

Analyzing the Financial Performance and Investment Attractiveness of Startups Supported by Incubation Centers

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Abstract

The startup and small business sector even goes as far as to being the main problem fixers of the economy, worldwide. Although startups can often benefit from the motivation and vision of the entrepreneurs, there are still some significant difficulties, such as insufficient funds, lack of essential business skills, and limited access to professional networks, all of which might lead to startup failures. Incubation centers are created to walk with startups at various stages, that is, give startups financial, technical, and mentoring support more so in the early stages of a business. The research looks into the financial efficiency and investment appeal of enterprises created through the incubation centers with a special spotlight on those university-based incubators in India. By combining the methods of research, in which financial analysis numbers are involved as well as qualitative interviews, the impact of incubation on startups' finances is reviewed, along with looking closely at investor attitude. We determine the most important financial ratios, such as profitability, solvency, and liquidity either of these are indicators for the financial resilience of a startup. Moreover, funding metrics, including series and investor type, which give insight into investor type selection for startups are researched too. Insights reported based on the filling up of the existing knowledge gap which relates to incubation centers' ability to increase financial yields and come in with investments. Such a study is significant since it depends on two crucial perspectives: first, incubator management, and second, investors. It also shows a view that can be carefully observed by managers of incubators, potential investors, policymakers, and entrepreneurs.

Keywords: startups, incubation centers, financial performance, investment attractiveness, India.

Introduction

The startup and small business sector is a major and significant contributor to innovation, economic growth, and job creation worldwide (Baranowski et al., 2008). On the other hand, the huge rate of entrepreneurial startup failure is due to insufficient funds, deficiency in important business skills, and limited professional network access (Patzelt et al., 2021). Supporting the growth of startups at all levels of maturity is what incubation centers are striving for. They offer financial and technical support, mentoring, training, and office infrastructure at subsidized costs, and are particularly helpful at the initial stage (Pauwels et al., 2016).

The main purpose of the incubation centers is to make startups successfully overcome the first barriers of the transition and become financially stable and investment-worthy ventures that may attract more investors and have bigger operations (Bruneel et al., 2012). Previous studies present indications that incubators in turn stimulate new venture expansion, innovation accomplishments, ability to stay in business and attract external financing (Allen, D. N., & McCluskey, R., 1990; Schwartz, 2013). Consequently, certain studies have been conducted on the actual financial performance and the investment dispensability of the startups that have been incubated. Analyzing these financial metrics may supply their executives with factual evidence concerning whether or not the centers are achieving the desired results and providing a return on investment.

Through this study, we are attempting to fill in the knowledge gap about the financial analysis of the start-ups housed in university incubation centers in India as well as getting perception on the investment readiness of the start-ups from potential investors. That is the reason we need to assess the financial impact in real numbers and validate how the incubation centers enhance the financial performance of startups, from the investor viewpoint. The report will concentrate on three key financial ratios - profitability, solvency, and liquidity ratios - two of which are the issues investors pay attention to when investing in venture capital or early-stage venture (Haines et al., 2003; Acs, et al., 2007).

In addition to that, the paper provides a new contribution to the body of knowledge in three areas. Firstly, this paper mainly concentrates on the area of university-based incubation Centers which are becoming an ever more crucial part of the creation and innovation policy throughout the country increasingly (Grimaldi & Grandi, 2005). In addition to that, this approach includes both the investor and the incubator points of view concerning startup investing desirability, not

just the incubator one. Fourth, it brings a domestic context for incubation centers that constitute the broader literature that previously was limited to developed economies.

The results are going to be of benefit to all the parties concerned in the industry of entrepreneurial finances. The officials responsible for the policy can use financial evidence to anticipate the direction of future public R&D spending and develop the programs with university incubators and startups in mind. Financial benchmarking helps academic institutions demonstrate and raise the level of performance of their incubators and can be used as a good metric to showcase that. Investors may find answers to their questions about how to value startups with an analytical understanding of tangible valuation metrics and adapt their investment strategies and capital allocation accordingly. Lastly, this knowledge will be of great help to entrepreneurs and founders in the future as they will be able to formulate stronger investor pitches that will easily allow them to get funding.

Materials and Methods

Research Design

This study will apply a mixed-methods research design, integrating the quantitative approach with phenomenological data. The two components are the qualitative one in the form of financial data analysis and the qualitative one which involves conducting interviews with main participants in the process of entrepreneurship support and investment decision-making.

Sample Selection Selection Criteria

Startups, which were promoted by renowned business incubation centers for a bare minimum of two years, designed the sample. Such centers should possess relevant experiences in the field of supporting startup existence through mentorship, investments, and providing business infrastructure.

Sampling Technique

A purposive sampling technique is applied to have a quality representation of all participating industries and geographical areas. Therefore, the said strategy permits the picking of those startups that have a variety of traits and helps in making the findings more generalizable, since the obtained data pertains to a broad sample and not only to a specific case.

Data Collection

Financial data, including income statements, balance sheets, and cash flow statements are obtained for the selected startups at a range of three subsequent financial years. Financial KPIs like Revenue, Profitability, and Liquidity ratios are among the indicators used to assess how the startups are doing financially.

Investment Metrics

Information on investment rounds, purchase of seeds, venture capital, and angel investments is acquired from public sources, which may include investment databases, press releases, and news articles. Data from this analysis is used to study the investment potential of the early-stage startups looking for funding and also track their funding progress over a specific period.

Quantitative Analysis

Descriptive numbers, such as the mean, the median, standard deviation, and the correlation coefficients are calculated to summarize the data that is quantitative. Financial comparison is made to gauge the financial efficiency of the startups before and after the incubation support startups.

Ethical Considerations

This study follows ethical standards regarding confidentiality of invested parties, written/oral consent, and data safety. All participants are informed about the study's aim and entered into the study, and at the same time their anonymity is taken into consideration in reporting the results

Result and Discussion

Table 1: Financial Performance Analysis of Startups Supported by Incubation Centers (2019-2024)

Startup ID	Year	Revenue (USD)	Profit Margin (%)	Current Ratio	Quick Ratio
001	2022	250,000	15	2.5	1.8
001	2023	320,000	18	2.7	2.0

001	2024	400,000	20	3.0	2.2
002	2022	180,000	10	2.0	1.5
002	2023	220,000	12	2.2	1.7
002	2024	280,000	15	2.5	1.9

This table is a summary of financials for two startup companies (ID Startup 001 and ID Startup 002) over three years from 2022 to 2024. What it does specifically is display the average revenue, profit margins, current ratio, and quick ratio for the two companies. Sales going up on an annual basis for both companies reflect healthy going companies. Among others, Startup ID 001 gains revenue of \$250,000 in 2022 and more than doubles to \$400,000 in 2024. Just like that, Startup ID 002, will rise from a revenue of \$180,00 in 2022 to \$280,000 by 2024. An increase in profit margins that are positive from 15% to 20% and from 10% to 15% for the starting companies number 001 and number 002 respectively was seen over the three-year period. The key is that this is the evidence of strengthening profitability over time. The current ratio and quick ratio are short-term liquidity ratios indicating the capacity of a business to pay the bills within a short timeframe. The current ratio is composed of current assets and current liabilities, while the quick ratio is narrower, taking into account only quick assets, like cash and accounts receivable, in contrast to current liabilities. Maybe for both startups, these ratios are beneficial and the following years are showing a definite improving trend indicating stronger liquidity positions. STOCK ID 001's current ratio is 3.0 and the quick ratio is 2.2 whereas STOCK ID 002 has a current ratio of 2.5 and a quick ratio of 1.9 by the end of the year 2024. Ratios of over 1.0 are looking positive, so these startups seem well financially off in the short term (Aernoudt, R., 2004). The data summary will show that two startup companies have proven to serve customers for three years of sustainable growth measured through growing revenues, profits, and liquidity. They both appear to be present for extensive achieving based on the financial history that is prevalent in this report. If we compare the two data, Startup ID 001 shows the highest growth rates and profits at 001 versus Startup ID 002.

Table 2: Startup Investment Rounds and Funding Sources

Startup ID	Investment Round	Amount Raised (USD)	Investor Type
001	Seed Funding	100,000	Angel Investor
001	Series A	500,000	Venture Capitalist
002	Seed Funding	80,000	Angel Investor
002	Pre-Seed	50,000	Seed Fund

The table as shown below highlights the funding source of two startups(001 and 002) in their early stages of investment. For Startups, the process of financing starts with pre-seed and seed investments which come from angel investors and accelerators mainly to develop a product. In the future, when the startup becomes successful, the venture capitalists will offer big Series A, B, and C funding for high-level operations (Aldrich, H. E., & Auster, E., 1986).

Fundamental, the investor had invested \$100,000 seed investment most probably an individual angel investor in return for equity shares. This injected capital would enable the founders to fulfill the market validation part and product development process. Afterward, Startup 1 got a \$0,5 M Series A investment from a VC firm that specialized in startups in the early stages. Series A allows us to hire the right people, and attract customers and it is aggressive (Crunchbase, 2022).

Yet, Startup 002 raised a smaller seed of \$80,000 and was a Pre-Seed seed rounded to \$50,000, were earlier. Before making seed capital, it might be necessary to receive funding from a founder, friends, and family to develop the product, manufacture the prototype, and learn whether the market is receptive (Aldrich, H. E., & Auster, E., 1986). While the angel investor's seed round of Startup 001 is in the same ballpark as Series A, the absence of further financing underlines the situation of slow customer traction and scale demonstration as well as future profitability. It may mean that the startup has to pivot or shut down unless Startup 002 appeals to investors. The startup may not cease to exist and can attract venture capital funding (Aerts, at al., 2007). The table delivers a summary of how the fundraising is ongoing for two early-stage startups. Monetary numbers and investor profiles say a lot about the validation levels founders have already achieved and the growth strategy they are powering. Shall access to venture capital remain open, scaling and eventually an exit through acquisition or IPO becomes possible (Crunchbase, 2022).

Conclusion

Reviewing the financial performance of startups that benefit from incubation programs reveals some important results upon data analysis. The financial performance examination of the startups established a trend in revenue growth and profitability that lasted for 3 years for both startups. Through 2022, startup 001 posted a profit of \$ 250,000 and then progressed to \$ 400,000 in 2024, with an increase in the rate of profit. Additionally, Startup 002 projected an incremental revenue from \$180,000 to \$280,000 in two consecutive years between 2022 and 2024, showing better financial stability. These startups gained popularity, not only on the networking side but also on the financial side, as they successfully raised funds from different investors who participated in seed funding, pre-seed, and Series A rounds. Startup 001 managed to raise an impressive sum of \$600,000 in a brokerage deal between both angel investors, who invested \$100,000, and venture capitalists, who contributed \$500,000, thus demonstrating the high confidence of the investment community for the startup. Startup 002, though raising less capital resolved its way towards scoring capital from angel-investors and seed funds therefore expressing investor interest in the startup's prospect. In summary, incubation centers, which provide generations of startups with potential for growth in finances as well as investment possibility, appear to lead to favorable outcomes in this regard. The incubation center, undoubtedly, had offered the necessary support, comprising of mentorship, financing, and infrastructure and therefore, it was a key factor that sped up the startup's development and the possibility of getting funds from investors. Such results unmistakably reveal the power of incubation centers in developing nascent enterprises and generating a culture of entrepreneurship. In conclusion, sustaining the incubation centers funded by the government or non-profits to keep up with the growth and success of the new enterprises is key to the achievement of all the socio-economic benefits such as innovation, employment creation, and economic growth.

References

1. Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The Evolution of Business Incubators: Contrasts in the demand and supply for these services from different generations of business incubation programs. *Technovation*, 32(2), 110–121. <https://doi.org/10.1016/j.technovation.2011.11.003>
2. Grimaldi, R., and Grandi A. (2005). Business incubators and new venture creation: An assessment of incubating models for organic growth of the company. *Technovation*, 25(2), 111–121. [https://doi.org/10.1016/S0166-4972\(03\)00076-2](https://doi.org/10.1016/S0166-4972(03)00076-2)
3. Haines Jr, G.H., Madill, J.J. and Riding, A.L. (2003) Informal investment in Canada: Gentleman's education. I and other members of the student leadership team have had the opportunity to develop and represent our school in a *Journal of Small Business & Entrepreneurship*, 16(3/4), 13.
4. Pauwels, C., Clarysse, B., Wright, M., and Van Hove, J. (2016) Understanding a new generation incubation model: Other companies may offer similar services, but the accelerator sets us apart from the competition. *Technovation*, 50, 13-24. <https://doi.org/10.1016/j.technovation.2015.09.003>
5. Schwartz, M. (2013). A study of graduated incubators to investigate their role in boosting a firm's prospects. *The Journal of Technology Transfer*, vol 38(3), pp 302–331. <https://doi.org/10.1007/s10961-012-9254-y>
6. Crunchbase. (2022, February 2). Venture capital funding: VC funding: what it is and how it works. Crunchbase. <https://about.crunchbase.com/blog/venture-capital-funding-how-vc-funding-works/>
7. Acs, Z. J., Armington, C., & Zhang, T. (2007). The determinants of new-firm survival across regional economies: The role of human capital stock and knowledge spillover. *Papers in Regional Science*, 86, 367–391. <https://doi.org/10.1111/2Fj.1435-5957.2007.00129.x>
8. Aernoudt, R. (2004). Incubator: Tool for entrepreneurship? *Small Business Economics*, 23, 127–135. <https://doi.org/10.1023/2FB%3ASBEJ.0000027665.54173.23>
9. Aerts, K., Matthyssens, P., & Vandenbempt, K. (2007). Critical role and screening practices of European business incubators. *Technovation*, 27, 254–267. <https://doi.org/10.1016/2Fj.technovation.2006.12.002>
10. Aldrich, H. E., & Auster, E. (1986). Even dwarfs started small: Liabilities of size and age and their strategic implications. *Research in Organizational Behavior*, 8, 165–198.
11. Allen, D. N., & McCluskey, R. (1990). Structure, policy, services, and performances in the business incubator industry. *Entrepreneurship Theory and Practice*, 15, 61–77.
12. Baranowski, G., Dressel, B., & Glaser, A. (2008). *Innovationszentren in Deutschland 2007/08*. Berlin.