

Conditions of partnership and forms of exchange between universities and industry**Guerini Fares**

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Abstract:

In an era of changing information and communication technologies, economic, political and social upheavals and increased competition, adapting to change is becoming a major concern for public and private organizations, which must constantly adapt to the dynamics of globalization. Moreover, the nature and development of our society largely depends on our ability to innovate. The challenges are many and it is necessary to ensure a harmonious integration and sustainable development between the economic sectors Well-being and solidarity between individuals on a global and international scale, and the establishment of complementarities between the various social and professional institutions at the specific and national level. In this context, higher education plays a particularly decisive role, at the interface of the mechanisms that create and disseminate scientific and technological progress. Companies, on the other hand, maximize their profits by exploiting this knowledge. In fact, the use of this knowledge is a key factor in the creation and dissemination of scientific and technological progress.

In this context, this study proposes a managerial study that analyses the role of universities vis-à-vis the economic sector, taking into account the appropriate relationships between training/employment, university/innovation and university/enterprise (partnership models and forms of exchange). between entities, depends on the instability and complexity of the environment.

Keywords: university, innovation, business, competence, strategy.**Jel Classification Codes : L, O 36.****ملخص:**

في عصر تكنولوجيا المعلومات والاتصالات المتغيرة، والاضطرابات الاقتصادية والسياسية والاجتماعية وزيادة المنافسة، أصبح التكيف مع التغيير مصدر قلق كبير للمنظمات العامة والخاصة، التي يجب أن تتكيف باستمرار مع ديناميات العولمة. علاوة على ذلك، فإن طبيعة مجتمعنا وتطوره يعتمد إلى حد كبير على قدرتنا على الابتكار. إن التحديات كثيرة ومن الضروري ضمان التكامل المتناغم والتنمية المستدامة بين القطاعات الاقتصادية والرفاهية والتضامن بين الأفراد على المستوى العالمي والدولي، وإقامة التكامل بين مختلف المؤسسات الاجتماعية والمهنية على المستوى المحدد والمحدد. المستوى الوطني. وفي هذا السياق، يلعب التعليم العالي دورا حاسما بشكل خاص، في التفاعل بين الآليات التي تخلق وتنتشر التقدم العلمي والتكنولوجي. ومن ناحية أخرى، تعمل الشركات على تعظيم أرباحها من خلال استغلال هذه المعرفة. وفي الواقع فإن استخدام هذه المعرفة هو عامل أساسي في خلق ونشر التقدم العلمي والتكنولوجي.

وفي هذا السياق، تقترح هذه الدراسة دراسة إدارية تحلل دور الجامعات تجاه القطاع الاقتصادي، مع الأخذ بعين الاعتبار (العلاقات المناسبة بين التدريب/التوظيف، الجامعة/الابتكار والجامعة/المؤسسة ونماذج الشراكة وأشكال التبادل بين الكيانات)، والتي تعتمد على عدم الاستقرار وتعقيد البيئة.

الكلمات المفتاح : الجامعة ؛ الابداع ؛ الاعمال ؛ الكفاءات ؛ الاستراتيجية.

تصنيف JEL : L, O 36.

I. Introduction:

The increasingly complex economic world, driven by the development of information and communication technologies, economic, political and social upheavals, the acceleration of competition and globalization, is a major challenge for all organizations, requiring constant adaptation to improve and maintain competitiveness and performance. These changes have led to the development of innovation concepts which have received particular attention in developed countries and are beginning to occupy the minds of public authorities and managers in developing countries in general and in Algeria particular.

Moreover, while the current environment is characterized by increased opportunities, the novelty is significantly accentuated by increased risks and uncertainties, which encourages all organizations, including universities, to adapt to achieve economic and industrial development through scientific and technological research.

Indeed, universities play an important role in the innovation process and contribute to the growth and development of society by promoting research and development activities, by training graduates with a spirit of technology and innovation and by establishing interaction with different economic sectors. Cooperation between universities and industry is therefore essential, especially as the two sectors are undergoing similar changes. Innovation remains a strategic approach to obtaining information on the competitive, technological and scientific environment and on the different economic actors inside and outside the organization. It requires organizational structure and human, technical and financial resources.

Nevertheless, the implementation of innovation strategies largely depends on the organization's ability to access strategic information and articulate its concerns and objectives, as well as training of the actors of the organization's management processes in the need for practical knowledge, conditioned by the knowledge of the experience and skills of the actors.

Thus, the innovation approach aims to establish a true match between the needs expressed in terms of change and the requirements of the environment by linking different macroeconomic and microeconomic factors, The project aims to meet the requirements of the environment.

The following questions must be answered:

- What are the conditions of partnership and forms of exchange between the university and the industrial world?
- What role do universities play in economic development in terms of innovation and adaptation to change?
- To answer these questions, we propose the following hypotheses:
- There is a complementary relationship between universities and industry,
- Universities play an important role in the process of innovation and adaptation to change, ensuring business competitiveness.

To answer the research questions and test our hypotheses, we conducted a field study in a public institution (ALCIST s-p-a in Bejaia).

We conducted eight open interviews (eight interviews) with officials and managers of the organization in order to identify the role of the university in the partnership process, the forms of interaction with industry and the degree of application of this approach in strategic and operational aspects.

II. The university/business relationship:

Competitiveness is a key issue for all organizations. It is determined by changing customer needs, developing new products, identifying manufacturing methods, selecting packaging, analyzing hygiene standards, developing skills, price monitoring, the choice of investments and the search for economic partners. It means the ability to maintain a presence.

However, while globalization offers Algerian companies opportunities to access new markets, it also exposes them to the threat of foreign companies better able to grasp export intuitions and identify the weaknesses of their competitors. Therefore, the complementary relationship between universities and industry is an essential tool for growth, allowing the acquisition of information and the protection of business assets and the national economy.

However, the results show that:

- The absence of a true information culture and the lack of professional services mean that the partnership principle is not an integral part of the Algerian corporate culture;
- Moreover, there is no match between training and employment. The training courses still offered in Algeria are far from meeting the current needs of the market. Most interviewees stated that the training they received did not meet the requirements of the jobs in question. The programs studied do not meet the needs of the labour market;
- Structural change: Algeria's economic and social policy has always been characterized by the domination of the state in the production and distribution of wealth. Thanks to oil revenues, the public sector has played an important role in the labour market;
- Cooperation between universities and industry is mainly the result of personal contacts. Postgraduate employment and the integration of young graduates into the labour market is done through knowledge networks;
- Increasing numbers of graduates, lack of awareness of the labour market due to lack of direct links between universities and employers, and the lack of information about job opportunities are barriers that limit the chances of graduates to find a job and indicate the lack of real cooperation between universities and industry. (Farid, 2006)

Vocational training centres continue to provide vocational training in already saturated sectors, while other sectors such as agriculture and fisheries suffer from a lack of training" (Faroukhi Djamel, 2005).

In addition, academic orientation is based on academic results. On the other hand, the least successful students are almost systematically affected, whatever their wishes, in the specialties least demanded by the labour market and whose reception capacities are the highest (humanities and social sciences are the most relevant examples). -In other words, there is a lack of organizations that follow new graduates and offer them internships or business placements.

Innovation is underdeveloped and not integrated in Algerian companies, while it plays a key role in solving strategic problems. There is also an obvious lack of financial and human resources to initiate partnership initiatives.

Moreover, the current environment, characterized by the absence of a real national development strategy, also affects the organization internally, highlighting the lack of managerial skills and therefore the absence of a real micro and macroeconomic strategy. Regarding the Algerian

economy, changes in the environment have led to significant changes in public organizations. Central organizations have always played an important role in decision-making, planning, management and evaluation. In other words, it is a company that has long operated under a centralized bureaucratic model, where changes were made according to the maximization of profit and investment, This has led to dysfunctions and crises of power and control. The organizational orientations given to us by our history did not allow us to meet this challenge: in the 1980s, we witnessed the bankruptcy of public organizations and the appearance of economic crises. The most concrete example is the application of structural adjustment programmes, which have been triggered by multiple changes in the internal and external environment. Organizations are constantly looking for the right balance between adapting to the environment and change and organizational effectiveness. The latter depends on the degree of stability within the organization, which is based on clearly defined structures and rules, in particular the effectiveness of the HR function

However, despite these difficult economic conditions, Algerian public organizations are still in a period of transition due to various transformations (representing difficulties in adapting to globalization) and still operate on the basis of bureaucratic structures, where only managers take into account the interests of their employees. Decisions are made without consideration of employees and the organization sometimes makes corrections without understanding the real causes of the changes; When integrating NICTs, managers use foreign experts instead of training their own country's staff. In most cases, change is introduced without prior research or planning, but one of the common characteristics of developing countries is that they all experience profound, rapid and brutal changes. Only management is involved in identifying problems and finding solutions. Change is often a constraint for employees, experienced as a form of control and largely unnoticed. Managers who observe an organization are constantly surprised by the mismatch between the image that leaders, managers, executives and trade unionists have real functioning of their company and what employees and their hierarchical managers think and live.

Changes go unnoticed by employees, whose actions and managers do not require their intervention. On the other hand, employees are limited to a job as a source of reward and risk not losing their job. These changes disrupt the social climate of the company and those responsible for managing these changes are often less proactive and often ill-prepared to adapt to new challenges.

As a result, individuals and employees often become victims of change and, in most cases, do not understand the causes and reasons. However, the performance and effectiveness of an organization depends not only on the introduction of tangible and measurable factors, but also on so-called intangible factors, such as :

- confidence;
- Skills management and human resource development;
- employee awareness and involvement in the change process.

With regard to ICT integration, the results show that change is often accompanied by the introduction of ICT.

In other words, to talk about change is to integrate HR into the life of the organization. In reality, the goal of any change process is not to function independently of the members of the organization, but to give them an important status. In any event, it is in this sense that it is legitimate to develop individual or collective strategies that allow actors to assert themselves within the structure and to harmonize both the pursuit of their own interests and the achievement of the

objectives of the organization. In order to reconcile individual and collective interests, areas of power must be maintained within formal organizational structures. (GUNIA, 2002)

In addition, the HR function is to facilitate the development of the skills, abilities and potential of each member of the organization to enable them to respond to different changes in the environment. Indeed, the success or failure of change depends on the perception of change by the agents of change and the dynamism of the group.

III. Innovation, change and devaluation of human capital:

According to Brunet (1999), this process is based on the identification of the problem, the application of principles and the use of change strategies. La réussite ou l'échec du changement ne dépend pas du choix des procédures, des nouvelles technologies, de la réorganisation opérationnelle, etc. mais des processus de mise en œuvre et de gestion du changement par les individus impliqués.

With the disappearance of the Taylorian organization, the individual has become a central and managerial concern for researchers and practitioners in this field, but in the daily life of the company, constraints are not enough to bring about change, Actors can block change and police, actors are constantly reminded that change is not passive. But in the daily life of the company, constraints are not enough to bring about change, actors can and do block change, actors must constantly remember that change is not accepted passively and that ultimately Ultimately, any change can only happen with the help of the company. And ultimately, any change depends on the ability of actors to mobilize so that cooperation and coordination, which are a condition of change, could take place. Thus, in order to better understand the principles of innovation and change for the well-being of the organization and its employees, it is important to understand the sources and motivations of the behaviors adopted by individuals and their objectives. Furthermore, managers must demonstrate clarity and creativity in the design and management of information in order to meet the new requirements imposed.

These lasting changes that drive the environment in which the organization operates nevertheless encourage managers to consider the concept of change as an essential behavior for the survival and sustainability of the organization. Cultural patterns and behavioral systems are essential to the survival of an organization. Indeed, when we seek to understand the organizational reality, whether it concerns the relationships between the actors or the strategies deployed by one of them, it is essential to identify the relevant actors in order to achieve an approximate interpretation of the phenomenon studied. Indeed, an organization can only flourish by developing a real strategy based on the skills and know-how of its employees. (Jean-Louis, 2000)

- If research on employee behavior in the face of change has attracted the attention of researchers and managers in developed countries, little attention has been paid to its importance in developing countries in general and in Algeria in particular.

Indeed, according to the results, innovation and change are not accepted by employees to the extent that the absence of a real strategy, the lack of training in this regard and the non-engagement of employees in the processes organizational and managerial change are raised. On the one hand, managers do not ask employees to intervene. On the other hand, employees are limited to having a job as a source of reward and the risk of not losing it, while it is understood as a threat, uncertainty and risk for employees. This is explained by labor market conditions, which tend to be dominated by instability, insecurity and unemployment. For individuals it is important to be present in the labor market (source of rewards), and for managers of organizations it is important to be aware of their leading position and try to make the most of of their physical capital, rather than human capital which is always available on the labor market.

Managers often lack initiative and are unable to adapt to new challenges. Unfortunately, too many managerial decisions are still based on the instrumentalization of management systems, to the detriment of understanding and acceptance by the actors who must use them. To respond to complexity and changes in the environment, organizations must ensure complementarity between the university and the labor market in order to adapt, react and innovate to ensure their growth and sustainability. (Dupuis-François, 2004)

Above all, organizations are constantly exposed to environmental constraints, risks and unforeseen threats², which constantly create uncertain situations which currently escape their control, thus disrupting the playing field of social actors, who are strategic actors according to Mr. Kroeger, and forcing them to develop new solutions and adaptation strategies. and forcing them to develop new solutions and adaptation strategies.

However, organizational upheavals and transformations have often neglected the human dimension. Organizations need the know-how, initiative, skills and experience of their staff, as well as their willingness and participation to achieve new goals. Interaction between academia and industry is essential to develop the capacity to cope with an increasingly turbulent and changing environment. Indeed, the right way to think is to start from the organization's resources (material resources, human resources and relational potential). (Kroeger M and Friedberg F, 1977)

IV. The instability and complexity of the environment:

Any organization faces a complex environment that requires adaptation in order to ensure its survival, the economic development of the country and the well-being of society as a whole. To fulfill its functions, it must be in permanent contact with its environment, accept the constraints imposed on it, protect itself from them and seize opportunities by developing real strategies. Organizations must be proactive to ensure permanence, effectiveness and sustainability. (kHELFAOUI HOCINE, 2000)

Faced with the threat of extinction, an organization must transform and redefine its strategy and structure. It must adapt to this situation to maintain and grow, and it has become essential for all organizations to understand the global economic environment. Business intelligence is the art of action that engages all stakeholders, develops their capabilities, constantly changes the status quo and ultimately leads them to make decisions. The causes of environmental instability and complexity are multiple. They understand.

- The integration of communication systems, the interdependence of political, social, economic, cultural and environmental phenomena. These phenomena create new threats to face, but also new opportunities to seize. Public administrations must therefore set new objectives and prepare to achieve them;

- Scientific progress and the resulting possibilities for improving the efficiency of public administration;

- External threats such as economic crisis, competition, etc.

National systems of governance. Public administration does not influence decision-making, but it can influence it:

Changes in public policy, i.e. the objectives, priorities and forms of action that public administration influences;

- For example, demographic changes, competition in the labor market, unemployment, migration and immigration phenomena.)

- changes in unemployment rates.

- Reforms linked to the privatization of companies and the transition to a market economy.

Persons made redundant in the public sector following the different phases of the adjustment programs of public enterprises and state-owned enterprises;

- Young graduates who are no longer employed in the public service or in the private sector;

- Selection and competitiveness: employers select graduates who have professional experience and are ready to work immediately.

V. Results and discussion :

Initial training is essentially theoretical and has no link with social and professional institutional structures, which means that there is no real link between training centers (universities, vocational training centers, etc.).

Initial training is essentially theoretical and does not correspond to the needs of the job market. In fact, training is not adapted to the new realities and demands of the industrial sector, which is constantly confronted with the phenomena of environmental change, technological innovation and, ultimately, globalization.

However, the demands of the new economic situation encourage all organizations to modify their adaptation and regeneration strategies in order to face increasingly tough national and international competition and the rapid evolution of information and technology. The innovation system requires the use of all skills, continuing education, scientific research, improvement of communication and motivation, rationalization of public management, change of organizational culture, modernization of management systems, the development of flexible strategies adapted to the environment and the integration of NICTs.

The government has taken a series of direct and indirect measures to bring universities and industry closer together, but there is a lack of a coherent overall framework, a systematic overall approach and a real planning and partnership strategy between universities and industry.

We can deduce from this that the Algerian university has experienced a significant transformation on the quantitative level (increase in the number of students), but on the qualitative level (decrease in the quality of teaching), it is far from having reached her goals. Those responsible for the sector themselves recognize this.”

Significant reforms are needed to address the shortcomings of higher education. Universities must open up to the outside world and enter into partnerships and agreements with companies, research institutes and consultancies. Internships should also be made compulsory as part of university education, so that students are better prepared to enter the job market and their skills are recognized by companies.

Suggestions for reforms

Following the study of the sample and the results obtained, a certain number of recommendations can be formulated

New forms of governance and strategies must be developed that go beyond traditional organization and management and take into account the essential partnership between universities and industry,

- the need to reorganize cooperation between the State, businesses and universities and to build a real development strategy in terms of collective projects and economic intelligence

- the need to reorganize cooperation between the State, businesses and universities and to build a real development strategy in terms of collective projects and economic intelligence. Universities must open up to the outside world and establish partnerships and agreements with companies, research centers and design offices. Internships must be made compulsory in the university curriculum to give students experience of the world of work and prepare them for employment. To train executives in this field, universities could create a master's degree specialized in economic information;

- Develop a clear strategy for the company, integrate the different stakeholders and set up a communication system;

- The organization must modernize and internalize its essential functions, open up, create, innovate and become a communicating entity;

- Technical training is also recommended. Technical training is also encouraged. Technical training includes research and information processing techniques.

VI. Conclusion:

Globalization means fierce competition between companies and between countries, which makes today's competitiveness increasingly vulnerable. This situation has led to the development of public and regional policies on the importance of exchanges and university-business partnerships.

Indeed, the opening of the economy to the rest of the world, the acceleration of change, the increase in competition and globalization have made the situation of organizations increasingly delicate, favoring their survival and development. Faced with this situation, and in order to ensure the sustainability and effectiveness of the organization at the national and international level, it must, on the one hand, integrate the concepts of change and innovation, and on the other hand, use the advantages offered at the macroeconomic level, such as NICTs, rely on the experience of developed countries, specialized training in economic intelligence, the development of managerial aspects and encourage investment in access to information technology. information and communication (ICT). develop managerial aspects and encourage investment in access to information and communication technologies (ICT). On the other hand, depending on the success, efficiency and functioning of the organization, microeconomic benefits should be exploited through the participation of different stakeholders within the organization, notably by attracting know-how and employee experience. In addition, the mobilization of all the resources available to the organization, in particular the integration of individuals and their participation in management, is essential to the success and performance of the organization.

This modernization trend offers organizations greater management flexibility, thus promoting their growth, performance, competitiveness and ability to adapt to the requirements and changes in the national and international environment, improving management based on public services, technology, creativity and a new culture, and bringing public administration closer to citizens.

Referrals and references:

1. Books:

1. Crozier M and Friedberg. F (1997), The actor and the system: the constraints of collective action, Seuil edition, Paris.
2. Dupuy François (2004), sociology of change: why and how organizations change, Dunod edition, Paris.
3. Feroukhi Djamel (2005), the problem of training-employment adequacy: mode of integration and professional trajectory of graduates of exact sciences and technology, CREAD, Algiers.
4. Guerid Djamel (2007), the Algerian exception: modernization put to the test of society, CASBAH edition, Algiers.
5. Khelfaoui Hocine (2000), graduate knowledge and social representations in Algeria (1962-1998). IN: GEISSER (Vincent), North African graduates from here and elsewhere: social trajectories and migratory routes, CNRS edition, Paris.
6. Levet Jean-Louis (2000), economic intelligence: way of thinking, way of action, Economica edition, Paris.
7. Makhoul Farid (2006), ed.: international blue pages, ed.: international blue pages, Bouira, Algiers.

2. Seminar article:

1. Nadège GUNIA (2002), The human resources function facing organizational transformations in companies, Impacts of new information and communication technologies. Internet, Paris;