

ROLE OF INNOVATION AND TECHNOLOGY IN ENTREPRENEURSHIP DEVELOPMENT

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Abstract

The Indian economy is composed of enterprises and businesses. Our economy has survived because of the industry leaders had been able to adapt to the changing times and supplied mostly the market needs. Any small business is integral to the total economy. Without it, our economy would not survive. But a business must also sustain itself, be able to constantly evolve to fulfill the demands of the market and the customers. In every business, it is imperative to be industrious, innovative and resourcefulness. Firms with greater innovativeness will be more successful in responding to changing environments and in developing new capabilities that allow them to achieve better performance. The present study explores ways in which start-up entrepreneurs are creative and innovative. The study also explores the impact of innovation and technology on the business development. Data was collected by means of a combination of in-depth interviews and telephone questionnaires with entrepreneurs who started up an enterprise in Hyderabad between January 2010 and June 2017. The association between innovation and entrepreneurship development has been studied by using suitable statistical techniques. The results are useful to the new entrants to look after the business set-up by the view of innovation and advanced technology.

Keywords:

Innovation and Technology, Entrepreneurship, Manufacturing Organization, Service Organization and Market

1. INTRODUCTION

The Indian economy is composed of enterprises and businesses. Our economy has survived because the industry leaders had been able to adapt to the changing times and supplied mostly the Consumer wants and needs. Any small business is integral to the economy. Without it, our economy would not survive. But a business must also sustain itself, be able to constantly evolve to fulfill the demands of the community and the people [1].

1.1 ENTREPRENEURSHIP

Entrepreneurs can contribute to the economic development by facilitating resource redeployment from less to more productive uses, by implementing economic “cost discovery,” “gap filling” and “input-fulfilling” functions, and by encouraging structural change. Recently, these roles have been listed in increasing numbers. The potential role of entrepreneurs as innovators in developing countries is a neglected function in this literature. A century ago, it was pointed out that entrepreneurs are frequently innovators, marketing new products and technologies and opening up new markets, processes, ideas and marketing of new knowledge. However, it is often misunderstood that innovation by entrepreneurs in low - income developing countries is less important than in advanced economies for growth [9].

The entrepreneurship discipline generally investigates the reasons for creating, recognizing and exploiting opportunities. Therefore, a broadly quoted definition of entrepreneurialism is that “opportunities are discovered and exploited”. It is acknowledged that not all opportunities will necessarily be in the best interest of society and he has generally defined entrepreneurs as “people who are ingenious and creative in finding ways to increase their richness, power and prestige”. This allows the allocation of entrepreneurial talent in ways delaying economic growth. While we know that such a destructive allocation of entrepreneurship may result from the rewards structure of a society, we will focus on productive entrepreneurial activities. This includes building, recognizing and using the positive opportunities within existing companies (or through the creation of new companies) in such a way that innovation is involved or new combinations are provided.

We have to note that three principal conceptual approaches to entrepreneurship are distinguishable in literature before defining what this innovation. The study focuses on entrepreneurship, the second on company performance and the third on ownership.

Dynamic players who make major decisions on investment, production, innovation, location or research and development are involved in the functional perspective. This concept is broader than that of entrepreneurs running their own companies. It also includes managers of multinational companies, state or non - profit organizations and a number of dynamic entrepreneurs. In this perspective, entrepreneurship refers to dynamism, creativity and originality as a psychological feature. The difference between entrepreneurship and innovation, as in the past tradition, is blurred: entrepreneurship is an innovative behaviour. If you are not innovative, you are not business [10].

1.2 INNOVATION

A narrow strictly technological approach specifically focuses on product and process innovation or technological innovation, often referred to as a result of (technological) entrepreneurship with a great focus on knowledge. A broader approach refers to innovation, such as new product development, new processes, new sources of supply, but also new markets development and new organizational approaches. More progressive innovations and more radical innovations can be distinguished. It is important to note that innovation refers not just to the first introduction of innovation by a first mover, but also to the expansion of innovation among other economic players.

Innovative literature differentiates significantly between innovations new to the world, innovations new to the domestic market or innovations new to the company. New innovations are mainly found in advanced economies worldwide. They are based at the limits of global knowledge on research and development. The development of new and new innovations is tended to be new

to the market in developing countries far beyond the international technology frontier.

The international diffusion and absorption of technology is a new market innovation in developing countries. The domestic company introduces innovations that are new to the market but have already been developed in their own country. New innovations for the company relate to domestic knowledge flows. Already on the market, innovation is adopted by a certain company and is adopted. This latest innovation concept is closest to the Rogerian innovation concept [11].

In any objective sense, what is new for the company is not very innovative. Instead of using it manually or introducing a new oven for hardening pottery a machine may be simply used to mould kitchen handles. In other words, new innovations for small enterprises in developing countries can coexist with stagnating economies, and grow technological gaps compared to the international borders. Our main focus is on innovative behaviours, which foster economic dynamism and land - level rise.

Like undertaking, the innovative performance of patents, trademarks, R&D inputs and other secondary indicators such as publications and quotations has been measured in a variety of ways. Innovation surveys between companies have been increasingly used since the 1980s. Companies are asked in innovation surveys whether innovation has been introduced. Most innovative surveys focus on technological innovations that lead to new products or processes of production. A separate class of organizational and marketing innovations is distinguished in subsequent generations of surveys. Innovation studies have spread to developing countries, especially Latin America, as well as to Asia and Africa, starting with the European Community Innovation Studies.

1.3 INNOVATION AND ENTREPRENEURSHIP

If the search for new combinations is described as the core feature of enterprises, the distinction between entrepreneurship and innovation is difficult to achieve. Does entrepreneurship and innovation really make a difference? We need to clarify the relationships between these concepts in a paper attempting to link two research traditions, respectively on entrepreneurship and innovation.

The entrepreneur is the hero of dynamic capitalism in the tradition. Typically, the entrepreneur creates new combinations: new products, new markets and new materials. Enterprise and innovation are practically synonymous. Innovation takes place in R&D labs and entrepreneurship in a managerial bureaucracy has routinely become a feature. Innovation is divorced from enterprise.

It also does not recognize that much innovation is generated by companies run not by entrepreneurs but by managers. Therefore, it makes analytical sense to distinguish innovation and entrepreneurship from a development point of view as distinctive key development forces. Some entrepreneurs are far more innovative than others and entrepreneur companies are not the only sources of innovation [12].

In every business, it is imperative to be industrious, innovative and resourceful. Firms with greater innovativeness will be more successful in responding to changing environments and in developing new capabilities that allow them to achieve better

performance. Innovation can help your business adapt and evolve in order to survive and grow. In your business, innovation may be driven by the need to solve a problem or capture a new opportunity [2].

An individual can improve how old products or services are used, find new uses for them, or even create new ones. Innovation also includes changes that you make to how your business is run - can you create new processes or a new business model. There are many ways to be innovative. You could implement a big change, a small change, or gradual changes over time. Learn more about becoming an innovative business. Building a culture that supports innovation can help your business stay relevant, meet challenges, and stay competitive. Innovation is not just about new ideas, but also about new ways of applying ideas [3].

Encourage innovation by asking staff how they would improve the way they do their job, using business strategies that welcome innovation, reviewing current processes and arranging regular training and networking opportunities for all staff. One way to make money from innovation is to commercialize your idea. Research and evaluate your innovation to find out if it will make your business money. Your idea or plan may sound great, but you need to assess whether your business is ready to sustain growth [4].

A substantial literature has been devoted to understanding the conditions under which entrepreneurs innovate, and the nature and evolution of national systems of innovation. By and large, however, this literature has been concerned with the process of innovation and its dynamics in advanced economies. Research at the intersection of the fields of entrepreneurship, innovation, and development is still in its infancy.

2. LITERATURE REVIEW

More precisely entrepreneurship can be defined as an art or science of innovation and risk taking for profit in the business, the quality being an entrepreneur. Entrepreneurship refers to taking out new and unique combinations [5]. Entrepreneurship is the ability of an entrepreneur to forecast the better future successfully [6]. Some important effects of entrepreneurship have the following characteristics: Firstly an individual entrepreneur effects the economic growth and the whole environment. Secondly it determines the entrepreneurial function acts as a responsible factor for economic improvement in the society due to its innovative feature. And then it distinguishes between the roles of investors, the manager and the entrepreneur. Most of the entrepreneurship studies moves toward focus on the participants in their locally entrepreneurial setup. These studies are linked with the role of entrepreneurs in innovations, new business venture businesses are most frequently under the attention and the strategic behavior and industry structure of these international ventures compared with domestically new startups. Specific factors of industry and firm were presented as the significant magnitude to give details and make a distinction of firm's behavior. There was no theoretical and experimental role given to individual entrepreneurs who have compel the firms into an international field. This is not surprising because global entrepreneurship was still considered as a "yet newer power of research motion" in international business research [7]. Entrepreneurship is broader concept that plays a central role in

market economy. Economic growth, modern technology and innovation are the three independent variables relates to an entrepreneurship [8].

3. OBJECTIVES OF STUDY

The following were objective of the research.

- To understand the concept of innovation
- To know the application of innovation in the various areas of entrepreneurship
- To understand the awareness of innovation among entrepreneurs.
- To study impact of improvement factors on manufacturing and service industries
- To understand the problems faced by the entrepreneurs in adopting innovation if any.

4. RESEARCH METHODOLOGY

The information collected for the study was collected by primary and secondary data.

- *Population:* Entrepreneurs of small scale industries in Hyderabad District (Manufacturer and service providers) (unknown)
- *Sample Area:* Hyderabad district. (Telangana, India)
- *Sample Units:* Entrepreneurs engaged in manufacturing and service sector
- *Sampling Method:* Non Probability-Convenient Sampling
- *Data Collection Techniques:* Interview and questionnaire
- *Sample Size:* Total 30 (15 Entrepreneurs engaged in Manufacturing and 15 Entrepreneurs engaged in Service industry)

4.1 HYPOTHESIS OF THE STUDY

(H₀): There is no significant relationship between the type of the organization and improvement factors due to innovation.

(H₁): There is a significant relationship between the type of the organization and improvement factors due to innovation.

5. RESULT ANALYSIS

By conducting survey data were collected through the respondents processed, tabulated and analyzed and the results find out.

- It was found that 20% respondents were having age below 30 years. 50% respondents were from the age group of 30 to 40 and remaining was from more than 40. The percentage of female entrepreneurs was 25% while remaining were male entrepreneurs.
- It was understood that only 25% entrepreneurs were having their post-graduation, while 40% respondents were graduate and remaining were completed their H.S.C or S.S.C, 60% respondent's business were old than five years, 40% respondent's business was less than five years.

Table.1. Motives to start new business

Rank	1	2	3	4	5	Weighted Average	Rank
Weight	5	4	3	2	1		
Motives							
1 Cheesed of from present job	4	8	5	6	7	5.73	VIII
2 To develop own business idea	12	7	4	4	3	7.40	II
3 Government policies and schemes	13	6	4	4	3	7.47	I
4 Influence and encouragement by family members, friends and relatives	8	8	7	5	2	7.00	IV
5 More Career Advancement	6	4	3	7	10	5.27	X
6 Previous experience or association with same or similar line of business activity	10	7	7	4	2	7.27	III
7 To gain social prestige	8	5	6	6	5	6.33	VI
8 To secure self-employment or independent living	6	7	7	5	5	6.27	VII
9 Desire to Earn More Money	9	8	4	5	4	6.87	V
10 To utilize better opportunity in the market	4	5	2	9	10	4.93	XI
11 Introduction of new product	4	6	7	3	10	5.40	IX

Source: Survey

5.1 INTERPRETATION

There are certain motives behind starting up any business various motivational factors were considered and checked the opinion by the respondents and understood the highest as well as least rank for motivational factors. It was find out that Government policies and schemes are highly motivated to respondents, second rank were given by the respondents to development of new ideas. People want to develop their own ideas through setting up new business. Third preference was given by the respondents to previous experience or association with same or similar line of business activity. It was found that most of the entrepreneurs running either previous business or new business in association with the previous business. Fourth rank was given by the respondents for Influence and encouragement by family members, friends and relatives. It was found that, due to the encouragement by the family members and friends people are getting motivated. Fifth rank was given to desire to earn money. Sixth preference was given for the social prestige. Social prestige is a social need everybody wants to fulfill the need as per the opinion of the respondents they have started the business to fulfill such need. Seventh preference was given to secure self-employment or independent living. Few entrepreneurs were having the opinion that they have entered in the business to develop self-employment. Respondents have given eighth rank to the fed up from present job due to the insecurity and less payments. As per the opinion of the respondents ninth rank was for Introduction of new product in the market. Less weight was given by the respondents to introduction of new product due to the fear of innovation and risk of investment. Tenth preference was given for more Career Advancement very less people wants

to develop business due to the need of progress in the career. The least preference was given by the respondents to utilize better opportunity in the market. Respondents were having the opinion that, due to unavailability adequate finance although there are number of opportunities in the market people cannot able to take benefit of the situation.

Table.2. Efforts taken by the entrepreneurs to enhance the skills within them

Entrepreneur Skill development techniques	No. of Respondents
Training session for increasing general business management skills	18
Training session for marketing and sales skills	06
Program for financial management skills	06
Learn advance technology and knowhow through experts	05
Participation in trade fair within country	12
Visited abroad to study the same type of businesses and advanced Techniques.	02

Source: Survey

It was found that all respondents are taking efforts to enhance skills which are required to become a successful entrepreneur. Most of the businessmen (18) attaining Training session for increasing general business management skills to develop management skills. Twelve respondents were having the opinion that they are improving their skill through participating in trade fairs within country they think attaining the fairs can increase the ability to identify the areas of development. Six respondents are attaining the programs which help to enhance the financial management skills. Respondents were having the opinion that, most of the entrepreneur doesn't have good knowledge in financial management and analytical techniques involved in financial management. Few respondents are (5) adopting new techniques and knowhow through experts in the related field whereas very less respondents are enhancing the skill by visiting same types of business in abroad to understand new technology adopted by the other countries.

Table.3. Implementation of innovation for business development

Response	No. of Respondents	Percentage
Yes	30	100
No	0	0

Source: Survey

It was observed that all respondents irrespective of manufacturing as well as service entrepreneurs adopting some kind of innovation for the development of business.

The majority of the respondents were trying for grants and assistance in order to bring innovation in their business and only 10% respondents have not applied because they were not aware about such grants and assistance. So lack of information by the respondents was one of the reasons for not taking the advantage of grants and assistance. It was seen that the majority of the respondents have changed their premises as a part of innovation. Out of these major was from service industry. When the question

was asked regarding the change in staff 40% respondents responded, that they have changed their staff time to time while 20% have changed as per the seasonal requirements. It was observed that very few respondents were going for exports so from the research it can be seen that export can be one of the emerging area where the business can be extended. As a part of innovation in business, many respondents have gone for franchise of various products.

Table.4. Ways of innovation adopted by entrepreneurs

Ways of innovation adopted by entrepreneurs	Always		Sometimes		Not at all	
	n	%	n	%	n	%
I have applied for grants and assistance	12	40	15	50	5	16.67
I have increased the premises of the business	10	33.33	8	26.67	12	40
I have increased the staff for the business	12	40	6	20	12	40
I have tried for exports	4	13.33	2	6.67	24	80
I have tried to take franchise for various products	10	33.33	8	26.67	12	40
I have sold my products through modern marketing medias (Tele. Calling, On line Selling)	15	50	8	26.67	7	23.33
I have used the money generated through the business in business only	11	36.67	7	23.33	12	40
I make changes in my products/services	9	30	14	46.67	7	23.33
I seek advice from the experts wherever necessary	9	30	18	60	3	10
I have adopted new technology	9	30	10	33.33	11	36.67
I concentrate on customer satisfaction	15	50	13	43.33	2	6.67

Source: Survey

Majority of the respondents were using the modern technology for the sake of communication so it has been proved that respondents were using innovative ideas to increase their business 60% respondents were using the money generated through the business for business Purpose only but 40% respondents were unable to use it for business purpose due to their financial and family problems.

Near about 75% respondents were interested in changing their products and services Time to time which indicates that there is awareness in the respondents about the innovation. The 90% respondents were ready to seek the advice from the experts which shows the quality of entrepreneurs and which is good for the business development. It was found that near about 62% respondents were changing their technology but the Remaining who have not adopted it, the major reasons for that was the lack of financial Assistance, non-availability of information regarding the technology. Majority of the respondents were concentrating on customer satisfaction which seems to be a good indicator for development of business.

Table.5. Association between type of organization and improvement factors due to innovation

Type of Organization	Improvement Factors							Total
	Sales	Profit	Production Capacity	Product/Service Quality	Public reputation	Information and technology service	Delivery time	
Manufacturing Organisation	3	2	3	2	2	1	2	15
Service Organisation	2	2	1	3	2	2	3	15
Total	5	4	4	5	4	3	5	30

Source: Survey

5.2 CALCULATION OF DATA BY USING CHI-SQUARE TECHNIQUE

Table.6. Chi- Square Table

O_i	E_i	$O_i - E_i$	$(O_i - E_i)^2$	$(O_i - E_i)^2 / E_i$
3	2.5	0.5	0.25	0.1
2	2	0	0	0
3	2	1	1	0.5
2	2.5	-0.5	0.25	0.1
2	2	0	0	0
1	1.5	-0.5	0.25	0.17
2	2.5	-0.5	0.25	0.1
2	2.5	-0.5	0.25	0.1
2	2	0	0	0
1	2	-1	1	0.5
3	2.5	0.5	0.25	0.1
2	2	0	0	0
2	1.5	0.5	0.25	0.17
3	2.5	0.5	0.25	0.1
				1.93

Calculated Value = 1.93

Degree of freedom = $(r-1)(c-1) = (2-1)(7-1)$

Degree of freedom = 6

Table Value = 12.59

Calculated Value < Table Value $1.93 < 12.59$

Inference: Since calculated value is less than Table.6 value we accepted the (H_0) and rejected alternative hypothesis (H_1). So there is no significant relationship between the type of the organization and improvement factors due to innovation. It was found that, there is a surety of an improvement in the organization due to the adoption of innovative techniques. It was also found that irrespective of the type of organization innovation helps to improve various factors.

6. CONCLUSIONS

Innovation and advancement of technology plays an important role in the development of entrepreneurship country like India. The present study was focused on the motives to start new business, efforts taken by the entrepreneurs to enhance the skills within them, ways of innovation adopted by entrepreneurs and

association between type of organization and improvement factors due to innovation. It was found that there are various motivational factors affecting on the development of entrepreneurship and the most motivating factor is government policies and schemes supporting to various business. Most of the entrepreneurs are taking efforts to enhance skills and adopting innovation through training. Most of the entrepreneurs are adopting modern marketing Medias to sale the products as well as services. Through the research it was found that, there is no relationship between types of organization and the improvement in the business due to adoption of innovation and technology.

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