

Innovation and Product development in entrepreneurship As a tool for economic growth

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Abstract:

Innovative new products are the fuel for every economy. Lack of innovation has long been blamed for India's sluggish economy, but despite our seemingly poor innovation record, we still stick to the hope that innovation and product development will be India's salvation in the face of fierce competition in Asia. As the cost of new technologies plummets, even small manufactures can turn to innovation to trim down the time it takes to get products to market, improve quality, assure consistency of that quality, and the trick to overcoming risk is to manage the process effectively i.e. effective management of innovation. Innovation and product development are the key instruments of entrepreneurship. It is the act that endows resources with a new capacity to create wealth. On one hand innovation creates a resource whereas, on the other, product development is an intricate process which needs competitive finesse & perfect poise between time to market, unflinching quality and lateral thinking. Product development should be versatile enough to make the product adaptable to various challenges in the offing. This paper attempts to illustrate the contribution of innovation and product development towards the growth of an entrepreneur and its impact on Indian economy.

Key words: competition, Quality, Entrepreneurship, Economic development

Introduction

The population of India has exceeded 1.2 billion. On one hand this seems to be alarming whereas on the other, this gives an opportunity to Indian economy for producing more entrepreneurs. India is third largest economy in Asia, and has plenty of industries that help push the growth. GDP growth was slow but impressive in the year 2011 i.e. 8.2%. The main industries continue to grow, which has given more individuals the opportunity to have stable employment and provide better facilities for their families.

Entrepreneurship is the priority of India. It is considered to be a significant determinant of economic development. According to The Legatum Institute Survey of Entrepreneurs, 2011, "Indian entrepreneurs show deep levels to optimism both for future of their country and for the economic possibilities available to them. Perhaps most strikingly, over half of all Indian entrepreneurs believe that India will be the most important global economic power in 20 years time". New entrepreneurial activities play a major role in the

process of creative destruction that cultivates innovation, employment and growth. The concept of entrepreneurship has developed over the years and an exposure to entrepreneurship skills can stimulate individuals towards different opportunities beside wage employment. The Indian entrepreneurs are probably the most capital efficient, possibly, because resources are always scarce for entrepreneurs. The fact remains that even small entrepreneurship continued to be dominated by business communities though at some places new groups of entrepreneurs too emerged. Successful entrepreneurs are the largest contributors to economic development and have the potential to be the greatest source of innovation and growth. Some family entrepreneurship units like Ambani (Reliance), Tata, Birla etc. grew beyond the normally expected size and also successfully diversified their business opportunities.

Lack of innovation has long been blamed for India's sluggish economy, but despite our seemingly poor innovation record, we still cling to the hope that innovation and product development will be India's salvation in the face of fierce competition in Asia. As the cost of new technologies plummets, even small manufactures can turn to innovation to trim down the time it takes to get products to market, improve quality, assure consistency of that quality, and the trick to overcoming risk is to manage the process effectively i.e. effective management of innovation.

India is known to be a land of engineers, doctors, scientists, intellectuals but the country can hardly call itself a 'start-up' nation because it is still lagging behind when it comes to producing entrepreneurs. Blame it on our education system or on the lack of infrastructure, but India is still in the promising stage as far as entrepreneurial development is concerned. India, in order to become a developed nation, needs more entrepreneurs with a managerial mindset and not managers who are just corporate clones. While India historically had low entrepreneurship rates, this weakness is improving and will be an important stepping stone to further development.

Entrepreneurship: A pragmatic approach

Entrepreneurship has played a significant role in the introduction of new economic activities that lead to changes in the marketplace. Many examples have been seen of entrepreneurial activities in the past. One wave of entrepreneurial activities took place during the last few decades. In the 1970s and 1980s we experienced huge structural changes in society worldwide – oil crisis, economic recessions, technological progress, increasing globalization, etc., as well as far reaching political changes in favour of a stronger market-oriented ideology and this created the uncertainty and disequilibrium that constitute proliferation grounds for new business opportunities and new ventures (Bettis & Hitt, 1995; Meyer & Heppard, 2000).

Entrepreneurship is one of the oldest activities. To discover or to identify new business possibilities and to exploit these possibilities in new ventures for economic gain has always been mentioned by the ancient Greeks, and it was the philosopher Xenophon (approx. 430-354 B.C) who recognized the adventurous and opportunity seeking activities of oversea merchants (Karayiannis, 2003). “Entrepreneur” was originally a French word. The word appeared for the first time in the 1437 *Dictionnaire de la langue francaise*. Three definitions of the “entrepreneur” are listed in this dictionary. The most common meaning was “celui qui entreprend quelque chose”, referring to a person who is active and achieves something. The corresponding verb is “entreprendre”, which means to undertake something; the word has been a part of the French language since the 12th century. As an outcome, new and small firms have been seen by politicians and decision-makers as the main contributors to the development of the economy and wealth-creation in society.

Entrepreneurship does not impact an economy simply through higher numbers of entrepreneurs, so it is necessary to consider quality measures like growth and innovation. Entrepreneurship needs both dynamism and stability. The former occurs through creation of new business whereas the latter comes from providing new businesses with the best chance to reach the potential. Initiatives aimed toward improving entrepreneurship should consider the development level of the economy. An entrepreneurial mindset is not just for entrepreneurs, it must include a variety of stakeholders that are willing to support and cooperate with these dynamic efforts. (GEM 2010 report)

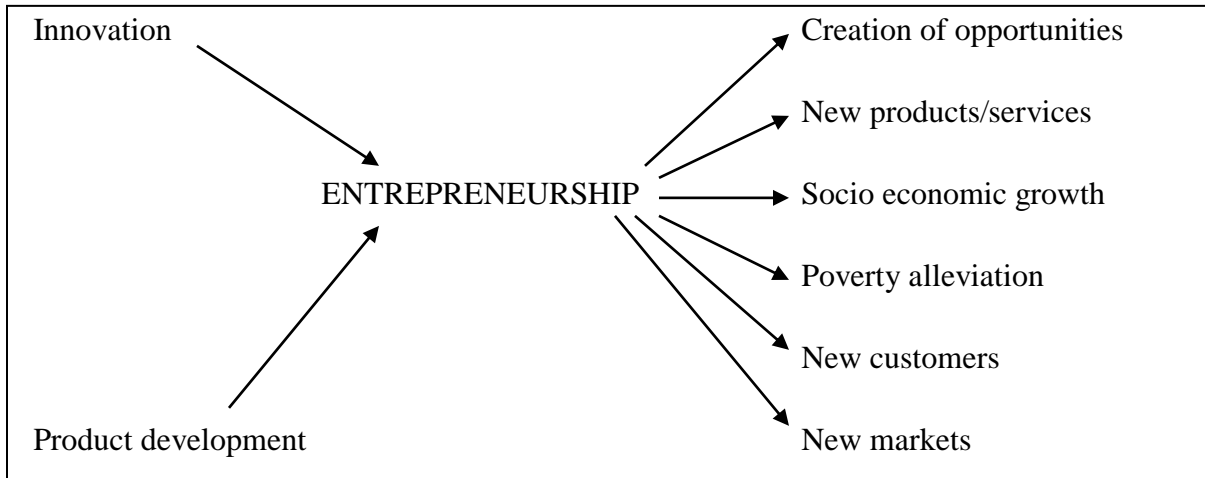
Entrepreneurship involves a willingness to take responsibility and ability to put mind to a task and see it through from inception to completion. Another ingredient of entrepreneurship is sensing opportunities, while others see chaos, contradiction, and confusion. Essence of Entrepreneurship is going against time with maturity and serving as a change agent. Entrepreneurship and economic development are strongly related. According to Schumpeter, entrepreneurial process is a major factor in economic development and the entrepreneur is the key to economic growth. He also focused on innovation and technological change of a nation which comes from the entrepreneurs and the ones who really move the innovation and economy are the big companies which have the resources and capital to invest in research and development.

Role of innovation and product development in entrepreneurship

Innovation and product development are considered to be the key instruments of entrepreneurship. It is the act that endows resources with a new capacity to create wealth. On one hand innovation creates a resource whereas, on the other, product development is a complex process which needs competitive grace & perfect poise between time to market, unflinching quality and lateral thinking.

According to Figure 1, Innovation and product development often lead to the growth of entrepreneurial activity which further leads to creation of opportunities by providing jobs and making carriers. Through this new products and services can be created, with the help of which socio-economic growth can be achieved by poverty alleviation, by giving source of income etc. and hence creation of new customers and markets will be possible.

Figure 1



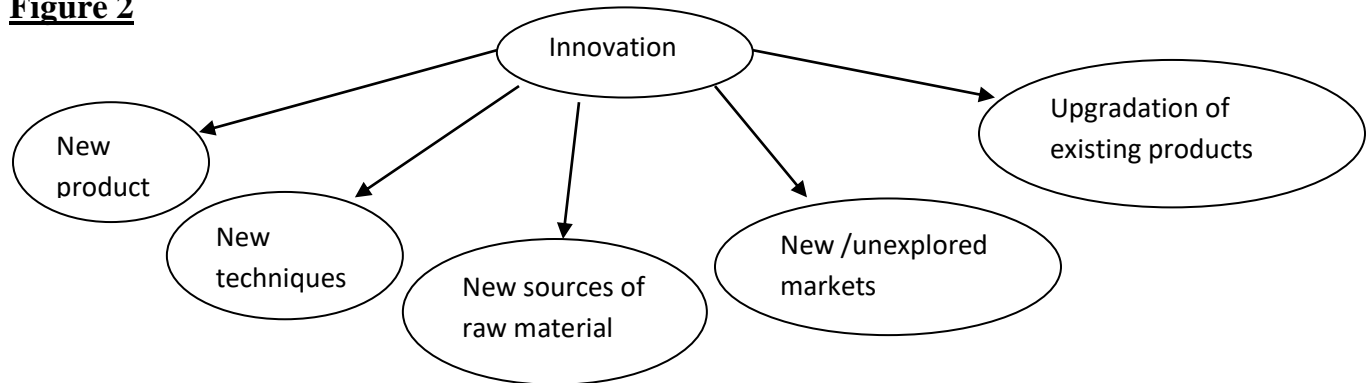
The creation, dissemination and application of knowledge have become a major engine of economic expansion. Entrepreneurs have come to rely more and more on this precious tool. It is a practice that has moved from the periphery of many industrial agendas right to the center of their strategies for growth and leadership. Most sectors and industries are currently experiencing what is called a "Schumpeterian renaissance". Innovation is today the crucial source of effective competition, of economic development and the transformation of society.

In the ever-changing world, innovation is the only key which can expand long-run growth of the country. More and more entrepreneurs are realizing the importance of innovation to gain competitive advantage. Accordingly, they are engaging themselves in various innovative activities, ranging from manufacturing processes, product improvement, and brand building initiatives to customer satisfaction. Today, business environment has become very dynamic with more demanding customers and intense market competition. To meet this challenge, firms are creating new products, solutions and services that provide a completely better experience for the consumers.

Innovation is not only about technology, but is also about understanding and exploring untapped user needs that require to be addressed in an efficient manner. It must occur at every stage of a product or solution development and release cycle. Thus, managing innovation is fast becoming priority in a global business environment. Firms which innovate tend to survive and grow to a greater extent. The most

successful entrepreneurs in latest business world are the ones who are not only innovative in their own work, but who encourage and assist others to be innovative in every aspect of their work like the introducing the concept of creating intrapreneurs within the enterprise.

Figure 2



India is progressively becoming more transcend global innovator for high-end products and Services. Still, the country is not performing relative to its innovation capabilities—with direct implications for long-term industrial healthiness and economic growth. About 90 percent of Indian workers are employed in the informal sector, and this sector is often characterized by underemployment, as well as low-productivity and low-skill activities. Although India has the advantage of being a young economy—with more than half of the country’s population under 25 years of age, 17 percent of people in their mid-20s and older have a secondary education. To continue with rapid growth and help eradicate poverty, India needs to aggressively utilize its innovation potential, relying on innovation-led, rapid, and inclusive growth to achieve economic and social transformation. Innovation is the main idea in shaping corporate life and helping entrepreneurs to adopt various strategic options. It helps to reduce total cost of production, increase income avenues, maintain efficient operating systems and expands R&D base of the country and brings latest technologies into the country. It enables to see potential acquisitions not only on cost basis, but also as a means of accelerating profitable top-line revenue growth and enhancing capabilities and also provides an edge to enter new markets faster and deeper.

Innovation is not an end in itself but a means to productivity growth and higher living standards. An innovation strategy is an essential tool for product development and continued growth even in difficult times. There is a widely held view that Innovation is primarily controlled by high-end technology and R&D. However, high-end technology and R&D are only two of quite a few sources of Innovation. The reach and impact of Innovation is seen across the value chain to also include other sources of Innovation such as various processes and services, marketing, branding, trade, entrepreneurship, market research, customer surveys, etc.

Innovation and product development thrives in a competitive environment and in turn, plays a key role in the achievement of such an environment. Innovation generates economic value, new jobs in the economy and cultures of entrepreneurship. By virtue of its relationship with competitiveness, Innovation and product development emerges as a factor in promoting economic growth.

Given the fact that the Indian economy is growing at 6-8% per year, while exports are growing at 30% (Cumulative Annual Growth Rate), and many Indian entrepreneurs are successfully competing against international firms and brands, it can be concluded that this has been made possible by a combination of factors, including enabling environment, rising capital and labour productivity as well as improved quality of goods and services at lower costs.

Globalization provides opportunities as well as challenges for nations to use Innovation and product development as a strategic lever to generate knowledge flows. It provides unprecedented potential for Innovation and product development to be used as a tool for revenue generation, so that nations with a strong knowledge base, can once and for all, escape 'the stranglehold of poverty'. At the same time, globalization creates challenges for firms to either innovate or perish. It is rightly said that "In the race to the top slot, the only way ahead for entrepreneurs is to innovate". Innovation is the 'necessary core competence' to remain competitive in the new landscape. Innovation is the necessity of the time and a specific instrument of entrepreneurship which leads to product development and can have two outcomes after commercialization, one can be unexpected success and the other one can be unexpected failure, unlike success, cannot be rejected and rarely go unnoticed yet it gives a lesson to the entrepreneur.

Objectives of Product Development:

Continuous innovation and up gradation in quality standards is necessary to survive in competitive markets and benefitting the end users. Old processes become obsolete with time and stagnate the growth of business. Timely upgradation not only helps in keeping up with the market trends, but also helps in creating an edge over others. Continuous research and development in products helps the entrepreneur to add value to the existing products.

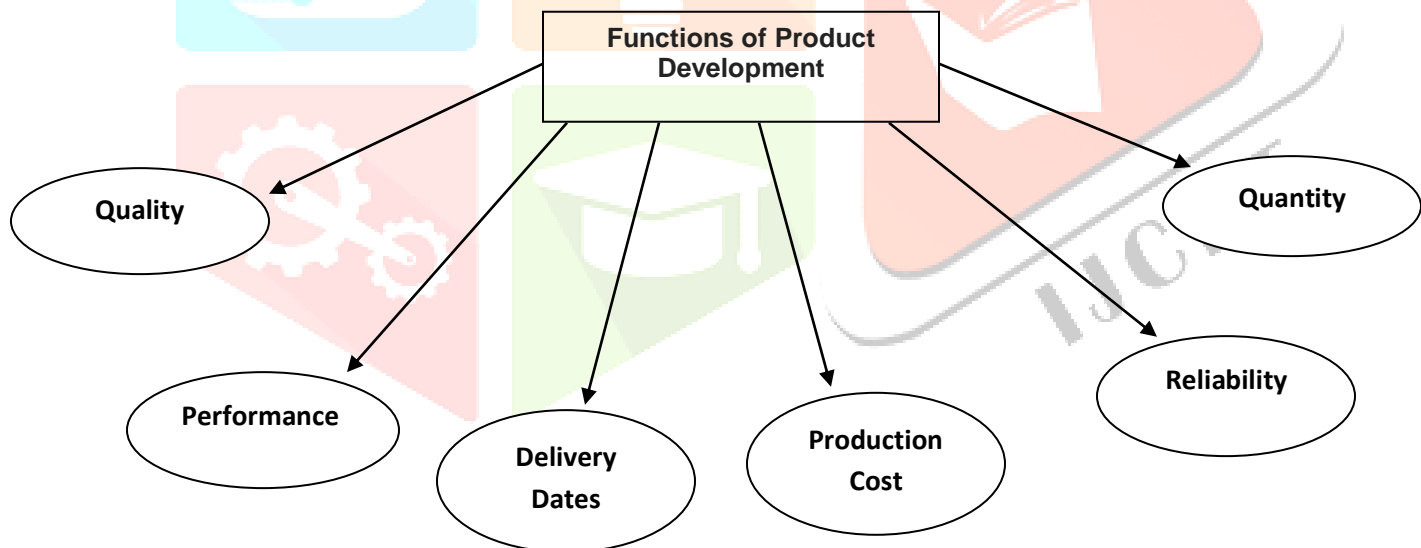
Innovation in product development means better and improved processes that ultimately reduce the production costs resulting in cheaper products. These products are already better than the previous products and hence a better deal for the user. Innovation results in exploring the new markets for the products as well as creating a loyal customer base in the existing markets. The products with better quality standards and better prices are always easier to sell in any market.

Need for New Product Development:

The product life cycle has become very short. Markets are flooded with similar products at each level. The products introduced today, become old in a matter of few months. Technology has become affordable, and due to education people have become more tech-savvy. Technology simplifies the process of product development by making it swift and cost effective. Since the consumer is well aware of the new technology, it becomes imperative to the manufacturer to keep up to the expectations of the consumer.

The competition is so fierce in today's market that one can never survive if it ignores the need of innovation and continuous product development. To keep the hold of the customers, one needs to regularly update the existing products and provide value addition, in terms of quality, prices and performance. Keeping brand loyalty is much harder in such a scenario. Brand loyalty requires innovation at each stage of product development, so that the loyal user does not feel the need to switch over to other brands and promotes the brand amongst the peers. Innovation also helps in diversifying and exploring new ways the product can be used. It can be done either by introducing new features to the existing product or by introducing an entirely new product in similar or new product line.

Figure-3



Globally, India is conceived as a country with aversion to innovation and entrepreneurship. The condition aggravates with the fact that we traditionally have had an inappreciable amount of investments in our R&D facilities. In the year 2007-08, we had only 0.93% of GNP being spent on R&D with the majority share going into strategic (military) development. This can be further confirmed by the fact that on one hand the R&D expenditure of all Indian industries taken together is less than that of a Single Japanese company - Sony while on the other hand, 12% of the world's total R&D expenditure in 2005 was done by China. A comforting fact is that Indians have a tendency of self-employment which was revealed in the 62nd round of NSSO's report on employment showing a national average of 254 per 1000.

India would benefit from strengthening efforts to create and commercialize knowledge, as well as better diffuse existing global and local knowledge and increase the capacity of smaller enterprises to absorb it. If all enterprises could costless achieve national best practices based on knowledge already in use in India, economic output could more than quintuple (five times as much in size, strength, number, or amount). India could also consider strengthening its support infrastructure for technology licensing by creating a public-private technology acquisition fund, building on intellectual property that is already locally available. Actions to promote commercialization and strengthen links among industry, universities, and public laboratories could include providing support to technology transfer offices, creating a patent management corporation, developing technology parks and incubators, and improving India's regime for intellectual property rights. India should also consider enhancing support for higher-risk technology R&D and commercialization by strengthening its New Millennium Indian Technology Leadership Initiative included by opening the program to international collaboration and giving grants to both research institutions and private enterprises, with sharing of any resulting royalties. To further spur international collaboration, India could create a Global Research and Industrial Partnership program to promote advanced R&D and commercialization efforts conducted jointly by domestic and foreign enterprises.

The National Innovation Foundation has a repository of more than 50,000 grassroots innovations and traditional knowledge practices and a number of initiatives exist to help the informal sector better absorb knowledge. More favorable matching grant support for pro-poor early-stage technology development could significantly increase collaboration among public R&D entities, universities, non-governmental organizations, national industries, and global networks. Increased support for grassroots innovators could be provided to the National Innovation Foundation to scale up impact. To leverage traditional knowledge into revenue, a policy-oriented intellectual property rights think tank could propose how to implement a cheaper intellectual property regime. Finally, successful technology upgrading programs could be extended to help informal and rural enterprises make better use of existing knowledge.

A quick glance at history enforces the thought that even Indians are adept entrepreneurs. Karsanbhai's Nirma, Munjal's Hero, Iyengar's TVS group, Dhirubhai's Reliance, Kiran Shaw's Biocon, Bharti's Airtel are few examples out of the inexhaustible list of Indians who have carved a niche in the golden temple of fame.

Reasons behind the Development of Entrepreneurship in India:

Growth in three basic sectors: Indian entrepreneurs should give more effort to shoot up the national production in primary, secondary and tertiary sectors. They work not only to increase employment but to create fortune from both national and international markets. They yield such goods and services which exaggerate the imports and give more strength for growing export of goods and services.

Protect regional expansion: Majority of the industrial entrepreneurs are operational in the urban and semi-urban areas which has headed the immigration of people from rural areas to big cities. This has created pressure on the government to provide housing and other facilities to the people. In order to lessen this imbalance, government has provided facilities to boost entrepreneurs to setup new ventures in rural areas.

Re-investment of profit: The objective of re-investment of profits can be achieved when their will be a platform for local entrepreneurs. They invest profits in the business for the betterment of the productivity and welfare of the community as being committed socially for the betterment of people and society as a whole.

Regionalization of monetary control: The main weakness of large scale enterprises is the concentration of economic power. In order to achieve equitable distribution of wealth and balanced economic growth, the Government has targeted to develop proficient entrepreneurs who can setup the small scale enterprise which will help in the distribution of wealth.

Solution to the problem of unemployment and under-employment: In large scale industries, the problem of unemployment and underemployment is more, It is so due to lack of resources and increase in labor force. The highly educated and technically qualified peoples get dissatisfied and frustrated with their job. In order to solve this socio-economic problem of India, government is taking step towards the development of few programs. Besides setting up of large scale industries, small scale industries are also encouraged to setup, which can provide large number of employment with the same amount of capital investment, compared to the large scale industries, and small scale enterprises are able to absorb semi skilled and unskilled labour as well, to solve this problem government should take different initiative to provide the right platform for the surplus and condensed labor demand

Utilizing youth strength: When government cannot offer work to the educated and highly qualified youths, to earn their living, they turn up to fierce activities. To reduce this factor the government should focus on different parameters, in order to reduce their frustration, anger and disappointment. The development of entrepreneurs is necessary in India which will provide self-employment work to the youth, to earn their living. Thus, they are diverted from negative activities by entrepreneurial inspiration to work for the country.

Women as a distinctive crucial group: India is a developing country where discriminating insolvency towards women is more. They are deprived of the opportunities, because of low glass ceiling; therefore, women have started their own projects in India. Government has also taken the initiative for the betterment of entrepreneurship skills among women which has increased confidence in them. The government of India launched a scheme called Association of women entrepreneurs of Karnataka (AWAKE). This scheme envisioned economic empowerment of women through the development of their entrepreneurial skills in non-agricultural activities.

In the 21st century India where nuclear families are becoming popular, the dividing line between the roles of men and women is blurring. Women are equally keen to become active participants in the economy. Therefore, the role of women cannot remain confined to jobs, but they must also engage in employment generation and bring out their entrepreneurial talent. The women's family and the society have a key responsibility to support this shift in the women's economic profile. According to general survey, women entrepreneurs are doing better and they are increasing day by day in comparison to male entrepreneurs, who are impatient and over confident to spoil their own ventures. Women entrepreneurs are found to learn their weaknesses and they try to overwhelm them through hard work and determination.

Conclusion:

India is a country of strong value system and any innovation to succeed in our society needs to be accepted by our value systems and cultural issues. An acceptance by the mass in itself is a kind of social innovation. In country like India, where the population is more concerned about making both ends meet, entrepreneurial activity can achieve sustainability only when support is provided both at the societal and governmental levels. Entrepreneurship development is the key factor to fight against unemployment, poverty and to prepare ourselves for globalization in order to achieve overall Indian economic progress. India demands high level of entrepreneurship development programs throughout the country for the growth of Indian economy. Entrepreneurial activity is the only support that can eradicate the problem of unemployment in the country like India. India has all the requisite technical and knowledge base to take up the entrepreneurial challenge. The scope of entrepreneurship development in India is tremendous. Due to the mixed economy in India, both public and private entrepreneurship exists here. Large scale sectors are under the public entrepreneurship whereas the middle and small scale sectors are under the private entrepreneurship. In order to develop entrepreneurship in these sectors, many programs are being floated on time to time by Govt. of India and State Governments aimed at nurturing entrepreneurship.

India would benefit from promoting more inclusive innovation by nurturing more formal R&D efforts for poor people and more creative grassroots efforts by them, and by improving the ability of informal enterprises to exploit existing knowledge. Existing pro-poor initiatives need to be scaled up. Inclusive innovation can play a critical role in lowering the costs of goods and services and in creating income-earning opportunities for poor people.

Innovation is a means by which entrepreneurs may exploit change in order to create new service and business opportunities (Drucker, 1985). Innovation characterizes entrepreneurship and brings about technical progress through capital-saving, efficient production techniques and higher level of output or economic growth. The entrepreneur creates and supplies new line of consumption to enhance growth in some emphasized entrepreneurial sectors to stimulate growth in various enterprises and industrial organizations.

Economic growth rates are often attributed to the role of government and entrepreneurs which is balancing and not mutually exclusive. The present day economy is knowledge-driven operating on the practical and innovative thoughts of the entrepreneur. Business set ups have become informal and oriented towards survival and self employment. Technical progress essentially results in increase in production, employment, export and overall growth of economy.

The quality of performance of the entrepreneur determines whether capital would grow rapidly or slowly and whether the growth involves innovation where new products and production techniques are developed. The entrepreneur is therefore an important agent of growth of innovations and technical progress. The development and utilization his technical and commercial skills create growth potentials in Micro, Small and Medium scale enterprises. The difference in economic growth rates of countries of the world is largely due to the quality of entrepreneurs in the countries. Production factors of land, labour and capital are said to be inactive without the entrepreneur who organize them for productive ventures.

One of the most important approaches to economic growth is the promotion of entrepreneurial activities as entrepreneurial efforts include new business, new jobs, innovative products and services and increased wealth for future commodity investment (Kayne, 1999). Indian government can develop policies related to educational and financial support to new entrepreneurs and can create an encouraging environment so that creative individuals commercialize their innovative ideas.

References:

Acs, Z. (2006, Winter). How is entrepreneurship good for economic growth? *Innovations*, 97-107. Retrieved from <http://www.mitpressjournals.org//.1162/.2006.1.1.97>

Autio, E. (2007). *Global entrepreneurship monitor: 2007 global report on high-growth entrepreneurship*. Retrieved from <http://www.gemconsortium.org//%20High%20Growth%20Report%202007b.pdf>

Bettis & Hitt, 1995; Meyer & Heppard, 2000).

Department of Scientific and Industrial Research. 2003. "Research and Development in Industry: An Overview." Ministry of Science and Technology, New Delhi.

<http://www.techno-preneur.net/> - The Technology Innovation Management and Entrepreneurship Information Service assists techno-preneurs in finding technologies, projects, funding options and information on policy environment, incentive schemes and industrial infrastructure available in the country, covering central and state governments.

<http://dst.gov.in/scientific-programme/t-d-tdb.htm> - The Technology Development Board aims at accelerating the development and commercialization of indigenous technology or adapting imported technology to wider domestic application. The board provides financial assistance in the form of equity, soft loans or grants.

<http://www.dsir.nic.in/tpdup/tepp/tepp.htm> - The Technopreneur Promotion Programme is run by Department of Scientific & Industrial Research.

<http://www.nenonline.org/> - The National Entrepreneurship Network (NEN) is a network of over 280 top academic institutions across India encompassing a 300,000+ strong student base and over 500 faculty members leading entrepreneurship programmes at various institutes.

<http://msme.gov.in/> and <http://www.laghu-udyog.com/> - The Ministry of Micro, Small and Medium Enterprises lists various government schemes for entrepreneurs Karayiannia, 2003

Ministry of Small Scale Industries. 2006. *Annual Reports 2005–06*. New Delhi. <http://ssi.gov.in>.

Mitra, Raja. 2006a. "India's Emergence as a Global R&D Center." Unpublished, Swedish Institute for Growth Policy Studies, Stockholm.

2006b. "India's Potential as a Global R&D Power." In *The Internationalization of Corporate R&D: Leveraging the Changing Geography of Innovation*, ed. Magnus Karlsson.

National Knowledge Commission. 2007. *Innovation in India*. New Delhi. www.knowledgecommission.gov.in

National Knowledge Commission. 2008. Entrepreneurship in India

Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. New York: Harper.
Stockholm: Institute for Growth Policy Studies.

www.ediindia.org/ - The Entrepreneurship Development Institute of India (EDI), setup in 1983 fosters entrepreneurship through various programs and courses

www.theindiaeconomyreview.org

Xenophon(approx 430-354 B.C.)

