Technological Innovation and Its Role in Promoting and Facilitating the Process of Organizational Learning in Small and Medium Enterprises

[1]Satoutah Samira, [2]Rouabhia Meriem
[1,2]Dept. of Information and Communication Sciences, Baji Mokhtar University, Annaba Algeria

Abstract
This study aims to identify the role of technological innovation in promoting organizational learning in small and medium enterprises , from the premise that organizational learning is a key step in the learning organization as an appropriate climate for the adoption of organizational learning for sustainability success within the organization , and keep up with the pace of competition in an environment of rapid and continuous change in terms of mutations and technological achievements unprecedented .
As small and medium enterprises are one of the sources of innovation, so that she excels at large institutions in terms of the number of innovations. Necessary to know the status of renewal in general and technological innovation in particular and its components, and then its effects on promoting the success of organizational learning and from the stand and see the subject in the small and medium enterprises because of the latter's role in achieving economic growth, as well as its contribution to the absorption of unemployment through the availability of jobs, which is no less so for large enterprises.

Keywords
Organization, Relationship, Innovation, Technological Achievements, Enterprises, Organizational Learning, Administrative Work

Introduction

Witnessing the global environment many developments and rapid changes in the various fields and areas , which has made organizations face many challenges and difficulties in how to keep pace with the surroundings and the way in which the adaptation. This prompted to change the institutions to new style replaced traditional forms is a pattern learning organization or learning organization , it has a learning organization a new vision in the field of administrative work are quite different from the philosophy of traditional organizations emphasizes the need to create and acquire knowledge and transported quickly to all levels of management. That encourages the learning organization on organizational learning and seeks to establish there a close relationship between them is considered as a relationship of containment can clarify this relationship through a link why the result , as it cannot be a process of learning organizational effective without incurring by building organization learnable .
In this study, we will focus on organizational learning and the contribution of technological innovation in support and facilitation within the organization, organizational learning as a key step for renewal in general and technological innovation, especially in organizations. Usually characterized by technological innovation devised a new method for the production of, for example, a new machine more efficient, or a new way of organizing within the institution , taking into account the flexibility , as the organization renewal of technology to meet the new conditions and the adoption of technology that accrue interest , as exemplified by technological innovation in the introduction of the means of modern production or change ways and production plans .
With this in mind we'll examine the subject of the study in the small and medium enterprises as an important strategic choice in the process of economic and social development of income, especially developing countries, in the light of the previous offering of this research will attempt to answer the following question :
How does technological innovation in facilitating the process of organizational learning in small and medium enterprises ?

The first axis: The nature of the learning organization and organizational learning

A - Learning Organization:

Turn the researchers to study the concept of the learning organization from multiple angles and from different aspects , each according premise adopted as a means of building , as there is more than a term used by researchers to indicate the learning organization such as : organizations knowledgeable "knowing organization" and organizations Notepad "thinking organization", eligible organizations "qualified organization" and organizations seeking to learn:

1. Concept of the Learning Organization

This concept can be understood more precisely, through the presentation of some of the definitions that came out the most important thinkers who have written on this subject, and is the American researcher "Peter Senge" first laid down the principles of the learning organization through his book, "the fifth discipline" in 1990 , where it is known to the institution in which it operates independently and everyone collaborator to develop their abilities constantly in order to achieve the results that they want , which seeks to develop new patterns of thinking , and develop its own set of goals and aspirations of the collective , where members learn continuously and collectively [1-2]. Custom learning organization as the process by which members of the organization to detect errors and correct them by changing theories work for them. Learn the organization when we gain knowledge in all its forms, whatever the means used (information , skills , techniques and practices) [3] .
Sttar Abboud (2008) has been defined as the organization in which each and every one of the workers required solving problems and making the organization is able to try to change , constantly improved in order to increase their ability to grow and learn and accomplish its purposes [3-4]. characteristics of the learning organization and the most important advantages : And the following are the most important characteristics of learning organizations as referred to by the phrase from the book:

- It is adapted to organizations with its external environment
- Play a breakfast Play and promote innovation .
- Have the skills and motivation to enhance the process of continuous learning, and the ability to learn and change.

- Available to have a regulatory environment that nourish learning and keen to learn collective and individual.
- Consider that everyone in the organization is a source of knowledge has.
- Keen on joint leadership with employees and encourage them to find ways to develop new products and services, as well as to encourage them to participate in decision-making.
- Organizational culture based on Accosting and transparency.
- Anticipate future changes in the environment and the ability to adapt to its effects .
- Freedom of experimentation and risk taking and acceptance by mistake, and considering lessons to be learned .

1-3 elements of the learning organization :

Summarizes elements of the learning organization with three main components [6-7]:

(i). Concepts (Concepts)

It includes concepts and ideas and abilities, techniques and methods that contribute to the process of learning and knowledge generation and then innovation and renewal.

(ii). Workmanship (Competence)

According to the skill and ability to work brilliantly and the completion of tasks and activities so ably and take advantage of the mistakes that emerge from the learning process that translates the behavior serves the practical organization.

(iii) Communication

(Connection) and includes mutual interactions and dialogues stature to accept others' opinions, cooperation and exchange of information and nutrition, generation and differentiation of them to continue in the process of knowledge generation.

II. Organizational Learning

Occupied the subject of organizational learning organizational learning wide attention by researchers and practitioners in various fields, and resulted in a multiplicity of visions and varying angles and axes and dimensions provided by the scientists and researchers to explain the organizational learning according to their specialties and interests and philosophies, and the era that has emerged in which their studies and their compositions .

A. The concept of Organizational Learning

Appeared first attempts to define the concept of organizational learning in 1974 by (argyris & schon) in their book "organization learning" as you view the question forward Organizations must learn ? , And since that question exploratory made a lot of efforts to identify and define learning in organizations and Askchav various dimensions. Below we will cite the most important statement by the researchers in their definition of organizational learning:

Argyris et Schon pointed to the organizational learning that process by which members of the organization to detect errors and correct them by changing theories work for them . When you learn the organization gaining knowledge in all its forms , whatever the means used (information , skills , techniques and practices) [8].

Senge (1994) defined their method by which detects individuals in organizations Ebastmrar how they are the ones who make up the reality in which they work and how they can change that reality [,.Fiol et Lyles (1985) stressed that the process of improving the procedures carried out by the organization in order to use Astaab information in a better way [10] .

In general, and through previous definitions we can draw the definition of organizational learning as "a continuous process aimed at acquiring and sharing of experience and knowledge at the enterprise level for use in the face of different positions , to be adaptable to changes in the environment surrounding the right pace , and that the achievement of individual learning and collective ongoing in order to reach the organization to the state of the learning organization .

B. Levels of Organizational Learning

Consideration of learning levels sheds light on how to deal with learning and requirements. This means that what we will present to him after learning levels and functional to serve the learning process and management , and the latter has three levels which are :

1. The Individual Level

Relation to individual learning done by the individual himself this learning be less formal and the legalization of the organization, because it distinguishes between the times of formal learning (classical configuration and self- configuration) and times of informal learning (learning through accumulation, tradition , experiences , exchange with members ...) [11].

Where individuals are trained to rely on themselves, and be regarded as a relatively permanent change in behavior of the individual and occurs as a result of the experience gained from previous experiences or practices . In order to learn the individual must have a specific goal sought to be achieved and that has the desire and ability to learn , then, individual learning is the process of creating and acquiring knowledge by the individual [7].

2. The Collective Level

Collective learning means learning that being done by teams of individuals working through the work carried out at the level of the group and in a cooperative manner and participatory . The role of management required at this level of learning because it is not in the organization and opportunities for the command , but in follow-up and facilitate the learning process [8].

Considering the difference (teams) are the wheel that drives the process of organizational learning Perhaps the most important characteristics is its ability to mutual discussion explicitly between all members in these discussions to be all things open between members are also learning them in a cooperative manner participatory and have a common vision of seeking through which to reach to a unified goal .

3. The Organizational Level

Organizational learning means the organization that you learn through experience and save the results gained through the activities of its members. The level of learning in this case, in which the exchange of knowledge, information and experiences between individuals regardless of organizational levels and strategies, procedures and policies that hinder the learning process and cause problems in daily work.

These three levels integrated with each other, the individual, learning develops and supports collective learning and vice versa and collective learning that supports organizational learning and develop the organization and live up to the learning organization, and this is illustrated in fig. (1) [7]:

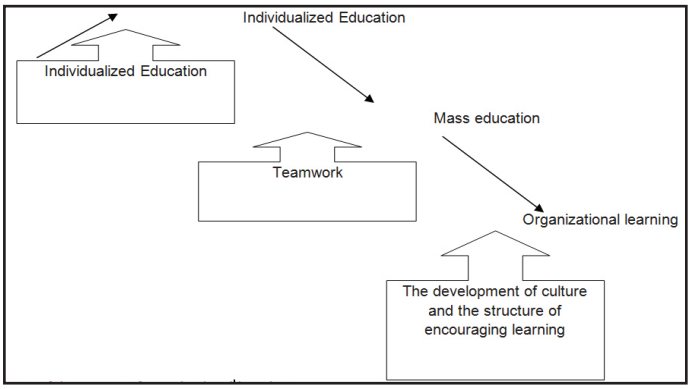

Fig. (1) : Levels of learning

C. Stages of the Process of Organizational Learning

If we consider that the process of organizational learning formed the basis of several steps and stages, the question arises here is how is the process of organizational learning in the organization? In this regard foot model Charreire petit which Rkzaaly five stages of the learning process [12]:

1. Detection Phase

In this phase is the announcement of the desire to develop a project, where it is put up or view the goal of learning on a group of actors, who must develop the collective learning in order to implement this project.

2. The Packing Stage

At this stage, the team in charge of the project displays on the actors change the formal structure to manage the project, he is trying to get the docking and the acceptance of all the elements of the organization involved in the project.

3. The Stage of Production Experience

The heart of this phase of the project, which could be where the emergence of two types of experiences. Experiences directly related to the project which is the subject of the so-called "intensive experiences (expériences centrées)" on this project, and the other is not directly related to the topic of the project and the so-called "expertise is concentrated (experiences delocalizes)".

4. Stage Test

The analysis of changes in the organization, whether in practice or in cognitive plans that lead these practices.

5. Phase-Dimensional Coding

Allow this stage logged practices gained in Routines regulatory and remove those that are not satisfactory, during which also modify the organizational memory logged knowledge implicit and explicit, which was created through the project are also circulating and sharing of experiences that have been produced either focused or unfocused [12] . See fig. (2)

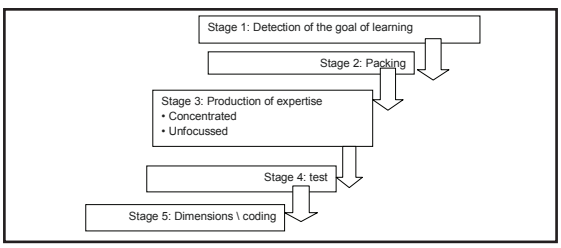

Fig. 2: Model for the Stages of the Process of Organizational Learning

Axis II : Renewal in the organization and technological innovation

1 - organizational renewal

Occupies renewal importance of excellence in various fields of life as a form finest essential characteristic of contemporary business environment , it focuses on the renewal of ideas , methods, and methods of work , and there were many definitions of renewal in accordance with the views of interested parties, but have overlapped and mixed up between several other terms , including: innovation , creativity , The invention , creation ... Bringing the use of these phrases are more recent improvisational , without chapter in their meanings , and focus on the difference employed , but with the developments become writers and researchers are trying at all times to distinguish between these concepts and to give them the field that are used in it. Therefore, it was recommended that we address to identify and define the term " renewal " precisely .

(i). definition of Innovation

The renewal (innovation) one of the most key requirements in contemporary management , it is no longer enough to lead organizations work with conventional methods . And affiliated term renewal to the economic (Joseph alois Schumpeter) since 1912 , and which is the scene first for renewal and the first to develop a clear concept for the issue of renewal in his book (the theory of development), and are considered contributions of those of the most important ever in this area , where it is known renewal as " the result arising from or create a new style in the production , as well as all the components of the change in the product or how to design " [13].

After you define ((Schumpeter renewable eat many writers and researchers depending on their field of cognitive concept of renewal , we find , for example, Peter Drucker (1988) defined innovation as a change in the output of resources , and the change in value and satisfaction resulting from the resources used by the consumer [14].

We also find Oscar (1989) , where it is known as renewal activity leads to a product of a novelty , originality and value for the community .) [15].

Roger et Shcemaker indicated that a good or service or idea before a person is aware of the seriousness of it may be the idea of a long history , but for the person who sees new [16]. Sttar Abboud Sttar (2003) has been known as a regeneration organization's ability to reach what is new adds greater value and faster and provide a better product than competitors' products in the market.

(ii). Rankings Renewal

Made several classifications for renewal , and the first interested in dividing the renewal types is the first of interested in it as a concept and all that it involves , as mentioned earlier , a economic (Joseph Schumpeter) in his book (the theory of development) and the distinction between the types of renewal selected five forms of him : [17].

- The production of a new product
- The integration of a new production method.
- The achievement of a new organization.
- The use of new sources of raw materials.
- The opening of a new entrance (New Market).

Perhaps the most common classification which is classified as a radical renewal to renewal and regeneration Thasina (gradually).

1. Renewal radical (radical) and is reaching new product or new process, which is completely different from what preceded it , and check the organization 's strategy through which a large jump in the market, it is a major breakthrough sudden different than before . It is characteristic of this type of innovation that occurs at intervals spaced relatively, in contrast to the renewal of the partial characterized by continuity, and in our time has become one of the most important requirements of the means and efforts big and concentrated, in addition to much information and in-depth and sometimes very modern, and enables its effects on :
- The emergence of technological interruptions can have amazing effects on the market.
- The relative shares of the market could be disturbed.
- The entry of new producers can occupy a place in the market.
- The status of a leading enterprise in the market can be unwavering.
- It is possible that some institutions disappear.

2. partial renewal (out) : This type of renewal improvements are relatively small , in products , processes and procedures , and that some of these improvements may be material , although accumulation achieves a radical renewal . The fundamental characteristic of this type is the dependence on the efforts of a simple , inexpensive, and it can be based out to be a factor , or an engineer can be the means available and can be obtained without the trouble of a large , as it starts from a small idea and then develops and can limit its effects in :
- A radica renewal not only has implications for competitiveness.
- Renovations scalability individually have little effect but accumulation has an important influence [18].

And can distinguish between the two types of ex- through the following table [19]:

Table 1: Comparison Between the Gradual Renewal and Regeneration Root

Standards	Gradual renewal	Radical Renewal
Impact	Lasts for a long time but not drastically	Short-term, but a radical
Speed march	Small Steps	Great strides
Timeframe	Continuous and gradual	Intermittent and non-progressive
Change	Gradual and steady	Sudden and revolutionary
Contribute	Everyone	Few distinguished selected
Entrance	Collective, collective efforts, entrance systems	Individual efforts be individualized
Way	Maintenance and Improvement	Reconstruction
Spark	Traditional know-how and the existing situation	Technological assumptions, renovations, new theories
Scientific requirements	Require few investments, but a large degree of effort to maintain	Require few investments, but a large degree of effort to maintain
Unification effort	Individuals	Technology
Evaluation Criteria	The performance of the process and efforts for better results	Results for profits
Feature	Works very good in Aguetsae slow growth	Appropriate for good Aguetsae fast growth

1-3 stages of the regeneration process (management renewal le management de l'innovation): Know the process of renewal as a result of activities that lead to a new product or service to the market or to the service of the institution, or a new system of production, distribution, and other, ie they phases and steps of the activities carried out by the institution and adopted to achieve the renovations. To achieve this requires the provision of means and resources necessary for it, looking for the institution and save programmed in advance, taking into account the influencing factors [20].

The first level is to collect new ideas from various sources, the second level is to preserve these ideas and discuss, develop and put in the application, and to think of new uses for these ideas and the ideas of the old as well and this is what represents the third phase, some old ideas and marginalized groups are active debate and create a physical space, which forces Individuals combination of old and new ideas, while the fourth phase represents the transition to the final application and translate them (ideas) to the services or products or the method or a new economic system or enhancer.)

In addition to these stages shortcut There are many stages of the process of renewal which differ from each other in varying degrees, but it boils down to six basic stages where verification of each phase overlap with factors regenerative affects positively and looting in activated and that makes the institution reconditioned more than others, in terms of resources, technological and financial and human resources. Also for the environment and the organization, strategy and the role of managers. The following stages of the launch process of renewal:

1. Meeting the Stage: This stage show preliminary ideas, and organization must be strengthened and taken seriously as there are ideas appear automatically, as there are ideas that result from a confrontation between individuals working in the same sector. Or in different sectors, in different countries or to meet the technology, all the factors regenerative must meet to reach a goal, but the openness of the organization to its environment and its ability to assess its human resources lead to liquidity regulation and the ability of their managers to make new meetings (forming the electrodes), as can be to call this phase: perception (recognition), a key step for the renewal of the output [21].

2. The Development Stage: After available to the institution preliminary ideas are still highly innovative as a springboard to a final draft, kicks off these ideas to conform with the objectives of the organization and how to develop, where he graduated with the idea of the character of the initial especially if the individual, to be shared by the team at full competencies towards the development, composition and give it a more formal

in the organization. And collective participation here is in order to avoid ingredients that are trying to maintain the status quo or the dangers Almtertah them (Okhtaraadm the ability to market, a huge cost ...), but enrich the debate around, criticize, re-installed and make them rich maximizing productivity. This stage is characterized by the inability to renew the period of time due to the paradigm shift in the importance of the idea and the problems that can be interspersed. The effectiveness of this stage means the speed of the pro stage and the beginning of the most important embodiment of the initial Atkalp unification efforts.

3. Stage Incarnations: Here enters the idea stage to give it a physical nature, with respect to the renewal model, which requires financial resources, technology and human resources tracking application. Begins to retrace the future of the project and shows so you must take all the requirements to achieve, and choose the institution between the acquisition of new technology purchased or collaboration with another organization, especially if they are small or medium-given the limited financial resources for the acquisition of new technology. The beginning of this phase starts thinking in the commercial power of the institution, and is a good project, which is in line with the capacity of the institution of human, technical, commercial, and contrary to their goals. To succeed, the renewal should be considered in the study of the market and the consumer, and its ability to renew and Bmoasfath current, as should the institution that combines scientific and technical skills essential for the initial application for the product. Characterized stage incarnations Besauptha and complexity and increase the dangers that hamper progress if you do not improve the organization respond to and wondering institution once again the possibility of further intervention in the final stage of the renewal cannot undo later [22].

4. Pre-Promotion and Promotion: The beginning of the project to continue this stage means entered in the final experiment to be put on the market, or the application in the enterprise based on the type of renewal, the renewal gives the final shape to begin with the institution in Eith tested internally and with customers. Intervention renovations beginning of this stage in connection with the market after the Pachtbara with a sample of customers, looking for a way formal institution to provide refurbished by advertising it in various fields, professional meetings, through publicity, in the galleries and on the largest possible area.

5. And then to be able to protect the institution renewed in the competent bodies, to begin in the Note and the analysis of the preliminary results on the level of private consumers and competitors. Thus, it appears that the role of the march, he is committed to personally manage the project from this stage that require follow-up closely in order not to face rejection, spur of the shareholders involved, band and production partners and others.

6. Stage Relay (D): After enable the institution to ask renovated comes the stage of development to strengthen the project and expand the scope of application, and the institution at this stage that bloom on the environment more than the previous stages to monitor realistic reaction to competitors, and users to do the improvements and additions necessary to maximize sales, and consider expanding the market to a greater level, and in the case of the international market should be appropriate product with the specifics of other markets, for the success of innovation as an ongoing process must be maintained on the situation that contributed to this renewal and the managers keep Balodaip current and should moths in the spirit of innovation of new continue and evolve the enterprise .

1. - technological innovation:

Despite the multiplicity and diversity of renewal, but it remains a technological innovation concerns the fundamental and permanent institution, because it regards developments related to the products, taken as technological innovation, considering the status of the policy of the institution and become a resource institutions seeking to good organization and management. There are several definitions tried to clarify the term "technological innovation."

2.1 Definition of technological innovation: Use the modern sense of the term for the first time by the economic (Joseph Schumpeter), saying that technological innovation is the change of origin or necessary, this definition was contained in the English dictionary OED (l'oxford english dictionary) says " should not be confused with the constant changes and rising and sudden changes or emergency, and we do not understand, but the amendments in the course of economic life, which is generated from the economy itself through evolution. knew (Schumpeter) technological innovation as follows: "Implementation of the composition or combination of new production, has been represented in five cases the following: 1) the manufacture of a new product (...) 2) the introduction of a new method of production (...) 3) open a new market (...) 4) to obtain a new resource for the starting material (...) 5) The establishment of the organization such as creating a new monopoly position. And may limit (Schumpeter) concept of technological innovation in the first and second cases, any new products and the introduction of a new method of production or improvement [23].

I knew the Organization of Economic Cooperation and Development OCDE "technological innovation covers new products, techniques, and completed when they are introduced to the market, or its use in the methods of production, hence Valtagdidat technological intervention all forms of activities, scientific, technological, organizational, financial and commercial. (OCDE, paris 0.1994) and economic knew (J.Morin) 1986 technological innovation that "put into effect or take advantage of existing technology, which is made in the new conditions, the outcome of industrial and translated [24]. Also known generally as the reliance on means and methods of production of a new, as it is seen as something new earned by the organization. In Dictionary (petie Robert) in 1992 known as the "technological innovation is the introduction of something new is unknown," and knew (Bartal et Martin) that implements a new idea to create or improve the process, product or service. And see (Musser) as a new idea, the actions of non-continuous technique which develops after a period of time to the point where my work is used successfully.

2.2 The nature of technological innovation:

The entrance, which focused upon the previous definition of technological innovation, a rating (Schumpeter) where Rate by nature into five types or categories - as we mentioned earlier -:

New Productsϖ
new techniques for the production ofϖ
new marketsϖ
new sources of raw materialsϖ
new forms of organizationϖ

In general, technological innovation can be a product, technique, organization or institution for the market, and will take care of the most important two categories, namely product renewal and regeneration method.

2.2.1 Renewal Product (l'innovation de produit): intended to bring about change in the specifications of the product or its properties to meet the desires and how to best satisfy the needs.) [24],

(and the intended product here of goods and services as well and not just manufactured products. Can be defined as a new product when it carries new properties not previously exist, and the redesign of the product to maintain its components, is called the latter differentiation of the product, and all this To meet the needs of customers as trying Alzabon or consumer search for those products that meet the desires and needs at the lowest cost and highest quality, so bear characteristics or features additional background may not find in other products.

In a study on technological innovation in French industry, the Ministry of Economy, Finance and Industry, the French between 1998 and 2000, found that there are 34% of the institutions rely on innovation in products where the automobile industry is 41.2% of the renovations produced, while 57.6% of Pharmacy. So concerned with technological innovations in all vehicles or components and characteristics of the products, and aims to improve the products offered to the customer, and when checking in technological innovations for the product is found belonging to three aspects, namely: renovations related to the functional composition of the product,ϖ renovations technological change composition of the product,ϖ renovations change the elements or characteristics of the product submitted.ϖ With the possibility of overlap among these innovations, which may renovations own composition functional product that requires combination of technological innovations change him.

1. renew the functional structure of the product: the invention is a combination of new product or a radical change in, The computer laptop considered a renewal in the functional structure of a computer.
2. the renewal of the technological structure of the product: for the elements and technical characteristics of the product, The evolution of the camera or the TV is an example of this type.
3. renovations characteristics provided by the product: concerning the characteristics and form provided in the product, and when he was separated between IBM Corp. and Computer buttons labeled this renewal to provide the product. Accordingly, every efforts made by the institution, and efforts to bring about changes in the specifications or components and characteristics of the products, are classified as activities designed to bring about the renewal of technology in order to satisfy the product and better meet the needs of consumers.) [25].

2.2.2 innovation in the production process (production methods) ((l'innovation de procede: It is the adoption of new methods of production or improved, and thus improve the performance of both technical and economic., Something that leads to the achievement of positive results in the amount of output and lower cost for per unit, and thus make a profit. which is an all-new or a change in the device or methods of production work to improve it aims to simplify., and reduce production costs. known as the Organization of Economic Cooperation and Development innovation in the production process as the introduction of the institution of the production process of new or enhanced (modified), to allow them to increase production levels and the quality of their products or reduce the costs associated with the production process. highlights the usefulness of this kind of technological innovation in improving the performances of the production process is technically and economical at the same time the consequences of positive results in cost-effectiveness and the amount of output.

Effecting changes in production methods to improve their performance and simplify performed by the positive results, is to speed the processing of inputs and flow output and reduce production costs, any lifting of the effectiveness of the system of production, this is what allows the institution to achieve larger margins and ensure the continuity of competitiveness. And it quest for technological innovations to the production method and can be exploited to improve the performance of the enterprise style technically and economically productive, where they can be the technical side to improve product quality and speed in the processing of inputs and economic side to reduce production cost, and by reference to the statistics of the study Almzkroh previously about technological innovation in French industry, we find that 23% of the industrial enterprises of the renovations in the production process, the share of the automotive industry FIA 27.5% and the pharmaceutical industry (pharmacy) 24.4%. Although only a few percentages, but the results have been very big on the performance of institutions.

2-3 factors of success or failure of technological innovation:

2.3.1 success factors for technological innovation:

There are several factors driving technological innovation, which can be summarized thus briefly: individual factors: the most important mental ability (IQ), self-confidence, ambition.ϖ economic factors: where the availability of resources is economic is considered one of the important elements in moving the change, innovation and invention, it can be argued that organizations that are available on the resource economic prospects sufficient can provide hooves material that makes the individual focuses all his time and effort on his work, as the lack of economic resourcesϖ have a negative impact on technological innovation taking into consideration the needs and desires of the marketϖ freedom of circulation of ideasϖ quality technology before known in the marketsϖ In addition to the efficiency and effectiveness of the administrative system and style of administrative leadership and supervision and procedures and regulations, is considered the most important factors that make up the organizational climate that encourages innovationϖ political factors as well, where is the political support for the processes of technological innovation in the creation of organizations and research programs in various fields and in the allocation of material and moral incentives necessary as well as in the development of educational curricula that help pattern regenerative capacity.ϖ)[26].

Among the more motives that lead the institution to adopt new technologies is to maximize the profitability of the organization and to strengthen opportunities in order to increase market share. A set of motivations that drive the institution towards innovation and continuous technological change, such as:

1. so that organizations can maintain its current market and trying to improve it must meet the needs and desires of consumers with the best possible how. For this institutions find the solution to invest in technological innovations own methods of production that enable them to introduce new products to the market its competitive advantages are different, and therefore we can say that the investment in such technologies can institution of developing new products saturate the needs of consumers and enhance the ability of the enterprise competitiveness.
2. Institutions hurtling towards technological innovations because of their desire to avoid adverse developments in the markets of resource inputs needed by the organization, for example, the trend toward automated and may be caused by the high cost of human

labor and the rise in prices of raw materials.
3) organization cannot afford to isolate itself from the outside world in the long run, especially this world characterized by new technological renovations continuously. Thus it can be said that the institution that ignores technological innovation and do not update their technologies may cause a problem and have developed a competitive bad compared to competitors and what should be noted is that the institutions that enable their technology, they can be a competitive advantage based on either affectation least or providing goods distinct, At the appropriate time, and this is what earns a highly competitive institution well.).
2.3.2) factors, the failure of technological innovation: the most important of these factors are:
bad evaluation of the markets϶ strong competition with various institutions϶ fluctuations and the impact of various changes϶ production costs or exploitation϶. Ocean political bad϶ absence or poor marketing strategy϶ resistance management organizations of any desire to change.϶ This is due to the change in the situation of abandoned accustomed administration them for long periods, which kills an atmosphere of renewal.
Lack of motivation and methods of encouraging excellence and technological innovation϶ lack of administrative leadership willing to change, and able to raise the desire of change among workers, which is subordinate to lose confidence in his leadership.϶ And therefore there is no room for renewal. prevailing social values and may impose restrictions on the renewal.϶
In addition to the factors limiting the technological innovation can add other factors that hinder the process of technological innovation, including the recall: uncertainty of the economic outlook of technical interest of technological renovation project϶.
Some institutions see that the projects of technological innovation long and the size of the risk of technical and marketing large, and therefore need for a longer period in order to take advantage of the cost-effectiveness, but by virtue of competition and large simulations may fail institution in its regenerative and thus give up some of the institutions for each project creative new Once you have done this comparison϶ insufficient financial resources.϶).
Also factors that hamper technological innovation, we find (obstacles technological innovation): It is clear that all the work is facing many difficulties hindered, even born and grows and integrates it must exceed a lot of it in the spirit of patience, perseverance and challenge. Whenever the work is more useful and deeper, especially if it exceeds the ordinary, the difficulties they will face more also, where that innovation is one of the forms of change for the better so the difficulties and constraints more, and here we must look for some of the impediments to technological innovation that caused the obstruction institutions causing her retreat to the back, and can be divided into three categories: economic, social and technical as follows:
4-1-2-1) on the economic level: represents an obstacle lack of financial resources the most important economic obstacles facing the process of technological innovation at both institutions, government agencies or scientific bodies, financial Vsab Al_khassat not allowed to carry out advanced research in order to achieve technological innovations, as well as so usually these renovations cost-effective is not enough, especially if renovations at the level of scientific bodies (universities, research centers), so do not find it embodied in economic reality, is the lack of information about the level of economic and financial risks posed by the introduction of the renewal of new technology to market, or risk the economic branch of the main obstacles that stand in the face of technological innovation, it can also add a high cost of equipment used in the production or research, or find that turning technological innovation.
4-1-2-2) on the social level: The most important barriers that limit technological innovation on the social level, is poor communication between the poles of the organization (management, shareholders, workers, trade union), so do not Transfer their efforts in the direction of one assistant on technological innovation
4-1-2-3 on a technical level : represents the renewal of Technology doing a big risk involves several risks both at the commercial , financial or technical risks Therefore, this particular technique is considered one of the obstacles that stand in the face of technological innovation , in addition to the need to do into the hands of a qualified workforce technology , so is considered one of the criteria and factors that the success of technological innovation in addition to the availability of appropriate composition , as is the composition of new equipment handicap limits of technological innovation process due to lack of experience . It also can be divided into technological innovation barriers to internal constraints related to the institution and other external and include the following :
A. Internal Constraints
- Lack of clarity of the strategic objectives ,
- an administrative style and the lack of clarity of duties ,
- The difficulty of bringing scientific and technological competencies with higher qualification ,
- The difficulty of the flow and the flow of information on new technology
- The difficulty of getting information about competitors and their products
- Support the ability to determine the cost of technological innovation
- In addition to the lack of equal power and responsibility.
B. External impediments :
B-1. social and cultural barriers may stand meetings , trends and traditions prevailing in the society and the pressures Kaaaúqa to the development and promotion of innovative and creative capacity of individuals and these values :
- Customs and traditions and customs
- Authority's request for power
- The spread of corruption .
B -2) legislative and legal barriers :
- Lack of legislation and legal march and facilitator of the activity of technological innovation ,
- Or rather the lack of lack of legal provisions on the status of the researcher (the law of the inventor / creator) .
B -3) financial barriers :
- Packing vulnerable to public capital
- Lack of perimeter Mali and dynamic tax system encouraging research and development , creativity and innovation
- Lack of adaptation of the current financial system with special needs renewal.
- The lack of assistance and bodies supported financially for renewal activity (banks , agencies , funds and institutions) .
- Double the budget for research and development within the industrial enterprises).
In addition to the constraints mentioned previously agreed each of the «tompeters» and «negraponte» that continuous improvement is the biggest obstacle stands as an obstacle to technological innovation , folks and say, when its courts hours of work to try to make changes and improvements to products and services gradually and on an ongoing basis , we remain at work yesterday and do not thinking of new creations and radical , as the continuous improvement of the institution is not allowed to monopolize the market and gain a competitive advantage and make big profits .

Advancing technological innovation currently at an accelerated pace in the developed countries , where they were preparing programs and style of leadership appropriate , and we unfortunately did not yet know the right foundations for technological innovation , which is still the vast majority of organizations and industrial enterprises is the ability to adapt to technological This is due probably to its fiscal deficit .

The third axis : the role of organizational learning in the promotion of technological innovation in small and medium enterprises

1 - Doraltalm regulatory process to encourage the renewal :

The process of learning is a major step in the renewal process by acquiring new knowledge and skills with what accompanies this process with behavior change, and this is what shows the role of change management in the learning organization as it requires the learning process of individual and collective change in the patterns of thinking and behavior, leadership, and change in those patterns lead creativity, and the urgent need for creativity often lead to the founding of the educated. The show features the effective creativity in the organization's ability to detect learning opportunities and management of mental models of the leaders and individuals, this creativity and learning concepts cannot be separated from any successful organization, is the process of learning as a bridge that connects the creative work . Thus, it can be concluded that the organization capable of managing learning processes capable of producing a reasonable level of creativity and excellence.

A) The relationship between organizational learning and technological innovation and the factors affecting the two:

The successful organizations involved to a large extent in the renewal through the mobilization of knowledge and technological skills and expertise to create products , processes and new services , although one of the main reasons for the organization's ability relatively small company such as Oxford to stay in the global markets competing strongly is the complexity of what is produced and the great difficulties faced by new entrants to the the market in an attempt to learn and guide their technology , since creativity is based on the introduction of the methods or processes or products Oalkhaddmat new that requires continuous learning in order to absorb and apply new things efficiently so as to achieve the objectives of the organization.

The Miz (April) intellectual resources Pettmthelha in the culture of the organization and technological know-how , trademarks, patents and scientific knowledge shared by workers in the organization and learning accumulated experience, and explained (Prahalad & Hamel) that the organization capacity building of substantial based on the possibility of the organization of joint learning , especially coordination skills productivity and organizational improvement and integration of production techniques used , although the direction of organizations in spending and investment on research and development and the formation of intellectual capital but aims to increase its capabilities in the creation of the renewal of technology in a document to the knowledge and capable of providing support to a large number of products and services.

B) focus on organizational learning as a factor in the success of new product innovation :

He (Imai, et al) that learning plays a key role in enabling companies to achieve speed and flexibility in the process of product development , and the constant search to gain knowledge and diverse skills helps the formation of diverse groups are able to solve many of the problems in a short time period , and concluded (Verganti) in his study of the planning product , to learn from past experiences is the foundation stone of the early stages of the operations of product development for effective management , have endorsed (Zirger) in his study of the performance of the product very advanced technology the need for regulatory mechanisms to keep the transfer of learning to develop the product, and the study (Herschel) that successful organizations realized that it no longer expects that the products and services that have made them successful in the past , will make it as well as the future, so they strive to excellence through learning , knowledge , and these organizations can learn and creativity by raising the tacit knowledge of its members , and this knowledge becomes vital when converted into capabilities and new products , and reach (Nederhof & al) in their studies for tools to improve learning processes Organisational renewal , to be planning creative product associated with three of the learning processes are: information acquisition , information distribution , and interpretation of information , it is through the interpretation of knowledge can be obtained the collective agreement and common understanding in the functional levels and tactical and strategic multi- planning and creativity of the product is directly connected Balakedzab , distribution and interpretation of knowledge is moving parallel to the learning processes .

2) technological innovation in small and medium enterprises : 2-1), the role of small and medium enterprises in technological innovation:

Technological innovation and small and medium enterprises is a close relationship , as each of them to serve others and supplemented . In order to clear the idea we will shed more light on the role of each.

The role of small and medium enterprises in a distinct process of technological innovation , they do not neglect or underestimate the importance of small improvements and renovations edits . It thus contributes a great contribution in the process of production , manufacturing and thus development in general . And for the following reasons :

Managed small and medium enterprises by the contractor to examine the environment and discover the opportunities and then seize , while large enterprises managed managers who are more closely related to the existing situation and its advantages ϖ.

Simplicity of the structure of small and medium enterprises and its orientation towards the main activity (a new product or improved service, new service or improved) , unlike large enterprises which usually creates many jobs share the attention with the main activity which deprives the last opportunity to focus resources and talent and interest ϖ.

Size characterized by small and medium enterprises agility and agility to change , and the limited investments make the transition to the new much less risky compared to large institutions . ϖ are usually small and medium enterprises closer to the market and thus be more interactive with the immediate and rapid changes in the market compared to large institutions ϖ.

Usually put small and medium enterprises products or methods of production, new markets are narrow and specific not invaded large enterprises to enter the modest due to no competition and therefore be in front of small and medium enterprises more room for renewal .ϖ[27].

2.2 The role of technological innovation in the development of activity of SMEs : the new reality imposes several variables make the small and medium enterprises stands at the crossroads :

Either adapt to what is happening from the global changes and integrate into the modern atmosphere ϖ,

And either sideline , so they must learn how to deal with the variables root taking place in the global economy and must adapt

if it wants to continue , and this happens if you managed to take advantage of the liberalization of markets , technological advances , especially in this , if it could take advantage of the liberalization of markets, technological advances, especially in the field of information and applications of new technology and increased mobilization of factors of production , and here we see the role of technological innovation , which enables it to all of this.

Conclusion

In light of the above, we conclude that even the institution is at the top must be accompanied by evolution , and in this study we mean the development of technologically any renewal and modernity in the mechanisms and techniques Kabuli craftsmanship system computers and convert communication system , for example, of the messages to the Internet and e-mail . It can reflect that and apply it in an appropriate environment within the institutions and boils it into a new type of organizations , namely learning organizations where they work the latter to create and develop an environment embraces and encourages innovation , to become part of the culture of the organization borne from generation to generation and it is natural that reflected independent on systems and structures . Learning organization where you can create an environment of encouraging organizational learning and the exchange of knowledge, experiences and skills, and a climate of team spirit based on the overall vision and great flexibility to adapt to the conditions of the internal environment and the external environment of the institution. But the success of the organization to adopt a method of organizational learning is not easy , but requires careful study and deep, also requires the interaction of all the works of the organization in a positive and supportive organizational learning .

The small and medium enterprises a great interest by the countries of the world in the light of the changes and transformations of the global economic and because of its role very important in production , operating income , innovation and technological progress , and based upon we'll examine the subject of study in small and medium enterprises , in a time when the private sector SME refurbished plays a leading role in building capacity and encouraging technological innovation and in developed countries , developing countries find it still counts for a lot on the financing of government spending to fund research projects and All renewal.

References

[1] Mohammad Bataineh Turkish and Ziad Mohammed Mashaqbeh , knowledge management " between theory and practice ," Jordan 0.2010 .

[2] Aachoc finest, organizational learning as an input to improve the performance of the institution , the memorandum Masters, Faculty of Economic Sciences and management sciences , University of Tlemcen , 2010-2011 .

[3] Bara Abdul Karim Mohammed Bakar , Managing Creativity in learning organizations , memorandum Master , Yarmouk University Jordan 0.2002 .

[4] Abraham Alkhlov Malkawi , knowledge management practices and concepts , Edition 1 , Warraq for publication and distribution Jordan 0.2007 .

[5] Tahir Jamil Fadel , an article titled impact of the dimensions of organizational learning in the availability of the dimensions of the learning organization , the University of Baghdad , College of Management and Economics .

[6] Peter Drucker , innovation and entrepreneurship , " translation practices and principles " , translated by Hussein Abdel Fattah , Jordan , the Jordanian Center Books , 1988.

[7] Safwan Yassin Hassan al-Rawi , the internal environment factors impact on technical innovation , Master Thesis , University connector 0.2005 .

[8] Sttar Sttar Abboud , innovation management concepts , characteristics and experiences of modern , Edition 1 , Dar Wael for publication Amman Jordan 0.2003 .

[9] Dawes Muhammad Taib , attempt to diagnose and assess the career system for innovation in Algeria , Ph.D. thesis , University of Cassidy Merbah Ouargla 0.2011 to 2012 .

[10] Adel Radwan , the role of innovation in support of industrial development in Algeria , a memorandum MA, University of Algiers 3.2011 to 2012 .

[11] Trad Knight , Mandjemt innovation and creative thought process of building in the small and medium enterprises , the memorandum MA , University of Boumerdes , 2007.

[12] Khudair Kazem Hammoud Organization (knowledge) , Dar fineness for Publishing and Distribution , Amman , 2010 .

[13] Mohammed Said Ookel , the economy and the conduct of technological innovation , the Office of Publications Algerian 0.1994 .

[14] Masoud bin Moish , technological innovation to develop the competitiveness of the economic institution , the memorandum Master , Faculty of Economics and the University of Science Steering Ammar Tljugi Baloguat 0.2005 .

[15] Ben Nazir Nasreddin , Altnologi innovation in small and medium-sized industrial , memorandum MA , University of Algiers 0.2001.

[16] Mohammad Qureshi , technological innovation as an input to enhance the competitiveness of the national industrial enterprises , Memo Master , Mohamed Khider University of Biskra, 2004-2005.

[17] Benbrika Abdul Wahab , bin Turki Zeinab, an intervention entitled technological innovation contribution in strengthening the competitive position of the organization, Mohamed Khider University of Biskra, an international forum on creativity and Alngaeraltnzimi in modern organizations , the University of Blida, 12-13 May 2010 .

[18] Bulbolh faith, environmental influences on technological innovation , the memorandum Master , Faculty of Economics and management sciences , University Saad Dahlab Blida 0.2006 .

[19] Brooch Zainuddin Abdul Wahab and Belmehdi , management innovation in the organization from the perspective of human resource management, international scientific conference on the performance of organizations and governments , the University of Ouargla 8 to 9 March 2005 .

[20] Kush dignified , the impact of technological innovation on the environmental performance upgrade catalog , PhD thesis , Faculty of Economics and management sciences University of Algiers in 2011.

[21] Aachoc finest and Allawi champion , the role of learning organizations in the promotion of the creative process , the intervention of the international forum on : intellectual capital in business organizations in the Arab economies of modern daily 13 to 14 December 2011 .

[22] Bushra Mohammed Abbas al-Husseini , the process of organizational learning and their impact on creativity (analytical study of Colleges of Pharmacy in Baghdad) , Memo Master , Faculty of Management and Economics University of Mustansiriya Baghdad 0.2007 .

[23] Zayed Murad , an intervention entitled Leadership and innovation in small and medium enterprises , in the framework of the International Forum on Almqaolteh,"Configuration and business opportunities", Mohammed Khudair University of Biskra Algeria , days 07/06/08 April , 2010.
[24] Annan Fatima Zahra, technological innovation and its role in economic development, a memorandum Master , Faculty of Economics and the University of Science Steering Badji Mokhtar Annaba 2006-2007.
[25] Sttar Sttar Abboud, knowledge management" concepts , strategies, and processes", 2nd Edition , Warraq for Publishing and Distribution, 2008.
[26] Jean Lachman «le financement des stratégies de l'innovation», economica, 1993.
[27] Argyris.c et schon, apprentissage organisationnel théorie, méthode, pratique, paris, 2002.

D. Satoutah Samira: Professor Lecturer Faculty of letter and Humanities and Social Sciences / Department of Information and Communication Sciences at Badji Mokhtar Annaba University/ Algeria.

Rouabhia Meriem: Ph.D. researcher. at Baji Mokhtar University of Annaba Department of Information and Communication Sciences / Algeria. Master :"Communication and governance"