Middle-East Journal of Scientific Research 6 (4): 412-417, 2010
ISSN 1990-9233

A Short Review on Entrepreneurship in the Field of Evolving Nanotechnology

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Abstract: All Employments related to Nanotechnology field are different in products and processes that they produce. Many developments in Nanotechnology, like to all inventions and other creative ideas, finaly originate from the man's mind, whether this man is a particular person or a small group of people. But this inventors act in defined and specific business places like universities, state laboratories and companies. A Entrepreneur in the Nanotechnology field for finding needed basis for his or her company, shoud pay attention to the viewpoint of inventors. Entrepreneurship in the field of Nanotechnology has Priority because Nanotechnology revolution is internationally the first industrial revolution that simultaneously developing in the different parts of the world. A Entrepreneur in this field knows well that Modem technology always leads to new job and opportunity. We can see some public Rumors and statements based on the fact how Nanotechnology would change the world, around Entrepreneurship in the field of Nanotechnology. In this mini review we will discuss above mentioned concerns.

Key word: Nanotechnology · Entrepreneurship · Change · Technology · Revolution · Company

INTRODUCTION

The Relationship Between Nanotechnology and International Entrepreneurship: The first industrial revolution is basically a phenomenon belonging to the Great Britain, even though it quickly became spread abroad in the developed countries of Northern America and Europe (Indeed, Germany and United States look the lead from the Great Britain in the way of measure of becoming industrial, till the end of 19th word war. Economy of lots of Countries tend to being industrial and creating broad and powerful producing foundations, but, in whole these countries remained behind the European Countries (Such as the Great Britain) and Countries of Northern America in the course of technological and Scientific development and creating invention. In the second half of the 20th century, Industry of Europe and Northern America extended their geographical region, so that they could transfer parts of their production actions to countries known as countries of third world like china, Taiwan, India, Indonesia, Malaysia, Mexico and other countries of Asia, Latin and South America and to a less degree to some of America in the course of technological and scientific development and creating inventions. In the second half of the 20th century, Industry of Europe and Northern America extended their production actions to countries known as countries of third world like China, Taiwan, India, Indonesia, Malaysia, Mexico and other countries of Asia, Latin and Latin and South America and to a less degree to some of African countries [1-2].

The speed of this goes higher in the final decade of 20th century and is the early of 21th century. the main reason for this transition was simple and the cost of performance of these actions was lower in the above mentioned countries in comparison with other countries and or in the other developed countries. the root of this fact was based on five main effects as following:

- Transferring a considerable volume of west courtier's currency (mainly) united states to these countries.
- Sending the most clever students from these countries, Because European and North American Schools of first class resulted that a major source.

That are entraording trained could appear among the citizens. Whether these people have lived in their own countries or have come from abroad.

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- Producing modern industry and Sub-Structures in the mentioned countries.
- Providing opportunities for citizens of highly trained to come back to their countries, so that they could get employed or that they could perform their own personal profession action.
- Decisions of mentioned countries for that all of capitals a quire by this way to be invested in the structural from of Nanotechnology actions and also social substructures necessary for supporting and protection them. But it is important for Entrepreneur in the field of Nanotechnology Because Nanotechnology revolution is the first industrial revolution that correctly happened in a lot of parts of the world. this opportunity that one can participate in this golden field from the beginning has been so tempting and different countries in the world invested considerable capitals to the authority of their universities, laboratories and commercial institutes to help them in the field of invention, acquisition of the right of exploitation and economic competence with powerful European countries and Northern America that any way trained the best and the most brilliant talents. Then the major difference between Nanotechnology and other cameral fields of industrial revolutions as following items:
- A Entrepreneur of Nanotechnology can relate its favorite and regarding technology in any country with inventions that are done in the field of Nanotechnology all over the world.
- Students are better to access capitalists in any region of the world to establish their own company.
- A Entrepreneur of Nanotechnology can put their company in working order with focus on its internationality and announce its presence in a number of countries in order to make profit from local specialists or available employees.

As an instance, we can see that a Northern American or European Nanotechnology company, has established R and D in its mother country or perhaps in other countries that's the source of this technology. and then in another country it constructs its own production plant and she can hire some employees that are well-trained and even he can receive financial aids from government and send to other various countries. Sometime this kind of distributed structures were the only distinguished manner of major companies, But even relatively small companies also can be actually international, by providing quick traveling and their relations [3-5].

Therefore, A Entrepreneur in Iran can establish a company in the territory of one field. and then find another technology in Born Switzerland university to complete and extend that technology received from Iran. Then she can found a Swiss company in order to gain a license in frame of product for further development of this technology that in the end it can be built in a productive company placed in Tanzania. Global nature of trade and Nanotechnology is such that this scenario that even until the 1990s it seemed unbelievable, appeared to be more practical every day. If a Entrepreneur in the field of Nanotechnology is agreed to have successive competence in the world level, they should think so generally and creatively. S/he should seek for useful and advantageous technology, irrespectively to in which spot of the world, this technology has been invented.S/he should put into attention the best method for exploitation of the technology that S/he has gained its license when necessary even if this requires his/her company to be placed in multiple spots of the world and have some subordinate branch [6].

The Relationship Between the Development of Technology and Entrepreneurship: In the history, man had invented modern technologies to make his life easier. This modern technologies need new skills that makes specialists to be able to use them. the specialists are establishing commercial institutes in order that they can use their skills based on this modern technologies to produce goods or present services in order to new opportunities for job be established, so technology and job has always moved toward together i.e. whenever the men invented a modern technology, there also have been produced some opportunities to make use of them, even though, having job in contemporary era has become a new structure, but it is thousands of years that mines' structures are been presented. so the following relationship is always confirmed [2-7].

New Job = New Opportunity = New Technology: Modern technologies provide new opportunities for mentioned technologies to be applied and these applications are themselves a source for producing new jobs. This fact has been true in the whole history, from the time of invention of wheel to the invention of Nanotechnology. A technology remains as an abstract and single curiosity, without having useful applications and remains unknown for others except for interested people to a high extent. But when some of its applications are appeared, there is a need to a job or equivalent to that to make complete use of it.

Entrepreneurs are confronted with a wide range of choices in the field of Nanotechnology to make their work started. this job necessarily needs not to be done only on the basis of building or selling a particular Nano technological production. there can be some be under use whitely. some of them suitable for producing products. So, someone who makes jobs in the field of Nanotechnology, should encourage such a lateral products. The more available lateral products be, the more acceptable and authentic his/her products will be known.social acceptance of a product helps the development of the market. Revolutionary technologies like Nanotechnology that have capability to be used in broad applications, not only provide opportunities in the field of a particular kind of technology,but also provides some opportunities in using and supporting them. Range of this applications and supporting that done by them and as a result, opportunities provided, are only limited to human's imagination potential that is basically topless [3-5].

An Alarm to Entrepreneur in the Field of Nanotechnology: Entrance of a new technology is always faced with some oppositions. Luddite movement formed in England in the early 19th century was basically a reaction against the entrance of big weaving instruments and fear from creation of changes both in the fields of hiring human forces and confirming the price. Recently, there are oppositions against Nuclear power, Biotechnology and especially organisms that are genetically changing (especially nutritious products) Nuclear power industry in US is basically stopped, while in Europe,the use of nutritious products that are genetically improved, caused some conflicts, that if we suppose that at an this technology someday become publically used, in practice it doesn't seem that enters in the stage of being publically used so soon. Biotechnology that means open technology in combination of DNA, is also confronted with its particular disagreements. But, such a subtle look has not been focused on technology of Nano yet and also disagreements have been done [3].

Fortunately, discussions have been started about Risks and advantages of it and researches are done or are being done to examine Nano technological products' effects on organisms and environment. But among more than 200 products that are labeled by Nanotechnology in the markets of all over the world, only one of them was exposed to be built in this way because of their unsuitable effect on Nano tubes and Carbon flamers indicating taxi light (Tenanted effected on nerve system). Another case was about the effect of poisonous effect on the lungs of rat. Although confirming this findings and also understanding them may require more investigations, this reports convey that Entrepreneurs should pay attention to problems related to environmental and Biological effects of Nano technological products. in additions, it is possible that methods that are used to evaluate environmental and Biological effects of products and Nano technological processes to be unsuitable too and new methods should be designed to provide more job opportunities for Entrepreneurs in the field of Nanotechnology [4-7].

This questions in none way is related to Nanotechnologically built product. A circulation of trash and hypermetrical materials are produced in every production process and this circulation of additional materials should be supervised for Nano technological products, too. Nano particles that are smaller than 100nm in dimension pass from even the smallest filters often used (like the dimension of 0/22 Micron or 220 nm) and as a result other methods are required for analyzing and integrating Nano materials from the production processes.

Furthermore, there is a very high possibility that Nano particles come from the air and therefore, filtration of aerobe needed. this facts can be of high importance's for staffs who work in the environment of productive factories in the method of Nano and also for those who live near these factories. In the production industry of mid-conductive materials also other industries, neat rooms and coving clothes of the whole body is common, but it is possible that it is needed for this protections be confirmed individually for each of the Nano technological products and processes, in other words, there can be a lot of opportunities for Entrepreneurs in the field of Nanotechnology that as a result problems are appeared [4].

Thinking of Entrepreneurs on Transformational Technologies: A number of worlds technologies are changed, but this task is done in the view point of their effect on creating jobs but not on their sociological uneconomical effects. the goal is for Entrepreneurs in the field of Nano technology to act on opportunities such as science of Nano and technology of ideas, new and existing inventions in a very generally way.

A New technology always causes to transformations changes in the society the range of effects of some technologies are relatively limited, but other technologies may create deeper transformations. Consider the different effects of the gas lighters that replaced with match,

also the replacement of stalls pulled by horse with Automobiles. in both of above examples, a new technology replaces with another technology that has exactly the same output, however, gas lighter affected the society relatively a little, where as Automobile put a deep effect on society and environment some of technologies that have changed the world are Whet, money, gunpowder, stem engine, meechirary transformation, quick relation open technology of integrating DNA, computer and Internet [1-7].

Differences Similarities of Nono Technology with Other Transformational Technologies: In territory of Nanotechnology topic, there are some vulgar, rumors and statements based on the fact that how the Nanotechnology will change the world, that shows it very different, special and even dreadful. these differences effects on Nanotechnology engineering and scientific aspects in many ways, especially when that this topic gets clears and lots of characteristics of the material in the scale of Nano are different from characteristics of this material in higher scales. And even if the process that are used by this bobs to produce products are so different, but for opportunities provided creating these jobs, there no difference with other technological developments. Although methods that these new opportunities conforming themselves with economical structure of Nano technologic world by them can be different. All of the persons of distinction, analysis and interested people in the field of Nanotechnology agree that: Nano technology is Great. So great that will create the next industrial revolution and will cause market of some billion dollar with all of the possible manners, then, if this industrial revolution is similar to the past, what's the difference?.

Industrial revolution basically caused creating and changing the way in each parts of trade and task was known till 200 years ago a longer period. In a subtle word, Entrepreneurs which have understood its ability for creating products, produced a million jobs and made attempt to prance theses goods and products and an unclear number of other producers, too, were disappeared by two reasons that are Their products were out of fashion and the secind is They couldn't confirm their selves with modem technologies [5].

In the end, this new commercial actions approximately put into their work all of the imaginable fields (from production of rubber to the production of space shuttles). Number of lateral jobs various supporters created is very high that include taxi drivers to lawyers specialist in the field of the high of exploitation.

All of these jobs are started by Entrepreneurs. Although those people who these jobs was their own thought, at the end, may have stopped the companies founded by them. Daily and in all spots of the world, using different technologies and making profit of them in any type of methods, Entrepreneurs have started jobs. from this aspect, industrial revolution exits with this steady process that daily and making profit of them in any type of methods, Entrepreneurs have started jobs. from this aspect, industrial revolution exists with this steady process that daily in the new knowledge, new technology and different inventions are done and new method that are decided for removal requirements rising from human's mind's fruitful imagination potential continuously is going on. From creating job opportunities point of view, there is no difference between appearance of Nano technology and industrial revolution. It's basic science and engineering may be different but applying this engineering and scientific progress. Continuously, results in producing goods and new products, those lots of them are replaced with current available products and that would produce other productions, too, in the completely new markets[2-9].

Processes and Nanotechnology products resulted in creating jobs in many spots of the world and this process continuously goes on with a lot of new inventions done. some of ambitious Entrepreneurs have observed these opportunities and take the next step, that in so doing, they would start a new job action and some of these jobs maybe so successful and perhaps some of them will fail based on some reasons. There is no difference between this topic and the previous technologic developments.

Previous technologic revolutions that made changes in the world, were mainly based on a concept or an invention. Wheel, portable money, gunpowder and engine power.Computers and Internet and open mixture of DNA, were broken and unsteady inventions that produced various industries and lots of jobs based on them. Nono technology is not a broken invention, although a lot of inventions are created and will be created that are under that title of Nano technology. general term that is used for declaring the ability to perform particular tasks on the material in the atomic and molecular scale. To construct products that their more production was not possible [2].

The science of Nano and Nanotechnology from carbon nano-tubes to single electrons transistors makes it possible to affect on any parts of jobs from consuming goods to space investigations. Another main difference between Nanotechnology and other technologies is that Nano technology was a global favorite topic from the first

this being interested is thinkable in the number of countries from two aspects, that are From construe chive and investigative attempts point of view in the field of Nanotechnology and the second, They put their capitals into work by the measure point of view. Therefore, these countries not only made investments, but also began to produce different kinds of plans and guideline programmers to create a commercial action based on Nanotechnology in its countries economy. In some cases, countries began to participate with each other to create regional Nano technological industries and plans [9].

The Process of Acquiring the Right of Exploitation by Entrepreneurs in the Nanotechnology Field: Development and research starts in many Nano technological countries about knowledge, invention and the right records that originate from state laboratories and universities. After that these new established companies started working, Present their particular inventions and begin to from record cases especially the actions that are entirely done in their own laboratories, but in primary stages of their task, they acquire the right of operation of inventions or in other words, operation licenses of other sources.

The process of acquiring license for a nana products includingthe bellow parts:

- To recognize the intended goods.
- To integrate information as much as being able that this fact could include acquiring confidential pieces of information.
- Evaluate technology of intended product from the point of view of capability of finding market given profit.
- Negotiate with those to give license on financial problems and other important conditions.
- Fill the paper which is signed by two parties and talk about formal documents that mentioned salaries are gained by them.
- Receive the right of public record for production of goods that non-restricted licences are easily available for them.

CONCLUSION

All the persons of distinction, analysis and interested people in the field of Nanotechnology do agree that Nanotechnology is great. Such great that created the next industrial revolution and make a market of thousand billion dollars with all of the possible forms. Entrepreneurship in the territory of Nanotechnology is developing quickly in developed countries of Northern America and Europe. In other words, Nano technology has covered many parts of the world and made the above topic for the third world countries like Iran a very tempting golden field and opportunity Because the Nanotechnology Entrepreneur in Iran can find intended and favorite technology and product In any country with modern in venations and start to work its company with focus on being intra nationality for at least countries of the region. In a Nanotechnology company from the commercial and Entrepreneurship point of view, creating product, developing production process and developing the same production are of important processes. Most these attempts are done for developing product and process with the extension of Entrepreneurship teams. These teams are composed of people with different skills to develop product or process. Nanotechnology created new opportunities for making new jobs, so that confronted a job, asker with a broad range of new options in the field of Nanotechnology. The entrance of nanotechnology in the world's territory can be faced with disagreements in the future, because it will cause to various changes and transformations in the world.

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