little to no experience. The financial support and provision of resources from the university and the government provides them greater liberty in multiple ways in comparison to other Incubators making age of incubator an obsolete comparator. This was even visible from descriptive statistics i.e. There was no notable trend indicative of age and number of graduates in fact incubators in reputed universities tended to create more firms irrespective of years of operation of incubator.[13]

Many studies considered the revenue earned from sales as a way to quantify success, but it could be argued that in recent years plenty of business incubators do not just capitalise off the products of their client companies but also donate new creations as a noble gesture in desperate times or other reasons. This makes it impossible to just the success of a business incubator based off sales.

Many studies considered the number of graduated client companies as a measure to judge the success of Business Incubators. But one must consider the responsibility and the duty of the incubator to not just graduate companies but make companies self-resilient and self-sustaining. Graduated companies which eventually collapsed under the pressure from the market do not reflect the true success of an Incubator.[11]

V. RESULT AND ANALYSIS

Responses collected using the Likert scale (1-Not at all important, to 5-Extremely Crucial) to gauge the ability of the incubators to furnish crucial business services such as legal Assistance and counselling, Computing and Information Services, Connecting with relevant benefactors, accounting and leveraging Intellectual property development to support the limited business skills that founder of client companies lack, is described below:

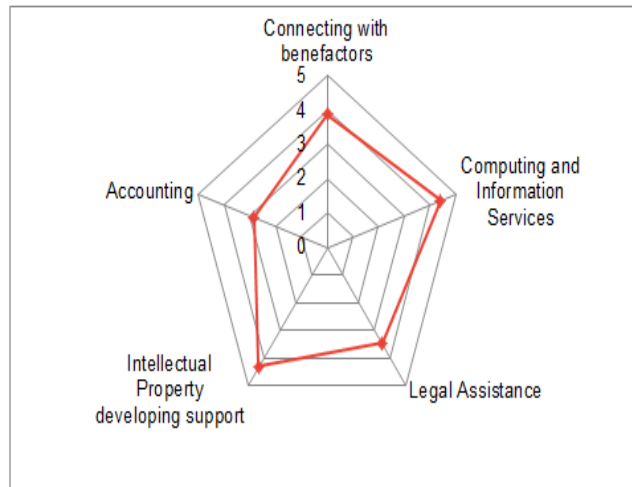


Figure 3: Spider plot on crucial Business Services

Responses collected using the Likert scale (1-Not at all important, to 5-Extremely Crucial) to gauge the ability of the incubators to furnish crucial Financial Consulting Services such as Capital market access, Equity and Debt Finance arrangements, Investment advisory, Business Taxes and Business and Financial risk management is described below:

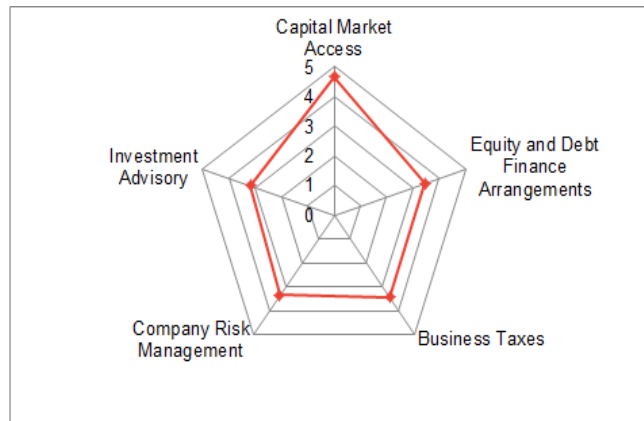


Figure 4: Spider plot on crucial Financial Consulting Services

Responses collected using the Likert scale (1-Not at all important, to 5-Extremely Crucial) to gauge the ability of the incubators to furnish crucial Management Services such as branding and promotion, Business Planning, Business Process and Transformation, Human Resources and legal consultancy is described below in figure

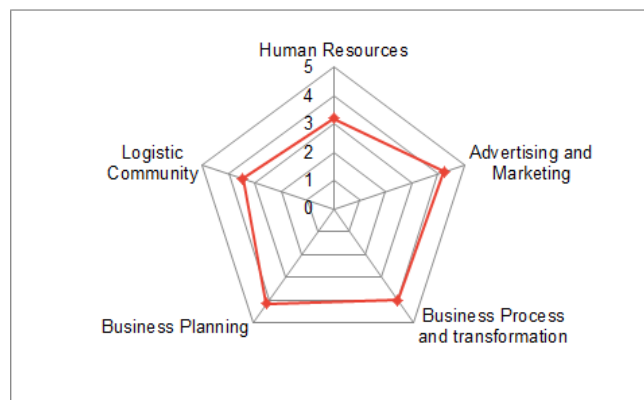


Figure 5: Spider plot on crucial Management Services

The main objective of the study was to discover global factors contributing to the success of Technical Business Incubators from a vast pool of literature and identifying factors critical to the Indian environment in the wake of it emerging as a fast-growing developing country where social, economic and cultural influences are significant, much in contrast to the West. The literature didn't bare the traditional globally conceded factors but ascertained them. The sample size was limited to Indian Incubators and sufficient data was gathered for the purpose of the study.

VI. CONCLUSION

The lack of covariance between age of the Technical Business incubator and the Number of graduated firms since university incubators due to higher credibility, acclaimed position, lack of fewer financial constraints and young impressionable and entrepreneurially intentioned talent pool at their disposition. Consideration of parameters such as sales and monetary gains are outdated since new age Incubators also develop products and donate them as a noble gesture. It is also to be noted that everything that the incubator does cannot be gauged in terms of monetary benefits since incubators might have a long term social or economic impact or an impact on the company value which in turn leverages the book value. New age technology tends to be more long term focused and fail to generate revenues initially. Growth focused companies' futures are impossible to predict owing to the time period. For instance, companies like amazon which still generate low revenues but have managed to create monopolies and are tech unicorns in the eyes of investors is an example of such companies which are long term focused.

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