

Evaluation of Aspiring Entrepreneurs – A Holistic Model for Incubator Managers and Angel Investors

Chivukula Venkata Ramana¹, A. Jaganmohan Reddy²

¹Associate Professor, School of Business, Auro University, Surat (Gujrat) India.

²Professor, Symbiosis Institute of Business Management, Hyderabad (Telangana) India.

ABSTRACT

Business Incubators is one of the topics in entrepreneurship that has attracted the attention of researchers since the last three few decades. Although the topic of Business Incubators is well explored, there is a research gap in the area of assessment of entrepreneurs by incubator managers and angel investors. The present study attempts to fill that gap by developing a model and instruments to make an assessment of aspiring entrepreneurs. The present study is conceptual in nature and uses primary and secondary data for exploring the assessment of entrepreneurs. The focus on analysis was on what factors matter for selection of aspiring entrepreneurs and identify. Personal Interviews were carried out with thirty angel investors in Telangana and Andhra Pradesh asking them as to how they would make an assessment of aspiring entrepreneurs who would approach them for funding. The present study focused on developing a holistic model that would focus both on individual and business level. The study makes contribution in three dimensions namely Scholarly, Business and Social. There are three major limitations for the stud. First, the study does not suggest methods to cross check the self- reported scores on the instruments. Second, the RCPGI Model is not empirical tested. Third, the RCPGI model works well only with start-ups operated by teams. The present study offers scope for further research and provides directions for future research.

Key Words: entrepreneurs, evaluation, incubation, angel, investors

I INTRODUCTION

During the last two decades the emergence of business incubators in different parts of the world is one of the most important developments that took place in the field of entrepreneurship. A business incubator is an organisation that supports, mentors, funds and collaborates with new business especially start-ups. Business Incubators across various locations even within the same country vary from each other based on their business philosophy, strategies and processes. According to *Wired* magazine, the concept of business incubator was developed by Joseph L Mancuso in 1959 when he started Batavia Industrial Centre in New York. Some of the major services offered by incubators include Advice on Market Research, Help for filing patents, providing functional and industry specific training, providing access to angel investors and venture capitalists and mentoring on business aspects. Business Incubators can be broadly classified into four types namely Traditional Incubators, Industry Specific Incubators, Stage Based Incubators and Technology Oriented Incubators.

Frenkel, Shafer and Miller (2005) explore the functions of technological incubators in the context of Israel. The study focuses on distinguishing between public technological incubators and private technological incubators. Frenkel, Shafer and Miller (2005) demonstrated that the role of public incubators is significant although the private incubators have entered into the domain of technological incubation. Chandra, He and Fealey (2007) conducted a study on business incubation in the geo context of china. The

study focuses on the financial services aspect of the business incubators. Mc Adam, Galbarith, McAdam and Humphreys (2006) conducted a review of prevailing studies pertaining to processes and networks. The study attempts to provide future directions for research. Lalkaka (2002) explored the potential for the growth of incubators and suggested that effectiveness and efficiency have to be achieved by incubators through continuous learning and sophisticated processes. Ndabeni(2008) explored the growth of SMEs in the context of South Africa as facilitated by small business incubators.

Lesakova (2012) examined the contribution of incubators in providing help to small and medium enterprises. Thobekani, Zinzi, Eugene & Welcom (2016) explored the topic of business incubators with the aim of suggesting strategies to enhance the effectiveness of business incubators. The study suggests that future researchers on two aspects pertaining to business incubation namely model of incubation and self sustainability. Semra F. Ascigil and Nace R. Magner (2009) conducted a study on incubators in the geo context of Turkey with a focus on social capital. The study uses data from 53 owners of businesses in five incubators, and provides evidence supporting the absence of relation between social capital and skill utilization.

Mahmood, Jamil and Yasir (2017) investigated the contribution of business incubators in the context of Pakistan. The study attempted to find whether business incubators have played a significant role in the Promotion of entrepreneurship in the context of Pakistan. The results of the study indicate that

business incubators are strong on consultancy and networking services but are weak to entrepreneurs whereas on training, infrastructure and marketing. AL-Mubarak, Busler and Al-Ajmei (2013) conducted a qualitative study on incubators with a focus on economy, policy, industry and culture. The study identified a few challenges faced by incubators, which if resolved can lead to development of entrepreneurship. Adlesic and Alenka (2012) conducted a study on social capital in the context of business incubators. The study was conducted in Slovenia with data collected from 125 incubators.

Mukhove Masutha and Christian M. Rogerson (2014) conducted a study in the context of South Africa with a focus on evolution, present development, institutional issues and geographical spread of incubators. Lange (2018) explores into the value perceived by entrepreneurs about incubators and accelerators. The results of the study indicate that the value perceived by entrepreneurs about incubators and accelerators emerges from two important factors namely knowledge and culture. Tsaplin and Pozdeeva (2017) conducted a study on strategies of incubators in three geo contexts namely USA, Germany and Russia. The study collected primary data from experts associated with start-ups. The results of the study indicate that USA provides a much stronger support for start-ups than that provided by Russia and Germany. Gozali, Masrom, Haron, and Teuku Yuri M. Zagloel (2015) explore the various factors contributing to the success of the incubators in public universities in Indonesia. The study developed a model for successful operation of e-business incubators.

Hidayat & Andri (2017) conducted a study on business incubators in the context of Indonesia with a focus on collaborative learning model. Wang, Cheng and Wang (2013) explored the impact of government policy on the research and development capabilities of university incubators.

Kurya Khan and Gustafsson, (2018) explored the contribution of incubators in enhancing the speed of internationalisation. Prevailing studies have focused on various areas of incubation and incubators including inception of incubators, regulatory issues, impact of incubators, and evolution of incubators. There are very few studies in the area of assessment of entrepreneurs by incubator managers and angel investors. Also these studies have not developed a model and instruments to make an assessment of aspiring entrepreneurs. There is a research gap in the area in the area of assessment of entrepreneurs by incubator managers and angel investors. The present study attempts to fill this research gap.

II METHODOLOGY

The present study is conceptual in nature and uses primary and secondary data for exploring the assessment of entrepreneurs. Data about the challenges faced by various incubators and angel investors was collected through online sources, journals and industry reports. The focus on analysis was on what factors matter for selection of aspiring entrepreneurs and identify. Personal Interviews were carried out with thirty angel investors in Telangana and Andhra Pradesh asking them as to how they would make an assessment of aspiring entrepreneurs who would approach them for funding. The present study focused on developing a holistic model that would focus both on individual and business level. The instruments used to measure entrepreneurial propensity, entrepreneurial intention and entrepreneurial potential have been taken from Ramana (forthcoming). The business level assessment using RCPGI model is adapted from Ramana (forthcoming). Also, discussions were carried out with forty entrepreneurs to identify the criteria to be considered for making an assessment of aspiring entrepreneurs with the aim of predicting their entrepreneurial success. The five criteria that were found to be common as mentioned by angel investors and entrepreneurs were closely related to Personality Traits, Business Specific Education, Prior Work Experience, Connections in the Market, Professional Affiliations/Memberships in Business Associations. However, keeping the average profile of aspiring entrepreneurs who seek the support of incubators and angel investors, personality and prior work experience were considered to be critical in developing a model for the holistic assessment.

III CONSTRUCTS AND THEORETICAL FRAMEWORK

The three important constructs that contribute to entrepreneurial success are entrepreneurial propensity, entrepreneurial intention and entrepreneurial potential. Entrepreneurial Propensity is the willingness of an individual(s) to start and operate one's own business (Ramana,2008). Entrepreneurial Intention is the combination of behavior and actions that are most likely to result in starting a new business. Entrepreneurial Potential is the ability of an individual(s) to start and operate one's own business (Ramana, forthcoming). A combination of these three constructs enhances the chances of success of an aspiring entrepreneur. The instruments for measuring entrepreneurial propensity, entrepreneurial potential, and entrepreneurial intention. **Exhibit 1, Exhibit 2 and Exhibit 3** respectively. To help individuals make a self-assessment of their suitability for a career in entrepreneurship, Entrepreneurial Propensity and

Entrepreneurial Potential can be measured and analysed through start-up matrix (Ramana, forthcoming). Apart from the assessment of aspiring entrepreneurs, a major challenge for incubators, angel investors and even aspiring entrepreneurs is making a

choice between two or among many equally attractive business ideas. The present study proposes a theoretical framework that comprises of a two-stage process. See **Figure 1** for the Start-up Assessment Model.

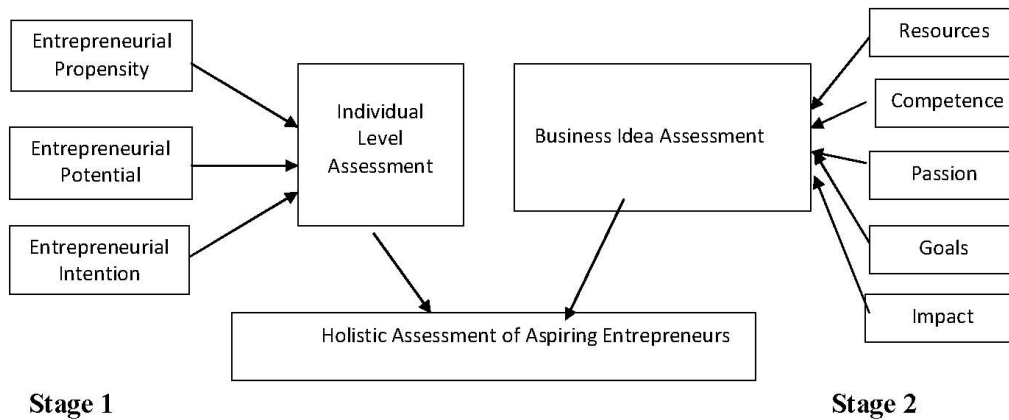


Fig. 1. Start-up Assessment Model Source: Adapted from Ramana (forthcoming)

RCPGI Model can be used to evaluate the suitability of ideas based on the five parameters namely resources, competence, passion, goals and impact. In RCPGI model, R stands for Resources, C stands for Competence, P stands for Passion, G stands for Goals and I stands for Impact. For each idea, RCPGI model can be used to evaluate your business idea. For each of the parameters, the following questions need to be asked for conducting the process of assessment.

(a) Resources

- (i) What are the resources including time, money, people, and connections in the market available to the entrepreneur(s)?
- (ii) On a scale of 1 to 5, how well does the resources available to the entrepreneur(s) match with the idea chosen for the start-up

(b) Competence

- (i) What is the competence of the entrepreneur(s) pursuing the business idea?
- (ii) On a scale of 1 to 5, How well does the competence of the entrepreneur(s) match with the business idea chosen for the start-up?

(c) Passion

- (i) What is (are) the passion(s) of the entrepreneur?
- (ii) On a scale of 1 to 5, how well does the passion(s) of the entrepreneur(s) match with the business idea chosen for the start-up?

(d) Goals

- (i) What is (are) the goal(s) of the entrepreneur(s)?
- (ii) On a scale of 1 to 5, how well does the goal(s) of the entrepreneur(s) match with the business idea chosen for the start-up?

(e) Impact

- (i) What is the impact created by the products and services offered by the start-up on the society?
- (ii) On a scale of 1-5, how well does this impact contribute to the overall wellbeing of the society?

Refer to **Exhibit 5** for the application of RCPGI Model to various business ideas. A comparison of scores of various business ideas, which appear to be equally attractive, will help incubator managers and angel investors in their funding decisions.

IV IMPLICATIONS/CONTRIBUTION OF THE STUDY

The study makes contribution in three dimensions namely Scholarly, Business and Social. Academicians and researchers can use the model and assessment approach to further explore into various aspects of incubation, especially matching funds with the potential start-ups who are mentored and supported by incubators. Practitioners, especially incubator managers and angle investors can enhance the effectiveness of their decision making in the context of screening entrepreneurs with the aim of funding their start-ups. Individuals aspiring to become entrepreneurs can learn about new venture creation, especially team building and practical approach through RCPGI Model and the constructs of Entrepreneurial Propensity, Entrepreneurial Intention and Entrepreneurial Potential. This in turn promotes the spirit of entrepreneurship, which contributes to the overall development of the communities, especially in which the start-ups carry out their operations. The present study is in

agreement with earlier studies emphasizing the importance of personality (Example: Bhide 2000 and Rauch, 2000) and is in contradiction with Gartner (1985) study that emphasized on the process of entrepreneurship and not personality of the entrepreneur.

V LIMITATIONS OF THE STUDY

The present study has at least three major limitations. First, the study does not suggest any method to cross check the self-reported scores on the instruments for Entrepreneurial Propensity, Entrepreneurial Intention and Entrepreneurial Potential. This is very important because aspiring entrepreneurs have varying levels of Entrepreneurial Propensity, Entrepreneurial Intention and Entrepreneurial Potential and that based incubator managers and angel investors have to make their funding decisions based on these criteria. There is a possibility that many aspiring entrepreneurs are not clear about their goals and the outcomes that they are seeking out their entrepreneurial career. Also many aspiring entrepreneurs may not be as serious about pursuing entrepreneurship as a career as they appear to be especially during entrepreneurial assessment. The open ended questions mentioned in **Exhibit 4** may not be comprehensive and that they may not be enough to crosscheck the self reported scores.

Second, the RCPGI Model has not been tested empirically and may not encompass all the important aspects for assessment of start-up entrepreneurs. Most importantly it is extremely difficult to apply RCPGI Model to the fullest extent because of the complexity involved in measuring passion and impact. Third, RCPGI Model does not work well with start-ups that are solo operations. Obviously a start-up with a team gets a higher overall rating on RCPGI model that a start-up that is run as a solo operation. The resources and competence of a team is generally higher than a single individual.

VI FUTURE DIRECTIONS FOR RESEARCH

The present study offers a lot of scope for further research. Future researchers can explore further the process of entrepreneurial assessment with a focus on predicting entrepreneurial success of aspiring entrepreneurs. Enhancing the efficiency and effectiveness of incubators is another area that can be further explored. Future researchers can also examine the specific training and education pertaining to start-ups.

Exhibit 1

Instrument for Entrepreneurial Propensity

Strongly agree 5, Agree 4, neither agree nor disagree 3, Disagree 2, strongly disagree 1

- (a) At some stage of an individual's career, starting and operating one's own business is the only option to get a sense of achievement.
- (b) There is as much risk and uncertainty associated with a job as with a business
- (c) The freedom, financial gain and career satisfaction obtained through operating one's own business can never be achieved through a job.
- (d) I don't like reporting to others
- (e) One of the ways you can have your own identity is through ownership of your own business.

Source: Adapted From Ramana (forthcoming)

Exhibit 2

Instrument for Entrepreneurial Potential

Strongly agree 5, Agree 4, neither agree nor disagree 3, Disagree 2, strongly disagree 1

- (i) I am highly energetic and can work for long hours
- (ii) I strongly believe in my capabilities
- (iii) I set Specific, Measurable, Acceptable, Realistic and Time based goals
- (iv) I have a long term view of my career
- (v) Achievement is a greater motivation for me than money
- (vi) I have a high level of determination
- (vii) I take criticism to my advantage
- (viii) I learn from failure and move on without losing hope
- (ix) I bounce back easily from failure
- (x) I seek personal responsibility
- (xi) I develop my own standards
- (xii) I compete with myself
- (xiii) I care for people and am deeply concerned about them
- (xiv) I have a high level of commitment
- (xv) I know how to use resources

Source: Adapted From Ramana (forthcoming)

Exhibit 3

Instrument for Entrepreneurial Intention

- (i) I have enough motivation to start and operate my own business
- (ii) I believe that I have a great idea that will assure feasibility
- (iii) I am passionate about my idea
- (iv) I wish to transform my idea into a successful business

- (v) I believe that my family, friends and support systems will provide me encouragement for starting and growing my business

Source: Adapted From Ramana (forthcoming)

Exhibit 4

Open-ended questions for Entrepreneurial Assessment

- (i) How do you react to a situation when you do not find enough Information on your business idea?

- (ii) How do you respond to a lucrative job offer with a salary much more than that of your expected profit from your new business for the first few years?
- (iii) How do you compare reporting in business (to customers, government officials and suppliers) versus reporting to bosses in a job? What is the difference?
- (iv) How do you tackle the different challenges in starting and operating your own business?
- (v) What will you do to overcome the negative effects of failure?

Source: Adapted From Ramana (forthcoming)

Exhibit 5

Idea Assessment using RCPGI model

S.No.	Idea	Score on Resources (On a scale of 1 to 5)	Score on Competence (On a scale of 1 to 5)	Score on Passion (On a scale of 1 to 5)	Score on Goals (On a scale of 1 to 5)	Score on Impact (On a scale of 1 to 5)	Total Score (On a scale of 1 to 5)
1.	Idea 1						
2.	Idea 2						
3.	Idea 3						
4.	Idea 4						
5.	Idea 5						

Source: Adapted from Ramana (forthcoming)

REFERENCES

- [1] Amnon Frenkel & Dani Shefer & Michal Miller (2005). Private vs. Public Technological Incubator Program - The Program from Israel, ERSA Conference Papers, European Regional Science Association.
- [2] Aruna Chandra, Wei He and Tim Fealey (2007). Business Incubators in China: A Financial Services Perspective, Asia Pacific Business Review, 2007, Volume 13, Issue 1, pp.79-94.
- [3] McAdam, M., Galbarith, B., McAdam, R., & Humphreys, P. (2006). Business Processes and Networks in University Incubators: A Review and Research Agendas'. Journal of Technology Analysis and Strategic Management, 18(5)(5), 451-472.
- [4] Rustam Lalkaka (2002). Technology business incubators to help build an innovation-based economy, Journal of Change Management, Volume 3, Issue 2, pp. 167-176.
- [5] Lindile L. Ndabeni (2008)The contribution of business incubators and technology stations to small enterprise development in South Africa, Development Southern Africa, Volume 25, Issue 3, pp.259-268.
- [6] Lesáková, Lubica. (2012). The Role of Business Incubators in Supporting the SME Start-up. Acta Polytechnica Hungarica. Volume 9, January issue , pp.85-95.
- [7] Thobekani Lose, Zixi Nxopo Eugene Maziriri and Welcome Madinga (2016). Navigating the role of business incubators: A review on the current literature on business incubation in South Africa, Acta Universitatis Danubius Oeconomica, Volume 12, issue 5, pp.130-140.
- [8] Ascigil Semra F. and MAGNER, Nace R.(2009). Business Incubators: Leveraging Skill Utilization through Social Capital. Journal of SmallBusiness Strategy, Volume 20, Issue 1, pp. 19-34.
- [9] Mahmood Nasir, Jamil Farhan, Munir Hina, Yasir Nosheena, Jianfeng Cai (2017). Advanced Science Letters, Volume 23, Issue 9, pp. 8479-8483.

- [10] Hanadi Mubarak AL-Mubarak, Michael Busler and Rashed Al-Ajmei (2013). Incubators as Tools for Economic Growth and Technology Transfer in Developed Countries, *European Journal of Business and Management*, Volume 5, Issue 16, pp.113-119.
- [11] Renata Valentina Adlesic and Alenka Slavek (2012). Social Capital and Business Incubators Performance: Testing the Structural Model, *Economic and Business Review*, Volume 14, Issue 3, pp. 201-222.
- [12] Masutha, M. and Rogerson, C.M., (2014). Small enterprise development in South Africa: The role of business incubators. In: Rogerson, C.M. and Szymańska, D. editors, *Bulletin of Geography. Socio-economic Series*, No. 26, Toruń: Nicolaus Copernicus University, pp. 141–155.
- [13] Lange, Ginger S.(2018), "The Value of Business Incubators and Accelerators from the Entrepreneurs Perspective." Dissertation, Georgia State University.
- [14] Evgeny Tsaplin and Yulia Pozdeeva(2017). International Strategies of Business Incubation: The USA, Germany and Russia, *International Journal of Innovation*, Volume 5, Issue 1, pp. 32-45.
- [15] Lina Gozali, Maslin Masrom, Habibah Norehan Haron, Teuku Yuri M. Zagloel (2015). The Asia Journal of Technology Management, Volume 8, Issue 2, pp.118-131.
- [16] Eschholz, V., Silva, M., Rampasso, I., Anholon, R. and Cooper Ordonez, R. (2018) "Primary criteria used by business incubators for the selection of new enterprises: analysis of selection notices", *Brazilian Journal of Operations & Production Management*, 15(2), pp. 224-231.
- [17] Nila Krisnawati Hidayati & Alfi Andri (2017). Crafting the effective learning model for higher education,: An investigation from the business incubator in three universities in Indonesia, *Journal of Management and Strategy*, Volume 8, Issue 5, pp.18-29.
- [18] Wen-Bo Wang1, Ying-Cheng Hung and Chu-Ching Wang (2013). University-Industry Business Incubators in Taiwan, *Open Journal of Business and Management*, Volume 1, April Issue, pp.1-8.
- [19] Yuchen Gao, Yimei Hu, (2017) "The upgrade to hybrid incubators in China: a case study of Tuspark incubator", *Journal of Science and Technology Policy Management*, Volume 8, Issue 3, pp.331-351.
- [20] Lalkaka, Rustam. (2002). Technology Business Incubators to Help Build an Innovation-Based Economy. *Journal of Change Management*. Volume 3, Issue 2, pp. 167-176.
- [21] Nazeya Kuryan, Mohmmad Saud Khan, Veronika Gustafsson (2018). Born Globals and business incubators: A Case Analysis, *International Journal of Organisational Analysis*, Volume 26, Issue 3, pp.490-517.