Entrepreneurship and Technical approach: Success stories of Technopreneurs

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ABSTRACT
Entrepreneurship is a cognitive task that involves both psychological as well as emotional elements. To begin as an entrepreneur is the desire of many but when it comes to bring this thought to action, only few of us come forward to it. Today, due to advancement in field of technology we are equipped with all the resources, smart techniques required to develop any type of framework for the business. Also, the government support for entrepreneurs is enhancing each day to fulfill every minute necessity and inculcate a smooth and efficient system for entrepreneurship. Several researches have shown results of the changing environment of entrepreneurship , the role of factors etc., which the government has taken into account and eliminated the evils probing a blockage in the development of entrepreneurship.

I.   INTRODUCTION

Traditionally, entrepreneurs are not seen as people of high esteem by philosophers of science. Entrepreneurs were not at all regarded as enhancing well- being of the society they live in. Earning profit by an entrepreneur was perceived as robbery ever since Aristotle had introduced the idea of economic activity as a "Zero- sum game" which means that one man's gain is another man's loss (Praag, 1999).

"Entrepreneurship is a vibrant process of visualization, transformation and creation. A lot of positive energy, dedication and passion are required towards the creation and implementation of creative and innovative ideas and solutions. The main ingredients include the willingness to take calculative risks specially in terms of point in time, impartiality or profession; the capability to put together an effective project team; the special skills required to organize needed resources; and of course very importantly a fundamental skill of building concrete business plan; and last but not the least, the vision to identify opportunity where others see confusion, challenge, and uncertainty" (Kuratko & Hodgetts, 2004).

Only creating of employment opprotunity is not entrepreneurship, it goes beyond that. Even though that is definitely a significant aspect, it's not the whole representation. The uniqueness of looking for opportunities, taking risks beyond protection, and having the firmness to push an idea through to authenticity merge into a speical viewpoint that pervades entrepreneurs (Kuratko, 2003).

Entrepreneurship in India

Entrepreneurship has been "rooted in the Indian brains and is an ingredient of its belief" (Gopalakrishnan, 2007). "India has been an entrepreneurial civilization…we had the entrepreneurial skill but concealed it for too extensive …and now it is flourishing" (Srinivasan, 2007). The entrepreneurial character is a continuing feature of India's history, mainly noticeable in a number of societies occupied primarily in trading (Tripathy, 1984). Additionally, there is also a rich practice in the Indian diaspora, across the past number of years, whose strength of enterprise is legion (Markovits, 2000).

Entrepreneurship in India happens in 'far more surrounding and far achievement ways than in urbanized nations', and might consequently be far more multifaceted, 'for there is lot more that requires to be done' (Khanna, 2007). Observers nowadays rejoice the ever-present Indian attitude of "Juggad" (a Hindi language word approximately interpreted as 'creative improvisation') (Verma, 2007; Rai, 2007).

The salience of entrepreneurship in India has strengthened in currenttimes, mainly with the increase in knowledge-intensive services. Freshentrepreneurs who do not belong to conventional business societyhave begun to come forward in huge numbers. Entrepreneurship has grownquickly, obviously so, generating wealth and

creatingjob opportunities,particularly in the last twenty years. Vital efforts commenced aftereconomic liberalization-together with methodical efforts to reducethe 'licence raj', superior efforts to make finance more easily availableto entrepreneurs and other organizational help and support to 'techno-preneurs' have helped progress the climate for Entrepreneurship(Goel, Vohra, Zhang, & Arora).

Statistics on the expansion of India's technology determined entrepreneurshipare significant. In a latest study by the Deloitte group, India ranks 2[nd]globally as home to the best increasing technology firms. 82 Indiancompanies come into the Deloitte Technology Fast 500 list of Asia-Pacific Companies in 2007 and the companies that have made it tothe Technology Fast 50 of India have an average three-year revenue growth of 489%(The Economic Times, 2007).

India enjoys massive prospective for the formation of capital through knowledge. Entrepreneurship and Innovation are the key drivers for producing wealth from knowledge,

maintained mainly by the availability of skilled human resources, access to finance and the ability of the government to create a facilitating environment(National Knowledge Commission, 2008).

4th Economic Census(1998) presents the entrepreneurship 'pyramid' in India (in terms of sectors and numbers of people engaged) is made up of the following:

Level1: Agriculture and other activities: crop production, plantation, forestry, livestock, fishing, mining and quarrying.
Level 2: Trading services: Wholesale and retail trade; hotels and restaurants.
Level 3: Old economy or traditional sectors: manufacturing, electricity, gas and water supply.
Level 4: Emerging sectors (including knowledge intensive sectors): IT, finance, insurance and business services, construction, community, social and personal services, supply chain, transport-storage- communications etc.
Figure1: Entrepreneur Pyramid
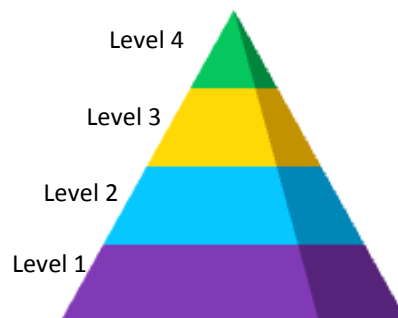
Source: National Knowledge Commission (2008)

Technology and engineering education in India

In the recent past there has been a remarkable increase in the number of engineering colleges in India.

With the increase in number of engineering college there is a wide choice among the students to study in the city of their choice which was not possible otherwise. There was a time when engineering colleges were confined to some state capitals and big towns only. With the increase of engineering colleges, technical education has reached the doorsteps of Indian youth. Lack of technical education was one of the disadvantages the youths have to start their own business.Technology and engineering institutions are creating technical graduates in huge number than they can originally manage to find good job for or industry can absorb

this talent. Now a days, in India several self financed private engineering colleges and self finance universities producing the majority of technical graduates. The growth is unique with the privatization in higher education system (Sundar & Madhavan, 2013).

Technology and engineering students

Questionably, the most commonly accepted factor supporting entrepreneurship is family background, but this is characteristically a factor that cannot be prejudiced by education. Another superior approach is based on the recognition of entrepreneurial suitability and expertise (Gartner, 1988, Carter et al., 1995, Loraine et al. 1998), however this move does not make it likely to forecast the occasion of the

phenomenon or to sense entrepreneurs. Many authors stress the role to be performed by the educational system in entrepreneurial character promotion earlier to the intention to set up a company (Albert and Marion 1997, Fayolle, 2000).

Case studies: success stories of engineering entrepreneurs

Table 4: Select success stories

S.No.	Name, designation and enterprise name	Graduation degree/ trade and college	Enterprise details
1.	Phanindra Sama; CEO and Founder, redBus.in	Electrical Engineering from BITS Pilani	Started in 2005, today redBus is the largest online bus ticketing company in India. It has the largest network of bus operators. It offers over 4500 routes across the Indian map. Customers can book tickets as per their convenience – be it the phone, home delivery, physical outlets or even SMS.
2.	Raghu Khanna; Founder & CEO, CASHurDRIVE	B. Tech. from IIT Guwahati	CASHurDRIVE is an innovative 'On-Vehicle' advertising concept which happens to be the first of its kind in India. It is the link between vehicle owners who are willing to display commercial campaigns on their private/ commercial vehicles and the corporate world that is up for such innovative outdoor advertising.
3.	Mukesh Bansal; Founder & CEO, Myntra.com	B. Tech. from IIT Kanpur	Founded in 2007, Myntra is India's largest on demand personalization brand for products, gifts and cool merchandise. Myntra enables individuals and corporate to create their own products by adding content of their choice.
4.	Paras Chopra; Founder, Wingify	Biotechnology from Delhi College of Engineering	Wingify, a startup that develops intelligent, affordable and simple-to-use tools for helping people make more money from their websites and eCommerce stores.
5.	SujalKarampuri; CEO & Founder, Sloka Telecom	Electronics and Communications Engineering from NIT Warangal	Sloka telecom is a Radio Access Network (RAN) solution provider. It is a pioneer in designing, developing and selling compact and cost-effective Base Stations and Consumer Premise Equipment (CPE) for new standards-WiMAX and WiFi.
6.	Vivek Ravisankar and Harishankaran K; Co-Founders, Interview Street	B. Tech. Form NIT, Tiruchirapalli	Interview Street began as a college project at NIT, Tiruchirapalli. The founders set up a forum for mock interviews with college students during placement season, helping to filter out promising candidates from the larger pool.
7.	Bhavish Aggarwal & Ankit Bhati; Co-Founders, Ola Cabs	Bhavish: BTech in Computer Science and Engineering from IIT Bombay; Ankit:	Olacabs.com is a portal for all types of cabs and car rentals. One can view customer ratings of that car operator and then book it right there on the

S.No.	Name, designation and enterprise name	Graduation degree/ trade and college	Enterprise details
		BTech in Mechanical Engineering from IIT Bombay.	website.
8.	Anand Babu Periasamy; CTO and Co-founder, Gluster	B. Tech. from Annamalai University	Gluster was a software company that provided an open source platform for scale-out Public and Private Cloud Storage. Gluster was funded by Nexus Venture Partners and Index Ventures. Gluster was acquired by Red Hat on October 7, 2011.
9.	Vijay Shekhar Sharma; Founder, One97 Communications	B. Tech. from Delhi College of Engineering	One97 is a pioneer in mobile internet services for consumers in India. It has the widest and largest deployment of telecom application cloud platform.
10.	Deepinder Goyal &Pankaj Chaddah; Co-Founders, Zomato	Deepinder: Integrated Masters in Mathematics and Computing from IIT Delhi; Pankaj: Mechanical Engineering from IIT Delhi.	Zomato.com is all about food and where you can find the best of it. From the nukkadwaladhaba to the swankiest restaurants in your town, they provide you with all the info you may ever need: menus, pictures, maps, reviews, ratings and contacts.
11.	Aneesh Reddy, Krishna Mehra & Ajay Modani; Co-Founders, Capillary Technologies	B. Tech. From IIT Kharagpur (All three)	Capillary Technologies provides mobile-based customer acquisition, tracking, and loyalty business. They have unique SaaS-based solution that uses the mobile phone as a means of signing up customers for a loyalty program, and then do the relevant analytics and actionable and RoI-oriented campaigns.
12.	Deepak Ravindran; CEO and Founder, Innoz	Dropped out of Kunnur University, LBS College of Engineering, Kerala	Innoz is a leading mobile company based in Bangalore which was named a Red Herring Global 100 and Nasscom Top 8 Emerging Product companies for 2010.
13.	PallavNadhani; CEO and Founder, FusionCharts	MS in computer science and graduated from the University of Edinburgh, Scotland	The enterprise, a leading provider of visual web applications and solutions, specialises in making data visualisation components like charts, gauges and maps, and caters to customers worldwide.
14.	Avlesh Singh and Ankit Utreja; Co-founders, WebEngage	Avlesh: Graduate in Metallurgy from Indian School of Mines (ISM); Ankit (Details not available)	WebEngage, an online start up offers a cool customer-feedback system which can be easily integrated into one's website via a one-time-only code-pasting manoeuvre.

S.No.	Name, designation and enterprise name	Graduation degree/ trade and college	Enterprise details
15.	Sachin Bansal and Binny Bansal; Co-Founders, Flipkart.com	B. Tech. from IIT Delhi	Flipkart.com the poster boy of Indian e-commerce, has transformed the face of Indian e-commerce. It is a Bangalore based small company. Flipkart grew incredibly immense in the last 5 years. It has a broad variety of products to offer and also known for fast delivery.

Adapted: SiliconIndia (2012)

II.   CONCLUSION

Technically entrepreneurship is an important pillar of any country without which it's impossible to justify the growth and development in global aspects. It not only relates to the GDP contributions but also to the economic position of the country worldwide. Thus, the crucial point of concern is to understand the factors responsible to initiate the systematic frameworks that could be of assistance to those who are new comers to the industry or aspirants to begin their own enterprises. For a country like ours it is important that we the people should take it as a our responsibility to contribute towards the growth development of India by taking use of the initiates like government Funding schemes, training programmes, seminars, workshops, research centers etc., and starting our own enterprises.Developing entrepreneurship is one of the ways to promote the growth of the youth by encouraging more start-ups, seeking technical help , use of incubation centre to be skillful in these aspects can lead to a more sophisticated yet judicious use of available resources without comprising the sustainable aspects .

REFERENCES

[1]. 4th Economic Census. (1998). New Delhi: Ministry of Statistics and Programme Implementation, Central Statistical Organisation.
[2]. Albert, P., & Marion, S. (1997, Septembre 19-20). OuvrirI'enseignement a I'espritd'entreprendre. Les Echos.
[3]. FayGartner, W. B. (1990). What are we talking about when we talk about entrepreneurship.Journal of Business Venturing, 5 (1), 15-28.
[4]. Fayolle, A. (2000). Exploratory study to assess the effects of entrepreneurship rograms on french student's entrepreneurial behaviours. Journal of enterprising Culture, 8 (2), 169-185.
[5]. Gartner, W. B. (1989). Who is an entrepreneur? is the wrong question. American Journal of Small Business, 12 (4), 11-22.
[6]. Goel, A., Vohra, N., Zhang, L., & Arora, B. (n.d.). Attitudes of youth towards entrepreneurs and entrepreneurship: A cross cultural comparison of India and China. Ahmedabad: Indian Institute of Management, Ahmedabad.
[7]. Gopalakrishnan, R. (2007, October 17). Prosperity beyond our cities by spreading enterprise. AD Shroff Meomorial Lecture, 8.
[8]. Khanna, T. (2007). Billions of entrepreneurs: How China and India are reshaping their future and yours. 20.
[9]. Kuratko, D. F. (2003). Entrepreneurship education: Emerging trends and challenges for the 21st century. Coleman Foundation White Paper Series. Muncie: U.S. Association of Small Business & Entrepreneurship.
[10]. Kuratko, D. F., & Hodgetts, R. M. (2004). Entrepreneurship: Theory, Process, Practice. Mason, Ohio: South-Western Publisher.
[11]. Markovits, C. (2000). The global world of Indian merchants, 1750-1947: Traders of Sind from Bukhara to Panama. Cambridge University Press.
[12]. National Bank for Agricultural and Rural Development. (2013, May 14). About Us » Mission and Overview. Retrieved May 26, 2013, from http://www.nabard.org/: http://www.nabard.org/english/mission_and_overview.aspx
[13]. National Entrepreneurship Network. (2013, April 21). About NEN. Retrieved May 11, 2013, from http://nenonline.org/: http://nenonline.org/aboutnen/about_nen
[14]. National Institute for Micro, Small and Medium Enterprises. (2012, December 12). About Us. Retrieved June 19, 2013, from www.nimsme.org: http://www.nimsme.org/page.php?id=33
[15]. National Institute of Entrepreneurship and Small Business Development. (2013, May

10). About, The Institute. Retrieved June 08, 2013, from http://niesbud.nic.in/: http://niesbud.nic.in/institute.htm

[16]. National Knowledge Commission. (2008). Entrepreneurship in India. New Delhi.

[17]. National productivity Council. (2013, April 12). About us. Retrieved May 07, 2013, from http://www.npcindia.gov.in/: http://www.npcindia.gov.in/profile.htm

[18]. National Science and Technology Entrepreneurship Development Board. (2013, April 24). About us. Retrieved May 13, 2013, from http://www.nstedb.com/: http://www.nstedb.com/about-us.htm

[19]. National Small Industries Corporation Ltd. (2013, May 18). About, Corporate Info. Retrieved June 01, 2013, from http://www.nsic.co.in/: http://www.nsic.co.in/corporateinfo.asp

[20]. Organisation for Economic Cooperation and Development. (1998). National Innovation Systems. Pairs, France: OECD.

[21]. Praag, C. M. (1999). Some classic views on entrepreneurship. De Economist, 147 (3), 311-335.

[22]. Rai, V. (2007). Think India. 29-31.

[23]. SiliconIndia. (2012, September 17). Startup News. Retrieved January 12, 2013, from http://www.siliconindia.com: http://www.siliconindia.com/news/startups/16-Indian-Engineers-without-an-MBA-who-are-Great-Entrepreneurs-nid-129388-cid-100.html

[24]. Srinivasan, T. N. (2007, April 23). The Hindu, Business Line.

[25]. Sundar, C., &Madhavan, B. (2013). A study of engineering student intent towards entrepreneurial career in Chennai. International Journal of Business Management and Research, 3 (1), 1-10.

[26]. The Economic Times. (2007, November 25). New Delhi.

[27]. Tripathy, D. (1984). Business Communities in India: A Historical Perspective.

[28]. Verma, P. K. (2007). Being Indian.