

Entrepreneurial Ecosystem: Case Study on the Influence of Environmental Factors on Entrepreneurial Success

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Abstract

Are entrepreneurs born or made? Until 1985, research was focused more on personality traits and characteristics as it was generally believed that psychological factors, intrinsic to humans, had a significant influence on the individual's decision to become an entrepreneur. Subsequently, increasing evidence surfaced to suggest that environmental factors also played a contributing role in the decision making process to establish startup ventures. This paper attempts to develop a conceptual framework of the ecosystem which would motivate individuals to start new businesses. A theoretical framework has been developed on the basis of literature review and discussions with entrepreneurs. The qualitative case was developed through in-depth interviews and a pilot study was used to test the ecosystem factors. Eight factors, comprising the ecosystem, were found to influence the decision of an individual to choose the path of entrepreneurship - Moral, Financial, Technology, Market, Social, Network, Government and Environmental Support.

Keywords: Ecosystem – Entrepreneurship – Environmental factors - Environmental support

1. Introduction

The trend of entrepreneurs appreciating the significance of environmental factors gained ground towards the later part of the last century. During a function for the award winners of the “Northern California Entrepreneurs of the Year”, the first winner Margot Fraser, in her speech, acknowledged that there was a combination of external factors responsible for her success. She firmly believed that support from her family and her German supplier were the main factors behind her accomplishments (Byers, Kist and Sutton, 1997). This shows that there is eco system around the entrepreneur that facilitates the entrepreneurship.

The inspiration for this paper stemmed from the extensive work done by authors in compiling a book detailing 101 success stories of entrepreneurs in Tamilnadu (CII, 2008). The objective of this exercise was two-fold. The first was to highlight the enabling institutional environment, and the entrepreneurial passion and potential in Tamilnadu. Second, the book was aimed at inspiring the youth of Tamilnadu to expand their business horizons, tread the path less traveled and to participate in the journey of entrepreneurship. The cross section of this group of entrepreneurs is truly diverse, in terms of age, back ground, geographical spread and business sectors. The book reveals a kaleidoscope of entrepreneurial experiences. Some are the stories of struggles against odds. Others are strategic masterpieces. Some highlight the virtues of diligence and persistence. One common theme unites the group – the spirit of innovation and inspiration. The phenomenal impact of this spirit on social and economic landscape can never be overstated. Therefore it is easy to imagine the resolve of the researchers to do whatever it takes to preserve, nourish and grow this spark of entrepreneurship. This necessitates a holistic approach, to identify all the contributory factors that enable entrepreneurial success.

It is not enough to ask what successful people are like but one must also understand their environment. Gladwell (2008) highlighted this approach linking entrepreneurial success also to environment rather than personal attributes alone. In the words of Gladwell, *‘Biologists often talk about the ‘ecology’ of an organism: the tallest Oak in the forest is the tallest not just because it grew from the hardest Acorn; it is the tallest also because no other trees blocked its sunlight, The soil around it was deep and rich, no rabbit chewed through its Bark as a sapling, and no lumberjack cut it down before it matured’*

Mahesh Danannavar, a serial entrepreneur started his first venture Corporate Connect, a Business Process Outsourcing services company and made it a big success. His next venture, a wealth management firm, proved to be a massive flop, by his own admission. Undaunted by failure, he created his third venture Educampus, which turned out to be highly successful (Economic Times, 2010). This incidence indicates the clear possibility that there are other social factors that determine a

venture success apart from the personality traits of the entrepreneur himself.

These raises issues like: does process instead of personality play dominant role in entrepreneurship? Can personality traits predict an entrepreneur's success? The interviews with entrepreneurs revealed that external factors and support are essential to start and succeed. Therefore identifying the factors that makeup an entrepreneurial ecosystem is a very important first step.

2. Literature Review

The literature review was used to identify the factors that make up the ecosystem model and development of research design.

Personal qualities like intelligence, lifestyle, personality traits and talents of entrepreneurs were extensively researched by McClelland (1961), Joyce and Gomathi (2010). Gartner (1985), studied the environment surrounding the new venture and the process, in addition to individual characteristics of entrepreneurs. David and Kerry (2003) questioned the role of personality traits in entrepreneurial psychology.

Prahalad (2005) provided a definition for entrepreneurial ecosystem, according to which the ecosystem enables the individuals, enterprise and the society to combine effectively for the cause of generating economic wealth and prosperity. The remarkable attribute of an ecosystem is to blend together the stakeholders who are often driven by different objectives and expectations.

Entrepreneurial ecosystems can not only act as catalysts in speeding up the economic progress of stable economies but also can act as the prime mover when it comes to rescuing economies that have faced a sharp decline. The cultural impact on developing entrepreneurial ecosystems cannot be ignored. There is a need for a model which acknowledges the individual without discounting on the social factors that are beyond the control of the individual. A single framework is necessitated because the individual's personality and behavior, political and legal system, social mores are intertwined with the national culture from which they originate (Lee and Peterson 2000)

Van De Ven (2002) described in detail the industrial infrastructure that facilitates and constrains entrepreneurship. Such infrastructure includes institutional arrangements to regulate and standardize a new technology, public resource endowments of basic scientific knowledge, financing mechanisms, and a pool of competent labor, as well as proprietary research and development, manufacturing, marketing, and distribution functions.

While exploring the applicability of the entrepreneurial ecosystems in creating a 'sustainable valley', Cohen (2005) elaborates on the nine principal factors that are the key components. They are Informal Network, Formal Network, University, Government, Professional and Support Services, Capital Services and Talent Pool.

Clusters have a positive effect on venture creation because of their unique character, the co-existence of competition and cooperation (Romero and Montoro 2008). In clusters, a balance is reached between cooperation and competition which becomes evident in the higher productivity of the companies because of their increased access to inputs, information, technology and institutions; or in greater innovation and venture creation. The cluster provides incentives for the entry of new companies or start-ups.

Bernardez (2009) showed how entrepreneurial ecosystems have created significant economic upturn in Argentina, United States, Israel, India, China and Mexico in spite of adverse economic and social conditions. He demonstrated how each entrepreneurial ecosystem grew around a specific competency such as tourism, gastronomy and hospitality for Palermo, Argentina; software and high-tech for Silicon Valley; finances for Wall Street and London; manufacturing for China; engineering and business processes outsourcing for India.

Isenberg (2010) proposed a model for ecosystem consisting of thirteen factors. Leadership, Government, Culture, Success stories, Human Capital, Financial Capital, Entrepreneurship Organizations, Education, Infrastructure, Economic Clusters, Networks, Support Services, early Customers. The stake holders include Government, Educational Institutions, Financial Institutions, Media and Network. In fact Isenberg has outlined a total of thirteen stakeholders, the pillars on which the edifice of entrepreneurship stands. Isenberg's study encompasses several countries across the globe, from Puerto Rico to China, from Iceland to India, firmly establishing the idea of entrepreneurial ecosystem. In what can be termed as an economic miracle, the per capita GDP of Rwanda has almost quadrupled since 1995 notwithstanding the fact that its population and institutions were decimated by the genocide in the nineties. The transformation was not achieved by massive government or foreign aids but by their own people. The entrepreneurial efforts of small time farmers supplying the world's largest consumers with coffee and tea have made this economic revolution possible.

The Entrepreneurial Revolution, according to Isenberg, is not due to the heroics of one person or even one idea but the collective vision of a group of stake holders committed to the promotion of entrepreneurship, creating an ecosystem to actualize their vision.

To summarize, the literature review exercise provided enough evidence on the fact that entrepreneurs do require the external environmental factors to be favourable for success.

3. Qualitative Research

Kidder (1982) used the qualitative case study research method to provide description while Pinfield ((1986) used the research to test the theory. For this study case method is used for descriptive and testing purpose. Eisenhardt (1989) combined archives, interviews, questionnaires and observations. In the present study in depth interviews are used for data collection through case study,

In qualitative research selection of cases, collection of data and research question are important. For this study, two cases were selected and in-depth interviews were conducted and the results were compiled. The research question was what the factors are in the eco system which influences people to start and succeed in journey of entrepreneurship.

Experience can add substantial value in ones learning process. The crucial aspect of any research is when the theories are experimented upon and the results are used to fine-tune the theory itself. The two interviewees have gone through a complete cycle of entrepreneurship and they have succeeded in achieving the most important part of entrepreneurship, converting a business idea into a business success. The observations brought out provide valuable insight in to the impact of ecosystem factors that motivates/constraints the entrepreneur. Further it also throws light on the lacuna in the current system, for policy makers to take note.

Case 1

Started with just eighteen employees in 1987, Landmark is among the top brands in its space today with 1100 strong team and growing. The primary focus of its founder, Hemu Ramaiah was books, today after two decades of efforts; Landmark is multi-product store selling books, music, toys, furnishing etc across the country. The venture is a true success in every sense of the term, employee growth, revenues, and range of products, geographical spread and brand value.

Ramaiah started working in a chain of hotel bookstores after her college and after a decade of experience in staring concept book stores, she decided to venture out on her own. She did not find the financial help from the regular banks as they did not finance retail then. The initial funding came from her brother. Ramaiah not only received financial help from her sibling, but also the moral support from her entire family. This she feels is very important motivating factor throughout an entrepreneur's journey. She feels the crucial aspect in the initial stages was that Landmark had a passionate team that believed in the idea. The biggest challenge the venture faced was from the lack of a distributor network. There was a monopoly that made it very difficult to get the stock they wanted. In response they started their own distribution arm. The foreign exchange crisis of the early nineties caused more problems.

According to Ramaiah, *'Imports became impossible unless stock was paid for in advance. We borrowed money and bought up all the stock from all the distribution houses in the country.'*

From the very beginning Landmark was a company that added value to customers through the use of technology. The book store was computerized from the first day, the stock was online and bar coded. Ramaiah explained that the computer database ensured that the staff could inform customers whether they had stock of a particular book at any point in time. This proved to be a huge advantage, as customers need not waste time in searching for a book.

This was path breaking customer service in an era where most book shops relayed on manual competencies achieved through experience, with all the human errors and consequent delays thrown in. But this was easier said than achieved. In a population which is said to be the IT talent pool of the world, Ramaiah could not find the technology solution she wanted. Software products were not readily available in the local market nor were people willing to create custom software. It took her a lot of time and effort to get a company to develop the software, which set the store apart in the later days. Ramaiah also felt the lack of support from government agencies, as she had to face several obstacles and delays. Landmark did not receive any visibility through any form of media and the brand was purely build on the strength of loyal customers spreading their positive experience through word of mouth.

To summarize the observations of the interview, apart from several crucial positive personality traits that Ramaiah possessed that helped her to convert her idea into an entrepreneurial success story, there were factors in the ecosystem that motivated her and some were stumbling blocks. On the positive side, her family provided vital support throughout the journey; most

importantly, financial support came from a sibling when conventional financial institutions did not offer assistance. There was clearly a need for support from the technology sector which was lacking. Perhaps the biggest strength was the support offered by hundreds of loyal customers which eventually proved to be the bedrock on which Landmark built a path breaking new venture.

Case 2

In times when the institution of arranged marriages seems to fade away, possibly due to the influence of foreign ideologies and modern communication technology, Murugavel Janakiraman turned the whole idea on its head. By launching Bharatmatrimony.com he used internet technology to facilitate pre-fixed marriages. This entrepreneur proved that a good business model can effectively promote traditional transactions over the internet. Murugavel started with a portal in the US primarily to help the non-resident Indian community stay in touch with hometown traditions. He later started an exclusive matrimonial website, in 1997 after seeing his audience using the matrimonial segment of his first website extensively. Today there are several regional portals like hindimatrimony.com and he owns the largest matrimony portal in India with 10 million registered users.

Murugavel started his career as software professional after completing his Masters' program in computer applications. In the course of his employment in the United States of America, he wanted to make a mark in the Internet field and started a website to help Indian communities connect to their hometown. He clearly perceived a market need for an exclusive matrimony portal. His parents did not participate in any of his entrepreneurial decision-making but believed in Murugavel's capabilities and provided silent support. He never got any financial assistance for his startup idea from outside and invested his own funds. Murugavel's initial venture was a one-man show, with him doing everything from designing the website to marketing. Following the internet bubble burst, he returned to India and set his sights on his web based project. Due to the downward trend in the IT industry, he could rope in some of the best talent. With a high quality resource team, the package of services was offered to customers in a professional manner. To his credit, Murugavel adopted a paid model for the offered services and this helped the economic viability of the project and brought in rapid growth in terms of number of customers and revenues. In effect, the project proved to be a financial success when several internet businesses wound up due to the absence of a financially viable model. Bharatmatrimony could successfully raise funds through the venture capital route, which catapulted the business into a high growth trajectory. Institutions such as The Indus Entrepreneurs (TiE) and Confederation of Indian Industry provided the key support in terms of networking and providing platforms for interfacing the industry players and institutions with the potential entrepreneurs. Murugavel says the much needed government participation was completely absent. In his view, the government bodies failed to understand the magnitude and significance of the Internet business segments and provided little support, which is exactly the opposite in advanced countries such as the United States of America. As he was struggling to establish his venture, Murugavel often felt the need for a greater level of support from the media, which is required for the entrepreneurs to succeed.

To summarize the observations of the interview, the main trigger for Murugavel to start the venture was a clearly perceived need in the market and ready availability of technical know-how. Technology was not a challenge, as the founder himself had the necessary skills to kick start his venture, later enhanced by other information technology professionals with the appropriate skill sets. Major institutional investors did provide funding, but, only in the later stage after the venture was formed and started growing exponentially. Murugavel did not get much network support from institutions. Also, support from government and media was missing.

The outcome of the personal interviews with the two entrepreneurs is presented in Table 1.

4. Ecosystem Model

One of the key points that emerged out of this research is that there is a need for a model of entrepreneurship that captures holistically all the factors that contribute towards entrepreneurship success or failure. Although one may readily accept the fact that the components by themselves are obvious factors contributing to making an entrepreneurial effort a success or otherwise, the study of their influence in a single framework facilitates a systematic understanding of the factors that facilitate and constrain entrepreneurship.

A conceptual Framework of Entrepreneurial Ecosystem is depicted in Fig.1

The eco system model has been developed from a framework of eight systems of support and several factors contributing to the structure of a single support system.

- **Moral support** consists of the role played by the entrepreneur's father, mother, sibling, spouse, In-laws, relatives,

friends and society at large.

- **Financial support** comes from the immediate family, Banks, Venture Capitalists, friends, relatives, in-laws, educational institutions, angel investors, and small investors from the capital market, foreign financial institutions, government bodies and credit from suppliers.
- **Network support** refers to organizations like The Indus Entrepreneurs (TiE), National Entrepreneurship Network (NEN), and Confederation of Indian Industry (CII). It includes specific industry associations, alumni associations, online social networking sites like Facebook, LinkedIn, friends, network of suppliers and distributors.
- **Government support** emanates from clusters like Small Industries Development Corporation (SIDCO), educational programs from Micro Small and Medium Enterprises (MSME), incentives, incubation centers, infrastructure facilities, awards and legal procedures.
- **Technology support** is provided by government funded incubation centers, new technology developed in educational institutions, imported technology know-how, talent pool available locally.
- **Market support** refers to the opportunities in the market, reports from government and trade associations, support of suppliers, loyal customers. Acceptance of the product on consignment by the intermediaries, trade shows and exhibitions.
- **Social support** in the form of awards from trade associations, acceptance of venture failure, and exposure by media. Social respect bestowed on the entrepreneur also counts as social support.
- **Environmental support** includes availability of natural resources and climatic conditions.

5. Pilot Study

On the basis of the evolved framework, an instrument with 58 statements representing the eight factors was developed for analysis. Likert Scale was used to measure the responses of potential entrepreneurs. The reason for this analysis was to establish the need for the support systems required by the potential entrepreneurs. If such a need is clearly established, then the requisite ecosystem can be created which will prove to be conducive for the startup ventures. The questionnaire was subjected to external validation by experts. The pilot study with 30 potential entrepreneurs as respondents was carried out. The selected respondents were planning to start new business ventures and were participating in an entrepreneurial development programme organized by Entrepreneurial Development Institute of India, Tamilnadu. Cronbach's alpha results showed 0.93 percent reliability. Through Confirmatory factor analysis, all items of the questionnaire were validated.

6. Conclusion

Based on the qualitative research findings and the pilot study of the data collected, it is concluded that there is a significant influence of the ecosystem factors on entrepreneurship start up and success.

There were some contrasting evidences in the direct interviews and the results of pilot study. It was found that the network support factor (from NEN, TiE etc) which did not emerge as a key influencing factor in interviews, was found to be significant in the pilot study. Likewise, Government support in the form of financial assistance, also emerged as a significant factor in the pilot study although it did not emerge significantly in the in-depth interviews. Market support from customers and distributors was found to be significant in both the sources. Moral support was another factor that was found to be significant in pilot study as well as the feedback from interviews. Further, moral support does not have any place in the model proposed by Isenberg. (Economic Times, Corporate Dossier, 2010)

References

- Bernardez, Mariano (2009) *The power of entrepreneurial ecosystems-extracting booms from busts*
www.expert2business.com/itson/Articles/Ecosystems.pdf
- Brockhaus, R.H., (1980), Psychological and environmental factors which distinguish the successful from the unsuccessful entrepreneur: a longitudinal study. *Proceedings of the Academy of Management*, 368 - 372
- Byers, T, Kist, H and, Sutton, R (1997). Characteristics of the Entrepreneur: Social Creatures, Not Solo Heroes. Prepared for *The Handbook of Technology Management*. Dorf, C.R.(Editor). CRC Press LLC, Boca Raton, FL, 33431. (Online) Available:

<http://www.stanford.edu/class/e140/e140a/content/Characteristics.html>

CII - Confederation of Indian Industries, Tamilnadu, (2008) Star Trek – The fascinating journey of entrepreneurship in Tamilnadu , 101 Entrepreneurs, CII Tamilnadu

Cohen. B, (2005) Sustainable valley Entrepreneurial Ecosystems Business Strategy and the Environment. (In press). Published online in Wiley InterScience

David j. Llewellyn and Kerry M. Wilson (2003), The controversial role of personality traits in entrepreneurial psychology, Education + Training, Volume 45(6), pp. 341 - 345

Economic Times, High Flier (Oct 12, 2010) pp 14

Economic Times, Corporate Dossier (Oct 1, 2010) pp 2

Eisenhardt K M, (1989), Building theories from case study research, The Academy of Management Review, 14 (4), 352 – 530

Gartner, William B., (1985) A conceptual framework for describing the phenomenon of new venture creating, The Academy of Management Review, Volume 10 (4), October 1985, pp. 696 - 706

Gladwell. (2008). Outliers: The Story of Success Little, Brown and Company

Isenberg.D. (2010). The Big Idea: How to Start an Entrepreneurial Revolution. Harvard Business Review, Vol.88 (6), pp 41-50, June 2010

Joyce, N and Gomathi S. (2010), The influence of personality traits and demographic factors on social entrepreneurship start up intention, Journal of Business Ethics, Volume 95 (2), 259 - 282

Kidder T,(1982), Soul of a new machine, New York: Avon

Lee, Sang, M , Peterson, Suzanne J. (2000). Culture, Entrepreneurial orientation and global competitiveness. Journal of World Business, 35 (4), p.401, January 2000

McClelland (1961), The Achieving Society, Princeton, NJ

Pinfield L., (1986), A field evaluation of perspectives on organizational decision making, Administrative Science Quarterly, 31, 365 -388

Prahalad, C. K. 2005. The fortune at the bottom of the pyramid: eradicating poverty through profits. Saddle River, NJ: Wharton School Publishing. p65

Romero, A.M , Ángeles Montoro (2008) How clusters can encourage entrepreneurship:Reasons and advantages International Entrepreneurship and Management Journal, Volume 4 (3) :315–329

Van De Ven (2002). The development of an infrastructure for entrepreneurship, available at

<http://www.sciencedirect.com/science/article/B6VDH-45P0CPF-20/2/f4da073374b223d3a326b05f94e0c94f>

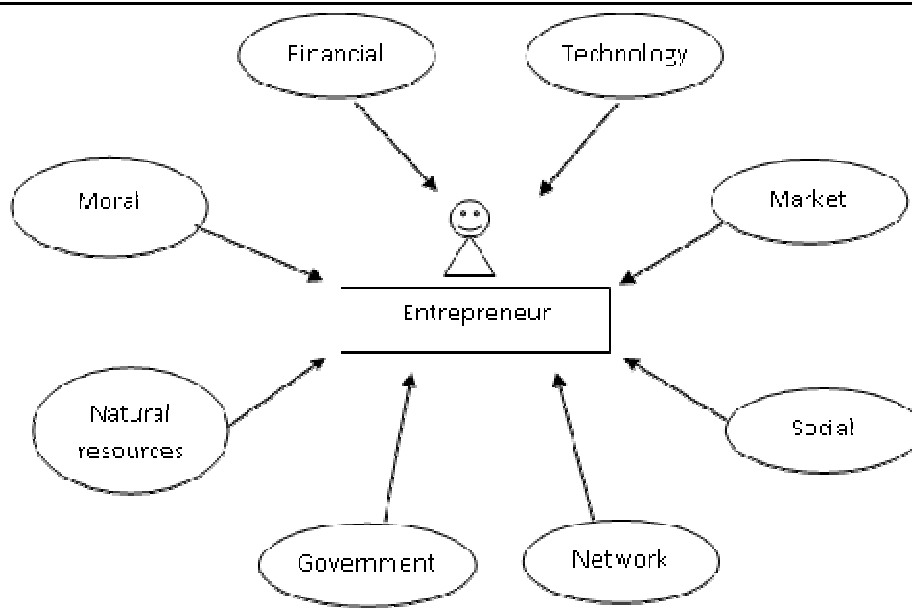


Figure 1. A Conceptual Framework of Entrepreneurial Ecosystem

Table 1 Findings of the in-depth interviews

Type of Support	Case 1 Hemu	Case 2 Murugavel	Findings
Moral	Parents, spouse and sibling.	Not significantly seen	Case 1 there was a positive influence and in case 2 it was neutral.
Financial	Initial funding -Sibling, parents	Initial funding - Self	In case 2 VC funding came into play at a later stage.
Technology	Significant role	Significant role	In case 1 it was found that trained manpower was not easily available locally.
Market	Significant role	Significant role	In both case 1 & 2 the business was customer driven. In case 1 initial resistance from suppliers.
Social	No Significant role	No Significant role	Media has not done enough but can play a positive role.
Network	Customer network	Social network, Association like TiE played a Significant role	In case 1 customers played the role of network support and social networking sites were not available. In case 2 associations like TiE helped in providing exposure.
Government	No Significant role	No Significant role	In case 1 government was a deterrent factor. In case 2 government was indifferent.
Natural resources	No Significant role	No Significant role	

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