Innovation, Learning and Regional Development

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Abstract — The subject of this paper is new, "unconventional" and with major implications on the socio-economic evolution. The paper tries to find answers and solutions to the present and forecasted problems and challenges, coming out from the classical approach, which is strictly economic.

It offers a different outlook and approach and a different understanding of the socio-economic phenomena. On the other hand, these phenomena began to do not “respect” almost any economic theory and law. The greatest challenges for the society ask for uncommon solutions.

This research analyses and systematises the main research idea and argues, in order to create a base of analysis for the systems’ parameters’ evaluation, the territorial dimension of these systems and the role of the institutions inside the regional innovation, learning and development partnership. The concept of regional partnership for innovation, learning and development evaluated to a large analytic approach which is able to generate the empirical base of the regional innovation, learning and development policies. The actual researches didn’t succeed to define the territorial dimension of innovation, learning and development, the role of the institutions and institutional context, in order to implement these specific regional systems. The main objective of this research is to define a new regional model of learning, creative industries and development.

The approaches which use this analyse framework are still ambiguous regarding the key problems, the territorial dimension of the innovation, learning and development and the important role of the institutions in defining and implementing these specific regional systems.

As a result, this scientific approach analyses and systematised the most important ideas and argues of the researches in regional innovation, learning and development regional systems, in order to realise a scientific base for a pertinent analysis connected to the following:

- definition confusion and empirical evaluation of the systems’ parameters;
- territorial dimension of these systems;
- institutions’ role inside the regional innovation, learning and development partnership.

The paper geminates the theoretical scientific research with the applied research and finally realises a new model connected to the continuous learning policies, the creative industries and the regional development.

For the beginning, the paper analyses the human resources concept, their development and motivation under the ergonomics restrictions.

The analysis of the human resources management implies the continuous improvement of the labour activities, in order to achieve the mission and the organisational objectives. The regional partnership project management has to take the responsibility to this process, to imply into every action, to cooperate with the team members and to reward good practices. The successful implementation of the regional human resources management implies the existence of three systems: evaluation, stimulation and rewarding.

The main objective of the regional human resources management is to supply specific skill and experience, in order to obtain optimal and sure performances, using the most adequate methods. There are two objectives categories: strategic (on long period, which are focused on the human resources organisation and planning) and operational (tactic and administrative, which are focused on daily work groups leading). The Romanian top managers from innovation, learning and research institutes are not too interested in
strategic objectives, as a result of their limited knowledge or of their lack of interest. But those managers which implement a professional regional management of human resources are able to obtain good results for all their organisations’ activities.

The human resources policy used by the organisation’s leadership orient the activity of every member of the regional innovation, learning and development partnership. A efficient regional human resources policy needs: the integration of the human resources management to the regional partnership management; the adhesion of whole personal; the insurance of a good work atmosphere, in order to valorise every employment potential; the recognising and the rewarding of the efficient labour; the continuous improvement of the activity and the decisional process leaded by competence. The top managers of the partnership and the dedicated department assume their responsibility for human resources management.

The human resources development represents a component of the business planning and covers the analysis and the identification of the necessary labour categories (on professions, skills, sexes). The development of the human recourses starts with identification and recognising of the regional innovation, learning and sustainable development partnership’s philosophy and mission. It continues with the examination of the external environment examination, the management capacity forecast, the establishment of the plans and strategies. The development of the human recourses is connected to: the identification of those professions which are not covered by labour in a specific region; the analysis of the labour age pyramid; the analysis of the labour fluctuation on industries; the comparison between demand and supply. The regional human resources program covers: the recruiting plan, the training plan and the promoting plan, as well.

The main method of human resource’s stimulation is the reward. This reward covers material and financial revenues, the present and future incentives and benefits, which are determined, directly and indirectly, by the labour quality and by its activity. The payment represents an element of the recompense which expresses money received by labour or the effects of a transaction. Sometimes, the specialists talk about direct recompenses (wages, incentives, increases) or indirect recompenses (vacation payment, unemployment benefit payment, pensions, dividends).

The elements which support the recompense’s size are: performance, knowledge, skill, competence and labour market. The direct recompenses cover wages and salary additives. The most important element, in order to establish recompenses, is to create hierarchies. As a result, it can be fixed the variation degree for every post. The next step is to establish the wage for every post and employee, according to the connection between post’s position and the recompense size. The recompense size is influenced by the economic-financial power, the legal restrictions, the organisation’s wage policy and the labour market. All these elements dimension the salary scale. The salary additives support the labour incentives system, which is divided on three levels: individual incentive, group incentive and partnership (organisational) incentive.

Under the regional innovation, learning and developing partnership, the individual incentives are: differentiated unit wage and bonuses. The group incentives promote cooperation and common effort in order to obtain better results. The partnership (organisational) incentives cover all labour, in their direct connection to the organisation’s financial results.

The indirect recompenses are only currently and they cover: payment for un—worked time, special facilities for employees, health insurance and employees’ protection against revenues‘ decrease, life cost growth, illness and professional accidents. Almost all specialists in human resources management are focused on employees’ recruiting, selection, training, evaluation, payment and improvement. But they ignore the connection between peoples and their work (activity).

The ergonomics represents a component of human resources management. According to ergonomics, the human resources management can be defined as a complex of interdisciplinary measures, connected to employees’ recruiting, selection, terms and conditions of employment, ergonomic used of work, material and moral incentives until the termination of employment. The ergonomics is a federative and interdisciplinary science, which is able to integrate basic concepts from technique, physiology, psychology, sociology and economics, in order to orient contemporary technique to the human normal psycho-physiologically possibilities. But the ergonomics has not been confused to these sciences. It is furthermore. As a result, the connection between ergonomics and other sciences is presented in fig. 1.

Fig. 1 ergonomics as integrative science

The ergonomics obtains information connected to work and explain the process of adapting the work to the human and human to the work, in order to grow the productivity.
II. REGIONAL PUBLIC POLICIES CONNECTED TO INNOVATION, KNOW-HOW AND DEVELOPMENT

At the beginning, the researches were focused on regional innovative systems, which were able to promote a viable partnership for regional development. The problem was that these regions were just a few. Moreover, some specialists considered that there were only three real regional innovative systems: Silicon Valley, Emilia-Romagna and Baden-Württemberg [1]. In order to realise the innovation-learning-development partnership, the regional systems have to be represented. Some specialists describe these systems as fuzzy territorial organisations [2], [3]. Another idea was to couple these systems to relevant regional policies [4]. Other scientific researches focused on regional innovation, learning and development partnership’s defining and conceptualization [5], [6]. They talked about the necessity of an institutional structure under which the partners (companies, R&D institutes, universities, and public administrations) can be interactively connected. Another idea is that the regional partnership system represents a subsystem of the specific national partnership system [7], [8]. The start point to realise the innovation, learning and development partnership is the definition of a specific region connected to it [9]. A specific region presents different sizes and characteristics. Moreover, the cooperation potential of the regional actors is different, as well. As a result, the researches were focused on different regional levels: national [10], regional [11], [12], urban [13] and districtual [14], [15].

The latest researches are focused on international management of human resources. They consider that the international level is the only one able to build the innovation, learning, development partnership and to solve the present problems of the society [16]. A representative book for the regional knowledge management analyses the specific regional partnership in connection to international division of production and the new world economic order [17]. This approach is less used in Romania and is considered as a new point of view. Maybe a single exception analysed the research—development management [18]. Another book treated the theme of cooperation stimulation between universities and regional employers, according to a gradual employment [19]. A different point of view is that which is focused on the continuous learning, creative industries and regional development [20].

The regional public policies connected to innovation, know-how and development has to be analysed critique and dynamic. Traditionally, the regional growth models are focused on capital and labour as main factors of influence. Knowledge workers interpret information, generate outputs and solve problems according to their internal structures as individuals rather than according to external rules or procedures. By its human nature, each knowledge worker develops his own subjective configuration based on past experiences, the information he has absorbed and the particular context in which he has used his skills and abilities [21].

The new economic growth models are connected to other more dynamic factors, as: human capital, knowledge, innovation and entrepreneurship. Innovation and innovation capacity represent the essential elements in achieving the regional sustainable development.

The innovation and knowledge become essential conditions for the success of the regional economic base’s restructuration. As a result, the importance of the innovation and continuous learning policies, in their connection to the regional economic policy and regional development has to grow. The regional sustainable development has to be connected to business sector, knowledge and innovation sector and public sector, under the umbrella of a dedicated institutional framework, which is able to support regional restructuration and adaptation processes. As a result, regional development partnership has to recognise the importance of education, entrepreneurship, innovation, human capital and public sector. These elements cover: macroeconomic stability, economy opening, competition and socio-economic system (see fig. 2).
The regional knowledge management and knowledge diffusion are basic instruments of the regional partnership. They support the economic growth and the creation of innovative regions. A central element of the regional policy is clusters’ creation and the particularities of the regional innovative system. Practically, the regional policy takes these elements as components of the regional development. On the other hand, the innovative processes can be or can not be concentrated spatially or geographically.

The business services agencies or the innovation mediators have to operate as local actors, in order to translate the knowledge connected to new technologies and procedures to the local business communities. As a result, the innovation, learning and development partnership becomes a functional network which is able to facilitate the innovative activities and to disseminate their results. This partnership can be analysed as a closed system and it has not limited to a specific organisational or geographic context.

The partnerships between the educational, research and economic sectors need to be created:
- in the short term, as individual visits of experts at certain subjects in school, or in the form of seminars;
- in the long term, in the form of a school for architecture and spatial planning as a non-profit organization for education of general public [22].

Under the regional development, the innovative process is more important than innovation production, because it potent the human capital. The innovation, learning and development partnership functions under a transition process of transforming knowledge into inter and intra organisational context (see fig. 3).

**Fig. 3 regional development partnership**

Companies and public administration use contracts of consultancy, signed to R&D institutes and universities. Moreover, these contracts can cover development projects and they can be asked by commerce chambers and trade unions, as well. Under the regional development partnership, are found knowledge able to analyse the innovative activities and the cooperation between different partners. The partnership is able to generate knowledge connected to advisory systems and those instruments which support the transfer of knowledge about new processes and goods. As a result, innovation becomes important for short and long period regional policy.

The regional partnership identifies and develops new instruments for the regional development policy, new specific innovative strategies and key factors which are able to support the partnership success. Innovation and learning represent instruments which can promote the regional economic growth. As a result, the initiation of such regional policy is focused on innovation and models which support the innovative process. These elements have to be supported by entrepreneurship and public sector efficiency. The translation from learning and innovation to regional growth, under this specific partnership, has to be analysing on different levels and measures.

For the beginning, the supranational (community) level allows the transfer and diffusion of knowledge, in order to adapt and implement measures connected to the external growth environment. At national level, the transfer and diffusion of knowledge is low, and the adaptation and implementation are medium. At regional and local level, the same indicators are medium and they support the regional growth. The regions have to be ready to face the challenges of the structural changes and of the global production system.

In order to achieve the regional sustainable development, a lot of European regions started to find new positions inside the labour global division. They use different strategies, according to their national and regional characteristics. These strategies are not forced to extend their actions to high fluxes, connected to output planning and management more than to output or new goods and services production, and to inferior fluxes, connected to sales, logistic and marketing.

In order to achieve a specific political target, the regions have to find the necessary conditions to support them to face the different challenges.

These conditions are connected to the understanding of those elements which characterise the general and regional innovation, learning and development partnership. A lot of problems connected to the partnership management and the knowledge diffusion are not solved at national or community level. Moreover, the regions face to a lack of human capital. But the problems are bigger inside R&D institutes and universities.

The actors of the regional partnership change information and knowledge connected to the transfer and absorption of innovations under the productive processes. Practically, this partnership represents a lot of “dynamic learning networks”. These networks support individuals and organisations to learn, because they give to these actors the opportunity to interact under a reciprocal educational connection, which is not highly asymmetric. Every member of these networks has to be able to promote its position to adopt a learning activity into the advantage of other members.

For the beginning, the dynamic learning network proposes changes inside the learning system. The next step is to produce new knowledge and to facilitate their absorption across a specific region. The dynamic learning networks are created and their change becomes an important objective together with the production and absorption of new knowledge. This means that the new knowledge is not “public” yet. The knowledge is
procedure covers the knowledge exchange, in its connection to the process. Practically, these regulations define the regional actor partnership is one of the public cooperation levels presented and by the possibility to understand the regulations of the regional partnership. The public policies cover the management, the transformation of different regulations and the policies proposed by every actor of the regional partnership. That process implies a good documentation, which has to cover informal agreements, regional concords, programs and plans.

The classic model of the regional partnership connected to the regional development is that based on triple helix (companies, public administration and R&D institutes and universities), but it is not able to present all necessary actions to achieve a specific objective. It does not cover the measures needed by the direct actions, which are connected to the learning demand of the individual actors inside the regional partnership.

The financial implementation of above specific regional policy starts with the resources’ collecting and finishes with the comprehensive education. It is based on possibility, feasibility and necessity for individuals to invest (to pay direct and indirect opportunity costs). Under the regional innovation, learning and development partnership, it is important to define and to solve the problem of the educational authorities and to achieve the same level of the knowledge exchange for all regional actors. But the actual real society is not able to integrate the individuals as a whole. On the other hand, the competition between individuals is greater and its effects become a standard for their personal life. This approach is based on the new dimension of the “institutional individualism”, which doesn’t support the idea that to live alone means to live inside the society.

Some specialists argued the idea that it is necessary a new regional model, based on the “triple helix”. This model has to quantify the social and individual dimensions of the regional innovation, learning and development partnership [17].

The model differences the regional partnership actors according to their ability to represent the education and research demand and supply (see fig.4).
partnership is introduced as a general notion, which is used to analyse the Member States and their actions need an important financial support. As a result, the actors of the regional innovation, learning and development partnership have an important role, especially for SMEs.

Innovation is able to generate economic growth on short and long term. The dedicated researches are focused on: the innovation regional disparities are greater than those connected to the economic development. The EU27 spent 1.84% of GDP for R&D in 2008, the same as in 2005, but less than in 2000 (1.86% of GDP). It was about 201 billion Euros. In 2008, Romania came in second last place on R&D funds (0.46% of GDP). The last place was achieved by Cyprus (0.42% of GDP). Bad places had Bulgaria (0.48%) and Slovakia (0.49%), as well. The Member States which invested the greatest sums to R&D activities in 2008 were Sweden (3.82% of GDP), Finland (3.45%), Germany (2.51%), Austria (2.45%) and Denmark (2.43%). Under the present global crisis, the Lisbon strategy’s objective of 3% of GDP for R&D activities in 2010 missed. But the new European strategy until 2020 conserved the objective of transforming EU27 into one of the most competitively and dynamic science based economy in the world.

Romania invested 444 million Euros in R&D activities in 2008, and it was a little growth regarding 2000 or 2005. Nowadays, the scientists and engineers represent 4% of the Romanian labour. They are more than in Italy, Malta, Austria or Portugal, for example. Belgium has the most citizens used as scientists and engineers (7.9%) and Portugal has the littlest (2.7%). The number of scientists and engineers represents 3% in Bulgaria and 4.2% in Hungary.

A positive element to support the innovative capacities represents the communication, in order to benchmark the regional actors. There are different models of regional partnership: institutional, strategic and partnership project. The institutional partnership covers representative public, private and civilian actors, which are able to ensure a good environment for regional specific cooperation. The strategic partnership is focused on the regional/local knowledge objective and the collective learning facility between partners. The partnership project represents a temporary improvement of the local/regional knowledge base, in its connection with spontaneity and ad hoc cooperation.

The regional models of innovation, learning and development are focused on rationality: economic, social or political. The economic rationality needs basic and all-in initiatives, which can be sold or can support the sustainable economic growth. The political rationality implies promotion and strategic guidelines, which can lead to institutionalisation and externalisation. The social rationality implies inclusion, sustainability and proximity inside a specific region [23].

The regional innovation, learning and development partnerships have to support environment protection and to organise the proximity on regional, cultural and social levels. On the other hand, the regional development policies based on continuous learning have to be correlated to innovation policies because the partnerships’ resources are finally focused on the production system, which needs knowledge transfers. The implementation of the general interest measures and services, which support training, research centres, companies, individual entrepreneurs, researchers and employees, creates a favourable environment for the regional policy, in order to allow the individual and collective initiatives with positive impact on a specific region. Moreover, the implementation of measures and initiatives which support the creation and the development of the regional partnership, allows the building of a performing learning and skill network. If the regional policy respects these three above needs, it will be able to support the knowledge transfer and implementation, in order to achieve a regional sustainable development, under the regional innovation, learning and development partnership. An important element of the analysis is the quantification of the regional authorities’ function inside the innovation, learning and development partnership. This function is different, according to the regional partnership type and the evolution of this partnership.
At the beginning of the regional public-private partnership, the regional authorities have to cover the transaction costs. These costs are connected to the development of new methods of knowledge collecting and dissemination, when information networks are built or when the cooperation between potential partners is initiated or developed. Under the regional partnership implementation and growth phase, the regional authorities have to facilitate and to ensure the normative support for the partnership, using specific policies and long term undertakings. When the regional partnership becomes mature, the regional authorities have to contribute to the monitoring and formative evaluation processes. At least, the propriety division and the identification of the divisions inside the regional partnership become important. Any partner is able to support this partnership, if it is only an involved player.

Moreover, the innovation can be described as a successful emergent element which covers the knowledge exchange between regional universities and business environment. As a result, the public authorities have to support the communication processes and the structural changes.

Best practices connected to this regional innovation, learning and development are those from the Northern European Member States, which are based on strategic partnerships and which are financed from regional credits and own funds.

IV. MOTION MODEL RELATED TO CONTINUOUS LEARNING POLICIES, CREATIVE INDUSTRIES AND REGIONAL DEVELOPMENT IN ROMANIA AS LATEST MEMBER OF THE EUROPEAN UNION

Nowadays, the world nations have to face to globalisation and economic crisis. The main important effects of these phenomena are: faster labour markets’ changes, the growth of the socio-economic and cultural connections’ complexity, the development of new instruments and competences and the capitalisation of information and knowledge. Competitiveness becomes a successful element. As a result, the socio-economic environment asks for new and greater competences. Moreover, those which have competence now, are not sure that will have it in the future, as well. The major question for universities is if they are able to offer the competences asked by the labour market? On the other hand, globalisation is not an option. It is a real process, which operates simultaneously on economic, social, research and learning levels, even that we want or we do not want it.

It is necessary to growth the attraction of the educational system and of the training systems across the EU27. Romania enjoined European Higher Education Area (EHEA) and reorganised the whole university educational system. The development of the National Qualifications Framework for Higher Education in Romania is monitored by a specific public organisation ACPART (National Agency for Qualifications in Higher Education and Partnership with Economic and Social Environment). ACPART has to facilitate the results and the attributions of the labour qualifications’ understanding by the universities, the employers, parents, students and graduates. This public organisation ensures the compatibility and the comparability with the international specific standards, in order to grow the competitively and the mobility of the students and graduates. ACPART offers advisory activities for students and universities, which are focused on the continuous learning. Last, but not the least, ACPART promotes trust in all occupational categories and in society.

On the other hand, quality assurance in university education is an important research problem. In the context of a falling birthrate, quality assurance in the form of entrance examinations has fewer practical functions. Through deregulation and incorporation, universities have made efforts to improve their educational quality by introducing market principles [24].

The object of education is the students, and it should significantly take students’ ability and interest into consideration. The curriculum implementation should make the students learn by doing and motivate them to learn. Then, the students will no longer consider the curriculum distant and unrelated to the life experience [25].

The dialogue between universities and business environment becomes essential for the cooperation improvement at regional level.

The regional problem is one of the most difficult problems which have to be solved in Romania. As a result, this above dialogue is able to find viable solutions. Romania has great inter and intraregional disparities. Moreover, the less developed community region is North-East from Romania. EU promotes the regional partnership, in order to achieve a sustainable regional development. But the European classic model is not applicable in Romania.

As a result, this paper proposes a new regional growth model, based on partnership, which has, as main actors, the following: universities and R&D institutes, technologic institutes, consulting centres, companies, public authorities, Chambers of Commerce and trade unions. The learning and R&D institutes induce the regional human capital and entrepreneurial ability. The technologic institutes and the consulting centres support the regional entrepreneurship and innovation development. The connection between companies, public authorities, Chambers of Commerce and trade unions entails services which quantify the regional population welfare. Romania adopted the concept of knowledge innovation policy as an important element of its sustainable development strategy. This strategy leads to an innovative system, like in figure 4.

Romania is divided into 8 NUTS 2 regions. Each region needs a regional business services system. Under such system, the institutes which promote knowledge are: universities, R&D institutes and colleges.

Under the motion regional development model, is proposed a partnership between public administration, universities, R&D institutes and business environment.

A solution offered by this partnership is the development of the creative industries. The definition and the critical analysis of the creative industries in Romania lead to the definition of some viable objectives connected to the regional development. The first objective is the building of a local/regional partnership, which to be able to develop the
creative industries. The second objective is connected to a study presentation of the present level and the development prospects of the creative industries in Romania and in specific regions. Third, it is necessary the dissemination of those information connected to specific best practices. The last step is to create a local management network for the creative industries. This network covers professionals, statesmen, business environment representatives, public institutions and NGOs. These above objectives were defined using a SWOT analysis across the Romanian NUTS 2 regions.

Fig. 4 motion innovative system in Romania

V. CONCLUSIONS

This paper’s approach is new, unconventional and with major effects on regional development in Romania. The present research tries to find solutions and answers to the present and forecast problems and challenges. This is why it leaves the limits of the classic approach, strictly economic. This approach offers another view and, maybe, another understanding of the socio-economic evolutions, which tend to be not compliant with the economic theories and laws.

The present greater challenges ask for especial solutions. The paper tried to find answers. It proposed a new solution for the regional growth: the creative industries. It is considered that the creative industries will have a greater impact on the society than internet had. This solution has not been eliminated. Often the most difficult problems have less sophisticated solutions.

REFERENCES
