

A Study on Entrepreneurial Orientation and Innovation on Indian Start-ups - A Literature Review

Dr. C.P. Lohith¹, Varshitha. B², Chandana. S³, R. Srinivasan⁴

¹Assistant Professor, Department of Mechanical Engineering, Siddaganga Institute of Technology, Tumakuru-572103, India

²UG Research Student, Department of Mechanical Engineering, Siddaganga Institute of Technology, Tumakuru-572103, India

³UG Research Student, Department of Mechanical Engineering, Siddaganga Institute of Technology, Tumakuru-572103, India

⁴Professor Emeritus, Department of Management Studies, IISc, Bengaluru-560012, India

ABSTRACT

When compared to a decade ago, Indian companies are steadily demonstrating their entrepreneurial focus. All start-ups are generating unique products and providing services since innovation is the order of the day. Because of the intense competition in both the local and global markets, there is a widespread trend to focus on innovation and continuous improvement. Both Central and State governments are now putting a lot of effort into promoting small businesses through a variety of schemes and incentives. All Indian start-ups are currently in the process of expanding their businesses. Customers are driving the economy because they have more purchasing power. A start up's success is directly proportional to how original and entrepreneurial it is. Innovativeness, proactiveness, and risk-taking behaviour are the three entrepreneurial orientations examined in our research on the influence of Technology innovation, Process innovation, and Product innovation on Indian Start-ups.

Key words: Start-up, innovation, entrepreneurship, entrepreneurial orientation

INTRODUCTION

There is a great awareness happening about the raise of Indian startups around the world. Its number is growing exponentially and as a result of this, it is proving itself as a growth engine and as well a job factory. Innovation and entrepreneurial mindset among these startups are acting as the two sides of the same coin, and thereby act a special purpose vehicle in developing Indian economy and as well societal transformation.

Indian startup culture is not newer one; it has taken nearly 20 years to get evolved into the present form of ecosystem. Due to the lack of sufficient supporting agencies like venture capitalist, business incubators and accelerators, the startups are not taking off well as expected. During the last decade, more number of startups is coming up due to favorable support given by different agencies and it is a good strategic move by all the stakeholders in the startup ecosystem. In addition to Bengaluru as a startup hub of India, other metros including our capital city and other tier 2 cities are looking towards building a vibrant startup ecosystem to take the competitive advantage (Indian Tech Startup Funding Report, 2018).

The main objective of this study is to provide a comprehensive understanding of how innovation and entrepreneurial orientation is going to nurture and backup the Indian start-ups. In addition, our study also highlights about the way in which the Indian start up evolved over two decades. Our study focussed on technological start-ups as the main respondents.

NEED FOR THE STUDY

Start-ups are a part of business environment rather than to consider them in isolation. These economic drivers need to be clearly understood by different stakeholders like the government, investors, incubators and accelerators. Indian start-ups are gaining more importance due to its commercial potential in a big emerging market.



India's huge population of nearly 1.3 billion people is becoming a bane to Indian start-ups. Even niche products or services will have a reasonably good market for any vibrant start up to exist in this tough competitive world. During the last three decades, economy evolved towards the market based economy and as a result of this, the Indian economy had a GDP of US\$2.726 trillion. (GDP (current US\$) (annual %)", World Bank- 2019)With a GDP growth of 7.0 percent in 2018 (GDP growth (annual %)", World Bank- 2019).

Indian economy is becoming one of the fastest growing economies in the world and as a result of this; Indian start-ups have got a great future in acquiring the larger landscape of the market in the country. It is expected to have an abundance of opportunities waiting for the emerging start-ups in India.

Today's purchase power is steadily increasing and as a result of this, the consumption rate of the innovative goods will rise from existing one in four households to one in two households in 2030 (World Economic Forum, "Future of Consumption in Fast-growth Consumer Markets: India," 2019).

In addition to this, our large population is going to be bane to the start-ups to meet their needs and wants. These start-ups can think locally and make an impact through innovation which can in turn be scaled up into the global market. This quantum move can be a tool for the strategic move of any of the technological start-ups. Along with this, the demographics of the population are another advantage. We have demographics of our population as the advantage since half of them are aspirational youth who are below the age of 25 years(Observer Research Foundation and World Economic Forum, 2018). The purchasing power of the young people who were born between early 1980s to 2000s is relatively high and the tendency of experimenting with the new innovative products is remarkably favourable to the new innovative start-ups (World Economic Forum, "Future of Consumption in Fast-growth Consumer Markets: India,"2019).

The diversified culture of Indian customer is both a plus and a minus for any new start up. There is a platform available for all the start-ups to pilot their idea in the local market and if it successful one, they can rightly scale it up to meet the global market requirements.

As a result of this, there is an absolute need to find out how innovation and entrepreneurial orientation is going to help the start up to reach to the platform wherein they can take the advantage of both local and the global market. Our work is to find out the importance of these two components.

RESEARCH GAPS

With all the support given by different stakeholders in the ecosystem, Indian start-ups are still struggling to gain the traction when it comes with the global competition. Most of the start-ups are either into software or into e-commerce, with some diversification into finance and health care. Most of the schemes announced by the government are not able to reach the needy entrepreneur because of the lack of its awareness among the community. In addition to this, most of the funding bodies take their own time to disburse the grant or funding support as promised to the entrepreneur which finally leads to the early death of the innovation. This makes most of the start-ups hesitate to apply for the funding support from these agencies and also discourage other entrepreneurs to apply for the same. Apart from this, most of the government schemes ask for the details related to 3 years profitability, credit ratings etc., which further become a hurdle for most of the early start-ups.

LITERATURE SURVEY

The definition of a start-up is derived on how firms revolutionize the entire market through innovative products or services offered under different uncertainties created by the competition. If the firm is not focused on developing innovative products or offer services and hence free from facing uncertainties, then it cannot be referred as a start-up.

Considering the impact of American and Chinese start-ups in the start-up ecosystem in our country, the Government started including the innovation as the focal point for any Indian start up in the policies framed during 2014. There were around seven different schemes developed to support start-ups to innovate by offering financial support through Technological Business Incubators. It also started offering several workshops and training programmes for the potential start-ups to innovate.

70 % of the Indian states have already framed their own start up policies to promote start up culture in the ecosystem. As a result of this, private investors are showing keen interest in supporting the ventures. As a result of this, India has emerged as the third largest start up ecosystem in the world. There are more number of tech start-ups in Bengaluru ranking next to London and Silicon Valley. This was possible for Bengaluru due to remarkable rise in the Global innovation index, enabling ease of doing business and higher Global competitiveness index rankings. As a result of this, both private sector and government are supporting individual start-ups through investments. Responding to the tax relaxation given by the governments, Private Equity and Venture Capital investment in India is steadily growing since



2013. Funding for the tech start-ups has been doubled between 2017 and 2018. As for as the mentoring start-ups is concerned, both the private and government organizations are providing helping hand to innovate the products.

There is an absolute need of strategizing the operations of start-ups so that they face all the different situations as critical as the covid-19 crisis which all of communities including upcoming entrepreneurs are facing. The start-ups should not consider all the setbacks as the failures; instead it is the learning process for them while battling the difficult situations. It happens to be a hard path for the start-up but innovation leads to the solution and there by achieve the strategic goals set by them.

Start-ups must innovate for India:

Entrepreneurship is going to be the economic driver in the coming days as for as Indian scenario is considered, since it creates both wealth and employment while solving real life problems. Only need of the hour is the mind –set which tunes hot burning problems into new business avenues (Steve Blank, Bob Doff, 2012).

Due to change in entrepreneurial ecosystem of India when compared with both US and Europe market, we face lot of lacuna in implementing their successful business model here in India. Indian startups need to reexamine the innovations catering to the local needs and fit the business model to solve the problem. Innovation can rightly be used as a tool to leverage the business market by satisfying the needs and wants of both the middle and low-income populations. This leads to lot of opportunities to develop innovative products and services to and thereby fill the gaps of affordability, accessibility and availability (Heather Fraser, 2012).

Innovation should be on a continuous basis rather than a considering it as an activity by the young budding entrepreneurs. It should be considered as a long term strategic goal rather than only to meet the upcoming local market. Design thinking and design management has to be effectively used to take the competitive advantage by understanding both explicit and implicit needs of the market. It also plays an important role in creating value in a company through innovation. The outcome will be an overall improvement of the product quality taking place through a well-defined product strategy (Brigitte Borja Mozota, 2011).

We need to create an ecosystem of entrepreneurship such that it comes up with a solution for the specific problem which needs to be addressed immediately by any startup. Startup Action Plan was launched by our honorable Prime Minister in Jan 2016, mainly to accelerate startup culture covering different sector starting from semi-urban to rural area. The main objective of this action plan is to create an ecosystem which is favoring the growth of startups in India. Some of the areas covered in the action plan are Simplification and handholding," "Funding support and incentives" and "Industry-academia partnership and incubation", which brings a great impact on entrepreneurial setup for our Indian startups. So many amendments have been taken place till now to the existing policy to meet the strategic goals. In order to ease the accessibility to different stakeholders in the ecosystem, Startup India portal and mobile applications have been launched recently. In addition to this, Startup India Hub is made operationalized more effectively with a dedicated toll-free number to address the issue which needs immediate attention.

Atal Tinkering Labs have been established in schools across India to encourage young minds to apply their creative skills to foster innovation and there by inculcate different skills like design thinking, computation, adaptive learning etc. In addition to this, several initiatives are also on the way from the government to promote startup in a big way.

Change of Indian Start-ups over time:

For the last decade, Indian start up economy is booming up with several changes happening to foster their growth, may be in terms of founding new start-ups, investing by the global investors, framing guidelines, global mergers and acquisitions and internationalization.

Trade and business is as old as existence of mankind and it has blossomed in India over centuries. It is as same as other old economies and cultures and in the recent years, it has been referred as entrepreneurship. Existing entrepreneurial ecosystem is the result of different waves of entrepreneurship activities covering different focus areas like Information technology, consumerism and innovation. Most of the Indian communities are basically entrepreneurial and high risk takers. History says that Indian traders have travelled across different countries like Egypt, Bahrain, Vietnam, Burma and other far away countries. Family –owned – small and medium sized businesses are owned by many Indian entrepreneurial communities like Reliance and Bajaj. A total market capitalization of some \$839 billion is owned by around 111 most popular families –owned businesses in India as reported in 2018. This number excludes the small and medium sized businesses spread across the country.

20% of Indians aged between 18 and 64 are really inclined towards entrepreneurship and willing to start their own ventures within next 2 to 3 years as per the Global Entrepreneurship Monitor report. Entrepreneurship is considered as an exciting career by around 63.7% as compared against the global average of 62.4%



Over the last 20 years, there is a gradual shift taking place in India from being IT, services and business process to R&D centre for MNCs and many start-ups of Silicon Valley. There are around 50% of the global 1200 MNCs R&D centres in India are in Bengaluru. As a result of this initiative, unique products are designed, developed and delivered completely from India. Some MNCs like GE, Cisco and Adobe are having their R&D Centres now in India due to a feasible ecosystem created to boost entrepreneurship.

B2B model based start-up having focus areas like deep-tech and IP-driven innovation are getting more attention nowadays in India. Some of the start-ups like Entropik Technologies focusing on emotion, AI, mapping brainwave, facial expressions and eye tracking, Detect Technologies focusing on high temperature magneto-resistive sensor and signal processing for leakage and corrosion detection in oil refineries are the classic examples to the outside world.

Zoho and Freshworks leading the unicorn Saas space from Chennai are the recent examples showing multiple success stories. There are around 500 AI based Indian start-ups are leveraging these benefits to cater their services to the global clients. Nowadays Indian start-ups are following footsteps of Israeli way of connecting with global customers to scale up their product after piloting and achieving product –market fit done affordably in India in comparison to their global counterparts.

Innovative Operations:

Nation's economy mainly depends on the number of start-ups operation and these start-ups acts as the key for framing policies and guidelines. Innovation should be the goal for any start up and it mainly depends on these policies (Hoffman, K., et.al., 1998). The performance of an automobile manufacturing company depends on the relationship it have with its suppliers (Geffen, C.A. and Rothenberg, S, 2000) and (Hasan, Z., et al., 2019), as they also promote innovation in OEMs.

To break the traditional supply chain operation, OTM (On the Mark) proposed targets on the effective management of the supply chain operations in a company by highly skilled manpower who overturns the traditional approach (Cao, H., Hu, J., et al., 2011) OTM includes demand forecasting, risk planning, supply chain dynamics optimization and optimization of decision processes related to supply chain operation. Due to lack of considering opportunity costs, switching costs and economic issues, most of the start-ups have faced major drawback in the past decade.

Seeking better opportunities in the surrounding is a good characteristic of any entrepreneur (Bates, T, 2005). The successful innovative products/services happen only if all the different disciplines in the firm work together and it should be a collaborative effort. The cooperation of both marketing and R&D are both crucial for the success of any product (Olson, E.M., .et al., 2001).

Entrepreneurial Orientation:

Entrepreneurial behaviour and other activities in a company which enables its risk taking capabilities and enhances competitiveness to achieve business performance refer to entrepreneurial orientation (Lumpkin, G.T. and Dess, G., 1996). The two dimensions which orient a firm entrepreneurial are its quick responsiveness to opportunities and risk taking behaviour, both enhance wise decision making and also strategize the entrepreneurial planning (Lumpkin, G.T. and Dess, G.G., 2001).

There exists a positive correlation between innovativeness, pro-activeness and risk taking behaviour on the business decisions and performance (Wiklund, J. and Shepherd, D., 2005). Innovativeness, pro-activeness and risk-taking behaviour becomes the parameters to measure the degree of entrepreneurial orientation (Rauch et al., 2009).

OBJECTIVES

- To develop measures of innovation and entrepreneurship orientation and a research framework for studying the relationship between the two.
- To develop a measuring instrument using the measures and establish its reliability and validity.
- To determine the impact of dimensions of entrepreneurial orientation on performance and assess their relative impact.



RESEARCH METHODOLOGY

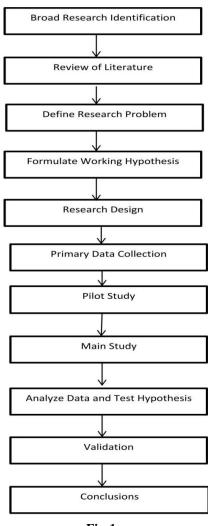


Fig-1

CONCLUSION

We will be doing descriptive research in our study, which is a description of the existing condition of affairs, also known as ex post facto research. The factors in this study are not controlled, and what has happened or is happening is reported. This comprises data collecting via survey techniques and statistical analysis of the data using regression and correlation methods. The advanced version of SPSS is used for statistical data analysis. We use a structured questionnaire as an instrument to evaluate the constructs of innovation and Entrepreneurial Orientation and the suggested study framework will be verified by testing the hypotheses we've come up with. By the completion of this study project, we will have accomplished all of our research goals.

REFERENCES

Reference to a journal publication

- [1]. Baden-Fuller, C. and Haefliger, S. (2013) 'Business models and technological innovation', *Long Range Planning*, Vol. 46, No. 6, pp.419–426. https://doi.org/10.1016/j.lrp.2013.08.023
- [2]. Bates, T. (2005) 'Analysis of young, small firms that have closed: delineating successful from unsuccessful closures', *Journal of Business Venturing*, Vol. 20, No. 3, pp.343–358. https://doi.org/10.1016/j.jbusvent.2004.01.003.
- [3]. Danneels, E. (2002) 'The dynamics of product innovation and firm competences', *Strategic Management Journal*, Vol. 23, No. 12, pp.1095–1121. http://dx.doi.org/10.1002/smj.275
- [4]. Etzkowitz, H., Webster, A., Gebhardt, C. and Terra, B.R.C. (2000) 'The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm', *Research Policy*, Vol. 29, No. 2, pp.313–330. https://doi.org/10.1016/S0048-7333(99)00069-4



- [5]. Fellnhofer, K., Puumalainen, K., &Sjögrén, H. (2016). Entrepreneurial orientation and performance—are sexes equal? *International Journal of Entrepreneurial Behavior & Research*, 22(3), 346-374, https://doi.org/10.1108/IJEBR-12-2015-0286.
- [6]. Geffen, C.A. and Rothenberg, S. (2000) 'Suppliers and environmental innovation', *International Journal of Operations & Production Management*, Vol. 20, No. 2, pp.166–186. https://doi.org/10.1016/j.promfg.2017.02.089
- [7]. Hasan, Z., Dhir, S. and Dhir, S. (2019) 'Modified total interpretive structural modelling TISM) of asymmetric motives and its drivers in Indian bilateral CBJV', *Benchmarking: An International Journal*, Vol. 26, No. 2, pp.614–637. DOI: 10.1504/JGBA.2019.10022953.
- [8]. Hoffman, K., Parejo, M., Bessant, J. and Perren, L. (1998) 'Small firms, R&D, technology and innovation in the UK: a literature review', *Technovation*, Vol. 18, No. 1, pp.39–55. https://doi.org/10.1016/S0166-4972(97)00102-8.
- [9]. Lumpkin, G.T. and Dess, G. (1996) 'Clarifying the entrepreneurial orientation construct and linking it to performance', *Academy of Management Review*, Vol. 21, No. 1, pp.135–172. https://doi.org/10.5465/amr.1996.9602161568
- [10]. Lumpkin, G.T. and Dess, G.G. (2001) 'Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle', *Journal of Business Venturing*, Vol. 16, No. 5, pp.429–451.DOI: 10.1016/S0883-9026(00)00048-3
- [11]. Miller, D. and Friesen, P.H. (1982) 'Innovation in conservative and entrepreneurial firms: two models of strategic momentum', *Strategic Management Journal*, Vol. 3, December, pp.1–25, https://doi.org/10.1002/smj.4250030102
- [12]. Miller, D.J., Fern, M.J. and Cardinal, L.B. (2007b) 'The use of knowledge for technological innovation within diversified firms', *The Academy of Management Journal*, Vol. 50, No. 2, pp.308–326, https://doi.org/10.5465/amj.2007.24634437.
- [13]. Olson, E.M., Walker, O.C., Ruekerf, R.W. and Bonnerd, J.M. (2001) 'Patterns of cooperation during new product development among marketing, operations and R&D: implications for project performance', *Journal of Product Innovation Management*, Vol. 18, No. 4,pp. 258–271, https://doi.org/10.1016/S0737-6782(01)00091-1
- [14]. Premkumar, G. and Roberts, M. (1999) 'Adoption of new information technologies in rural small businesses', *The International Journal of Management Science*, Vol. 27, No. 4, pp.467–484. https://doi.org/10.1016/S0305-0483(98)00071-1
- [15]. Rauch, A., Wiklund, J., Lumpkin, G.T. and Frese, M. (2009) 'Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future', *Entrepreneurship: Theory and Practice*, Vol. 33, No. 3, pp.761–787. https://doi.org/10.1111/j.1540-6520.2009.00308.x.
- [16]. Teece, D.J. (1986) 'Profiting from technological innovation: implications for integration, collaboration, licensing and public policy', *Research Policy*, Vol. 15, No. 6, pp.285–305, https://ideas.repec.org/a/eee/respol/v15y1986i6p285-305.html
- [17]. Utterback, J.M. and Abernathy, W.J. (1975) 'A dynamic model of process and product innovation', OMEGA, The Int. Jl of Mgmt Sci., Vol. 3, No. 6, pp.639–656. https://doi.org/10.1016/0305-0483(75)90068-7.
- [18]. Wiklund, J. and Shepherd, D. (2005) 'Entrepreneurial orientation and small business performance: a configurational approach', *Journal of Business Venturing*, Vol. 20, No. 1, pp.71–91.https://doi.org/10.1016/j.jbusvent.2004.01.001

Reference to a book

- [1]. Brigitte Borja Mozota, Design Management: Using Design to Build Brand Value and Corporate Innovation Allworth Press, Canada, 2011 Publisher: Allworth; 1 edition (August 1, 2003) ISBN-10: 1581152833 ISBN-13: 978-1581152838.
- [2]. Kothari C R (2006) Research Methodology, Methods and Techniques, Second Edition, New Age International Publishers. 2006. ISBN: 9788122424881
- [3]. Krishnaswamy K N, Appalyer, Sivakumar, M. Mathirajan (2006) Management Research Methodology, Publisher-Pearson Education, First Edition. 2006 ISBN 9788177585636.
- [4]. Steve Blank, Bob Dorf, The Startup Owner's Manual: The Step-by-step Guide for Building a Great Company, K&S Ranch, 2012. Publisher: K & S Ranch; 1 edition (March 1, 2012), ISBN-10: 0984999302 ISBN-13: 978-0984999309

Reference to a Chapter in an Edited Book

[1]. Cao, H., Hu, J., Jiang, C., Kumar, T., Li, T.H., Liu, Y. and Yu, Y. (2011) 'On The Mark: integrated stochastic resource planning of human capital supply chains', *Interfaces*, Vol. 41, No. 5, pp.414–435.Published by: INFORMS, https://www.jstor.org/stable/41318830



- [2]. Gatignon, H. and Xuereb, J. (1997) 'Strategic orientation of the firm and new product performance', *Journal of Marketing Research*, Vol. 34, No. 1, p.77-90. DOI: 10.2307/3152066, Published by: Sage Publications, Inc. on behalf of American Marketing Association.
- [3]. Heather Fraser, Design Works: How to Tackle Your Toughest Innovation Challenges Through, University Toronto Press, Canada, 2012. Publisher: University of Toronto Press 15 Dec 2012 2 Revised edition
- [4]. Klepper, S. (1996) 'Entry, exit, growth, and innovation over the product life cycle', *The American Economic Review*, Vol. 86, No. 3, pp.562–583. Published by: American Economic Association, https://www.jstor.org/stable/2118212
- [5]. Lieberman, M. B., & Montgomery, D. B. (1988). First mover advantages. *Strategic Management Journal*, *9*, 41–58, Published by: Wiley https://www.jstor.org/stable/2486211.

Reference to a website

- [1]. GDP growth (annual %), World Bank- 2019. 2020.(online)Available:https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=IN. Accessed 6th June 2020
- [2]. GDP (current US\$) (annual %)", World Bank- 2019,(online) Available: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=IN. accessed 6th June 2020.
- [3]. Inc42, "Indian tech Startup Funding Report", 2018(online) Available:https://inc42.com/datalab/indian-tech-startup-funding-report-h1-2018-3-bn-invested-across-372-deals/- accessed 6th June 2020
- [4]. Vidisha Mishra, Terri Chapman, Rakesh Sinha, SuchiKedia, and Sriram Gutta, "Young India and Work: A Survey of Youth Aspirations", Observer Research Foundation and World Economic Forum, 2018,(online) Available: https://www.orfonline.org/research/social-mobility-in-india-63480/ -Accessed 6th June 2020.