

A Theoretical Research: National Innovation System with Entrepreneurship Approach

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Abstract

Nowadays many countries around the world Under competitive economy and based on present age market conditions and transitional process from an industrial society to an information society and knowledge that has been surrounded human life - have been applied a new approach in the field of development and economics In order to address the challenges, which is called development of knowledge-based economy. According to it , our country ,with a short delay, define the basic orientation on the documents and its strategic plans , especially in outlook book for twenty years, and of course, the administrators of the country has been emphasized on it repeatedly. In fact ,the twenty year perspective outlook book of 1404 as the most important document in the upstream, has been explained the general direction in the four national development plan to achieve first place in the science, technology in Southwest Asia and change Iranian society to a entrepreneurs society during the coming years. To achieve development and knowledge based economy, in our country, requires fulfill and develop three national system of innovation, technology and entrepreneurship, that it is possible by Optimum realization on strategic of innovation management at all levels of the macro (government and related departments and subordinate), middle (universities and other research centers and technology parks) and micro (researchers, innovators and entrepreneurs). This article, the position of innovation and entrepreneurship in the knowledge base development and also strategic innovation and management innovation as a means to achieve national innovation system in the country will be considered. Then, position the management of strategic innovation in the development of the national innovation system will examine. Finally, a series of operating solutions in order to achieve worthwhile purpose and of course critical and complex is recommended.

Key words: Innovation, Strategic innovation management, National innovation system, Knowledge based economy and Knowledge based development

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Introduction

A competitive and market-based economy of the twenty-first century with the rapid changes in the national and international levels is caused the transition from an industrial society to information society. Countries of the world to face this century challenges has been rely purely on a new approach in the field of development and economy that is named knowledge-based economy and development. Today due to continuous changes of the economic and social conditions, rapid changes in the business environment, the necessity of adapting to them, strategic innovation management can be considered as a driving factor in the development of national innovation system and knowledge-based economic development is achieved through it. The important matter is the organization's manager belief about regarding innovation in modern times as a strategic vision that bring competitive advantage for organizations. According to dominate the literature in this, First will be expressed the concept of innovation and strategic innovation management and then focused on issues concerning the national innovation system. Finally, will be investigated how this effect on the national innovation system and the development of knowledge-based economy.

Role Of Innovation And Entrepreneurship In Achieving Knowledge-Based Economy And Development

Nowadays, increasing growth of science and technology has placed complex and special aspects in front of societies. This include some challenges, treats and opportunities in scientific technological industrial trade in economical fields that innovation and entrepreneurship has a very important and determines role in their quality. Innovation and entrepreneurship are two so connected and determine concept in the world that is directed in different aspects. Porter (1990) has stated future battles for competitiveness isn't only for organizations but between nationals and the most important solution for increase of nation power of competes is making them more innovated [1]. World Economic Forum for an annual assessment of the competitive ness uses the twelve indicators that one of them is innovation. Also, because of the key role entrepreneurship in economic growth and development is great importance and interest is stressed. In a way that centers such as GEM reviews and assesses the state of entrepreneurship and entrepreneurial economy is also one of the new concepts such as economic knowledge based and innovation driven is cited [2]. To enhance innovation capabilities, in most countries has formed a solution named national innovation system that focused on coordinate and align the maid determine innovation factors. Nelson (1993) states more innovative nations by concept of national innovation system as a set of institutional whose interactions determine performances [3]. Development key drivers in knowledge based

society include knowledge, technology innovation and entrepreneurship. On the other hand, education, cultural development and dynamic communication are the most important elements that are emphasis in a knowledge based society. In a knowledge based approach, the main element of production is knowledge. In today's knowledge-based societies, the impact of entrepreneurship and originality are very large, so that includes from change in social values to accelerated social growth and will include things such as employment, technology development, identifying and developing new markets. Accounting and effective use of resources, encourage investment and increase the wealth of the community [4]. Heinonen (2007) In fact entrepreneurship can be cited as a that products job creativity and making high value in investment or production and displaying any goods or service Entrepreneurship organization also display new services and goods which hasn't been exist in markets [5]. Kuratko (2005) stated that these centers have a flexible structure that provides goods for small trades during first years in a dynamic and effective area and decrease first costs to make a new job and stop loopholes of these org service through Management, trade and legal consultation new business [6]. In fact, Innovative product development is highly dependent on new product ideas and product information. This especially applies to companies that obtain their competitive advantages by technological lead like the automotive supplier industry. Innovation management in these industries has to focus on an efficient idea generation, implementation and capitalization, and on technology tracking [7]. In general Conclusions, it can be noted that nowadays, entrepreneurship and innovation is cited as an agent of since based economic development and through the development of science, technology and economy of the country and thereby increase productivity create jobs and change expand the social welfare [8].

National Innovation System With Entrepreneurship Approach

In recent decades, many countries, especially developing countries that were aware of their ignorance in the area after the start of the industrial revolution in Europe, moving towards development were pursued. At present, the rapid procedure of this shape of development is based on the axis of knowledge, technology and innovation. The path to development based on knowledge, Technology as an important instrument for development and also the key factor to compensate for the backwardness of the developing countries in the shortest possible time, is considered. Due to this, the process of achieving superior technology and continuous assessment of the technological developments in all countries is highly considered. In this direction, every country in order to obtain new technologies should be planned and coherent and targeted actions to enforce that it will be available in the countries with the implementation the system with entitled "the National Innovation System". In fact, it is a knowledge-based development infrastructural because of its development emphasis on facility the process of translating knowledge into technology and then product / service or chain of ideas to product / service and at finally it is wealth so the optimal fulfillment of this process needs to create an appropriate context and requirements in terms of national innovation system. In other words, it is expected that within the national innovation system occurs: academic studies by considering the needs of society and industry, creating pure and commercialization ideas by creative people, empowering innovative individuals to transform ideas into product / service marketable and the wealth generated in society by entrepreneurs through integrating the above steps. Of course, this stages and process are generalizable in the macro, middle and micro level. It should be noted most studies about national innovation system occurred in developed countries while in developing countries, this system was less fortunate and emphasized. So these countries in order to achieve balanced and comprehensive develop are forced to design an exact and science the national innovation system.

Strategic Innovation Management

Innovation in organizational issues is one of the important tasks of management and the every membership in organization is. Due to the organization interactions organization with its surrounding environment and the plenty impact on environment, in organizational processes, managers should for planning and institutional operations ahead always are creative and innovative. Also environment can expose organizations with the challenges and enormous threats. Thus, organizations in policy making and planning processes, to achieve the desired goals instead of stasis and stagnation must with the transformations and the dynamism consecutive be able to actively interact with their environment and thus it ensures organizations durability. Today, the dynamism and innovation organizations are indebted to innovation and creating new ideas is in the process of enterprise applications. To define strategic innovation, Consideration of expression and definitions that others give it can be beneficial. Hamel and Prahalad (1989) on strategic intent say "enable a company to create new industrial space and facilitate the creation of new markets" [9]. Markydz (2000) knows Strategic innovation as a completely different method of competition in the industry that by breaking the rules of the game and think the way will appear [10]. Krinsky and Jenkins (1997) using creativity and innovation to break the rules in order to gain competitive advantage to know [11]. Tachmn (1997) describes the ability to manage the divergent as converge current leading to new markets and rewrite the rules of the industry [12]. Hamel (2001) stated that the goal of business model innovation is" create a great diversity strategic in market and competitive environment [13]. Markides and Charitou (2003) define strategic innovation like this: Innovation in business model similar to playing in a game with a new approach that Strategic innovation as a player who employs different business models [14]. According to Gavin Darjn Trimble strategic innovation and creative deviations from traditional methods in at least one of the following three areas: the architectural design of the value chain, new concept of

transferring funds desired to customer or define the potential customer [15]. The firms based on the knowledge of science and technology are considered a crucial chain in converting research and development investments into economic value within national innovation systems. Being actors of concrete national innovation systems and depending on broad contextual conditions, knowledge intensive firms differ from country to country and face context-specific innovation development challenges, and consequently, develop original context specific approaches towards innovation management [16].

Results

Current conditions and recent changes in the world, in different fields, the world has faced with major challenges that all of them have a common basis of knowledge, technology, innovation and entrepreneurship development. Modern humans in order to directing activities and programs in national and international levels, chosen new approaches in the field of economics and national development that centrality of all matters is located science and technology more than ever, in the macro, middle and micro parts. Today, this form of development is termed knowledge-based development which is relies on the knowledge economy. In fact, in order to expand national innovation system, it's necessary to provide infrastructure requirements and prerequisites abundant in the macro, middle and micro levels. One of the basic requirements that should be considered. In the establishment and development of national systems of innovation, technology and entrepreneurship particularly the national innovation system, provide the appropriate context realization of the national system formation, means achieving knowledge-based economy and development, is one of the basic requirements. Today, this new approach of national economy and development, based on their recent form as an entrepreneurial university, the roles and functions of Universities is: including knowledge creation and its conversion to technology expending culture of lifelong learning, supply of highly skilled human capital requirements and development of knowledge-based innovation and entrepreneurship. Also the interactive roles and responsibilities of government, in his new position as knowledge government include: creating the appropriate context to realize and establish a dynamic interaction between knowledge systems, technology, innovation and entrepreneurship, policy, planning, management based on knowledge in various issues in the community, guidance, Structural and functional changes, the basic institutions, industry and promoting cultures of innovation, entrepreneurship and lifelong learning among majority of the community [17]. In general, knowledge-based economy as the most suitable form of the national economy system in path for achievement of developing a knowledge-based is been considered by macro policy makers and planners. It can be said, the development of this system requires a comprehensive and systematic look into all relevant areas that create believable and serious intention in managers and part of their subsidiaries, preparation and coordination between the private sector and majority of the community with regard to international cooperation is its priorities. In other words, in order to develop a national system must simultaneously considered to the development of large-scale systems (in national and international levels of science, technology and innovation systems) and sub-systems (especially in academia and industry) and be noted to expand it with entrepreneurial approach.

Conclusion

This study whit examined effective practice in the promoting the level of national Innovation System, knows Expansion areas of science, technology and innovation depends on enhancing engagement with innovation systems internationally, that this is mandatory for this field managers hereby give maximum benefit from the successful experiences in the areas international development, strategic innovation management at the macro level, intermediate, and small gain. Also officials must in order to identify and provide prerequisites for the implementation and development of national science, Technology, Innovation and Entrepreneurship systems promote and institutionalize a culture of scholarship, thinking, ideas, innovation and entrepreneurship in both general and special deals; and operate specific planning for the three institutions of government, academia and industry to operate. According to the required the implementation of a knowledge-based economy and development as the foundation for the formation of the NIS (National Innovation system) as it was emphasized in the related resources, It is appropriate that provide Actions and areas of required in order to realize effective knowledge-based economy and development. Definitely, government support for entrepreneurs and businesses for their support multi-Based Centers ,such settlements scientific research and technology, science and technology parks and incubators, business service centers, technology centers and other similar facilities, and their interactions with each other in order to complete the chain idea to product, is a big step for achieving the desired objectives.

Reference

- Porter, M. E. "The Competitive Advantage of Nations" New York, Free Press, MacMillan, 1990.
- Heinonen, J. "An Entrepreneurial-directed Approach to Teaching Corporate Entrepreneurship at University Level". Education and Training, Vol. 49, No. 4. 2007.
- Nelson, R "National Innovation Systems : A Comparative Analysis, 1993.
- Lin ,Carol.Yeh-Yun and yi-chiy. Cher ,Mavis , "Does innovation lead to performance? And empirical study of SMEs in Tawian". Management Research News Vol.30 No.2 ,pp.115-132, (2007).
- Arroundt, R. "Incubators too for Entrepreneurship" Institute of management consultants of Jordan (2002).
- Heinonen, J "An Entrepreneurial-directed Approach to Teaching Corporate Entrepreneurship at University Level". Education and Training, Vol. 49, No. 4. 2007.
- Kuratko D. F. and Hodgetts R. M. "Entrepreneurship: Theory, Process, Practice", Mason, OH: South-Western Publishers,2005

- Neumann M. and Riel A. and Brissaud D. "IT-supported innovation management in the automotive supplier industry to drive idea generation and leverage innovation" *Journal of Software: Evolution and Process*, Volume 25, Issue 4, pages 329–339, 2013.
- Hamel G. and C. K. Prahalad "Strategic Intent." *Harvard Business Review* 67(3) May-June: 63-76, 1989.
- Markides C. *All the right moves - A guide to crafting breakthrough strategy*. London :Harvard Business School Press, 2000.
- Krinsky R. and A. C. Jenkins ."When worlds collide: The uneasy fusion of strategy and innovation." *Strategy & Leadership* 25(4) July-August:36-41, 1997.
- Tushman M. L. "Winning Through Innovation." *Strategy & Leadership* 25(4): 14-19, 1997.
- Hamel G. *Das revolutionäre Unternehmen: Wer Regeln bricht gewinnt*. München :Econ,2001.
- Markides C. and C. D. Charitou ."Responses to Disruptive Strategic Innovation." *MIT Sloan Management Review* 44(2) winter: 55-63,2003.
- Govindarajan V. and C. Trimble ."Strategic Innovation and the Science of Learning." *MIT Sloan Management Review* 45(2) winter: 67-75, 2004.
- Petraite Monika "Approaches towards Strategic Innovation Management in R&D Intensive Sectors" *Social Sciences, Socialiniai Mokslai*. Nr. 3 (69), 2010.
- Shafiee, Masoud "University and Industry Relationship" Tehran, Amirkabir University, 2003.

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