

INNOVATION IN THE ECONOMIC CRISIS CONTEXT

Petrică CORĂBIERU^{1,*}, Ștefan VELICU², Dumitru ZAIT³, Anișoara CORĂBIERU⁴, Dan Dragoș VASILESCU⁵

- ¹⁾ PhD, Eng, Researcher II, S.C PROCOMIMPEX S.R.L. Iasi, Research Department, Romania
²⁾ PhD, Prof., University "Politehnica" of Bucharest, Machines and Production Systems Department, Romania
³⁾ PhD, Prof. University A.I.I. Cuza of Iasi, Department of Business Administration, Romania
⁴⁾ PhD, Eng, Researcher II, S.C PROCOMIMPEX S.R.L. Iasi, Research Department, Romania
⁵⁾ PhD, Eng, Researcher II, S.C PROCOMIMPEX S.R.L. Iasi, Research Department, Romania

Abstract: The paper highlights the main mechanisms created inter-organizational innovation applied to management and research of enterprise. The authors make a comparative analysis between the situation at European and national, that of Romania, in terms of inter-organizational innovation. In the paper are highlighted key concepts which required inter-organizational innovation at European level as: sharing knowledge, strategic alliances, strategic entrepreneurship, and innovation projects. The work proposes resize the concept of innovation related to efficient management and sustainable development. Resizing is based on comparative analysis of motivational factors. This analysis provides resources and supports necessary to support creativity and inter-organizational innovation such as systems to strengthen their capacity to create. Strengthening the capacity to create is a way out of economic and financial crisis.

Key words: inter-organizational innovation, comparative analysis.

1. INTRODUCTION

The tendencies towards the globalization, the concurrence and different events that afflict normal processes and evolutions of the global economy as well as the circumstances specific to crisis and partial or general recessions, impose to the actual national or international enterprises/organizations approaches adapted to the change, destined to ensure competitiveness and performance on long term and not only surviving or evolution predictable by politics on short term. The strategic constructions of the respective structures management have to possess solidity, coherence and flexibility in order to open the enterprise and to make it resistant to permanent and always different challenges of the market. The innovation, accompanied permanently by the productive creativity, became already a particular centre of gravity more significant than any other variable of the enterprise's development [1].

2. SOME GENERAL BENCHMARKS OF THE REFERENCE FRAME

At international level one of the most important directions of the enterprise strategies development became the inter-organisational innovation. Issued as a specific practice in the last period of the past millennium in the lucid enterprise, the inter-organizational innovation has been proposed by pertinent studies in the years 86– 90 [2]. The

more the firms are engaged in a bigger variety of inter-organizational co-operations the more it is most probably for them to propose new products or products improved with bigger possibilities of successful commercialisation [4 and7]. The inter-organizational innovation imposed its self in the last 2 decades by the following several concepts (Fig. 1):

- open innovation paradigm by which also in theory the passage is made from the closed innovation to the innovation that leads the enterprise to the market, putting into evidence the role of the marketing of innovation source [14];
- sharing the knowledge as a way through which a company can increase its creative performance building strategies by which it integrates the knowledge, not only technological, with the competitors on the market and with the national innovation system NIS [17];
- strategic alliances by which the small firms have in view the improvement of the performances by alliances with big and innovative partners, in order to make the change of know-how [8];
- strategic entrepreneurship as an inter-organizational collaboration way, by which the following of the superior performances of the firms is achieved, through

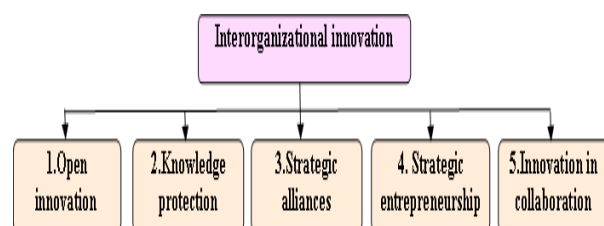


Fig. 1. Mandatory elements of the innovative process.

* Corresponding author: S.C. PROCOMIMPEX S.R.L., Str. Canta, No. 14, Iasi, Romania
 Tel.: 0332 /807529, 0040746195134; Fax: 0332 /807529
 E-mail addresses: pcorabieru@yahoo.com (P. Corăbieru); velstefan@hotmail.com (Ș. Velicu); dzait@uaic.ro (D. Zait); acorabieru@yahoo.com (A. Corăbieru); officeprocom@yahoo.com (D.D. Vasilescu)

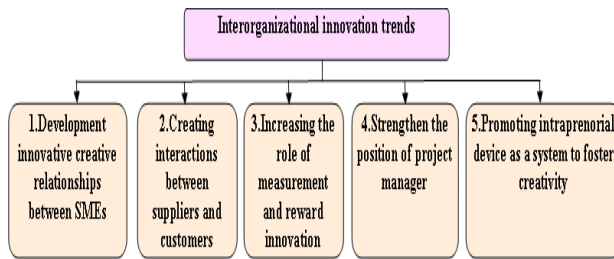


Fig. 2. Interorganizational innovation trends.

mediation of the activities of searching the opportunities and advantages [15];

- innovation in co-operation as mean of maintaining the continuous innovation in order to allow the firms to reduce the gap between the innovation level they have and the one they need.

Some more important and significant tendencies regarding the inter-organizational innovation at the enterprise's management and research have been remarkable in the last years (Fig. 2):

- development of creative – innovating relations between small and average enterprises and the external institutions that supply technical and financial support, the internal resources for the innovation being not sufficient to reach the [5];
- creation of interactions between suppliers and clients by the consortiums of research-development, interactions that help knowledge creation [6];
- increasing the role of the innovation measurement and award for the employees encouragement to create both incremental and radical innovations;
- reinforcement of the project manager position and enlargement of the decision area of this one in the field of human and financial resources, in the constitution of specialised working groups with a view to achieving complex studies, under different angles and perspectives;
- promoting the intra-entrepreneurial device as facilitating system of creativeness by which the employees original initiative is encouraged and helped.

On the international level, the inter-organizational innovation is focused on several directions:

- achievement and implementation of new methods for organization of the routine work and creative-innovative procedures starting from the philosophy that the innovating process is a complex and non-linear process [12 and 13];
- determination of the individual performances of each firm, identifying and evaluation of the methods used by the firms in interacting as elements of a collective system [3 and 11];
- achievement of global studies of the innovative behaviour of each company, centred on the research of the actual and potential markets, material and non-material resources of the organisation [7];
- study of the innovating capacity of each organisation with specificity to the creation, adoption and exploitation of the innovation with the help of specific techniques (hybrid technique A'WOT, used also for the comparison between different decision factors regarding the innovation);

- development of certain methods of study of the structures, devices and performances of the inter-organizational nets (integrated model of Product Development Process PDP - Th. Matheus, 2009).

3. SITUATION AT THE LEVEL OF THE NEW EU MEMBERS

In what concerns the new members of the EU (Romania, Bulgaria, Slovakia, Estonia, Latvia, Lithuania), due to the property transfer and to the frequent changes of competition, regulatory and organisational nature, the new structures didn't dispose of the necessary period for consolidation and continuity, the process of re-orientation and adaption falling behind. The development of a specific philosophy, of a strategic orientation and of several specific structures for the stimulation of the innovation and creativity is made at a low speed in the majority of the industrial sectors as in the agriculture. In the top industry and partially in the buildings creative-innovative solutions of quality have been more quickly adopted, implemented and used. Often, management styles, motivating systems and innovative processes are not properly articulated and integrated into complex and realistic systems. The concepts and practices of creativity-innovation of inter-organizational type are less known, the management being rather marked by the idea of conservation of certain individual and isolated positions in what concerns corresponding devices. A kind of internal atomisation of the innovating structures is specific to this behaviour, although the study of the respective international mechanisms, devices and practices provides clear and obvious conclusions marking their failure. In many cases, the approach of the innovative process is summarised in a brief interpretation like [8]:

- innovation – material result (routing: concept-prototype-product);
- innovation – research as internal strategy (isolation by respect to the outside).

The most often, the management style creates the main barriers in the way of the innovative process [16]:

- the creative process is regarded as an attitude occasionally necessary and not as a mental and attitudinal constant disposition;
- the creative process is considered as a prerogative of research - development activity and not as a vital component part of the entire organizational system;
- the creative process is perceived as depending only on the organizational factors and not on the personal capacity of each one to surpass the pre-established models;
- the creation and the innovation does not have to be imparted with others.

From the inter-organisational innovation point of view, some philosophies and innovative behaviours types are still prevailing:

- few studies are engaged regarding the problems of identifying and valorisation of the sources characteristic to the innovation by recourse to the co-operation or collaboration between enterprises;
- in the machine building industry and metallurgy sharing of the knowledge is little used by the companies

in order for them to increase the innovative performance; a small number of firms that build their innovative strategies by sharing with strategic competitors;

- the strategic alliance are present most in the field of the automotive equipments and component parts and in the telecommunications;
- innovation in collaboration with the purpose of maintaining the continuous innovation is a mean utilised occasionally, most in the food industry and in the consumer goods industry due to the reduced technical and financial support of the Romanian companies;
- performances measurement and award in the innovation does not encourage the employees to use the creativity and to innovate for the benefit of the enterprise;
- the research – development consortium are circumstantially established, having in view to reach certain objectives on short term;
- the attributions of the project managers are not delimited, they cannot take decisions in many cases without the approval of the enterprise's management. The project managers have not the direct control on the project budgets and this have a negative effect on the setting of the proper actions to take.

4. PERSPECTIVE ORIENTATIONS

Competitiveness imposes to the management, besides its basic functions, (planning, organisation, training-coordination, control), assumption of specific responsibilities regarding certain new directions of action:

- a. stability and development – the organisation has to prosper or, the worst case, to survive; management has to establish the evolution strategies, to monitor the performance and to provide the current adjustment necessary using plans, programs, decisions, using so all its functions;
- b. technological development – permanent achievement of new products or modernized products in order to face the requirements of the client and competition; management has to provide conditions and technical exigencies compatible with the organisation's mission;
- c. economic performance – to obtain the same result faster and less expensive represents an element of economical performing; management has to provide knowledge of the production costs and to impose a favourable attitude to their reduction; obtaining profit is essential for the organisation;
- d. perpetuation – the organisation has to win notoriety; the management purpose is to provide the continuous growing of this one, to improve the perception of the organisation's image in the business world, to protect, to consolidate its position;
- e. satisfy the employees – the organisation is a family; management has to ensure the favourable climate to such of entity: new employees, new work places, adequate qualification, favourable utilization of the experience, providing the product aspiration, promoting, utility; stimulation in ethical and competitive context can be ensured by rewards for innovation, for special achievements and trust has to confer independence and satisfaction of decision;

- f. development of the community – the organisation cannot break the employees from the social context they leave and manifest themselves in; the contribution of the organisation to the lasting development and the increase of the social and societal efficiency is a viable way of improving the image and increase the innovating potential.

In order to evaluate the innovative process, currently a predilection for the utilization of a system comprising two groups of indicators is manifesting: procedural and technological ones.

The procedural indicators characterise the steps of the innovating system on the route: market demands – idea – concept – product/technology – market. It is remarked that the initial departure point and the final point is the market. The procedural indicators offer information that can trace radiography of the stage of the innovation process in a certain moment. These indicators put into evidence aspects related to: expenses of invention implementation; number of capitalized inventions from the total breveted ones; weighting of the inventions that have as result new products or technologies; weighting of the costs of selection of ideas related to a certain domain or problem; expenses and average time for finding the economical applications for certain inventions.

From the technological indicators, the followings have a larger utilisation:

- the total research expenses – represent the expenses made by the central and local administration, by the private environment and the academic environment, with the research-development. Research-development makes reference to the creative activity achieved on systematic basis with the purpose of increase the knowledge stock and to use this knowledge for new applications achievement (Frascati Handbook, edition 2002).
- population employed in sectors with high technology – represents the population employed in industrial sectors and intensive services of high technology. This indicator links the work market of competitiveness and shows the intensity of the engagement of an economy in the creation of new technologies;
- tertiary education with advanced specialisation in research – this indicator includes the students with advanced specialisation in research both from state and private universities and shows the existence of the qualified human capital that can contribute to the research-development-innovation activity. [9 and 10].

In a globalized world, EU has to compare itself with the new international competitors. That's why EIS would have to include more countries that do not belong to the EU. In order to ensure getting comparable results for benchmarking, the information must be collected from harmonized data banks, provided by international institutions like OECD and World Bank.

In the indicators approach, subjectivity should be eliminated in the comparison between EU and other regions that supply data; usually, the EU member states benefit of advantages into the framework of the European Patent Convention (EPO), in the domain of the Community Trademarks and of the Community Design, while USA are advantaged by the American Patents and Trademarks Office (USPTO).

Other problems related to the compatibility come from the fact that there are not polls on the innovation in many non-EU countries or from the differences between the questionnaire or methods of the EU and non-EU countries. A global EIS aspires to include as many indicators as possible or to choose a nucleus of indicators every country could provide information for.

5. CONCLUSIONS

Actual provocations and perspective visions on the new creative mechanisms of inter-organisational innovation applied in the enterprise management and research converge to the outlining of the following ideas and action directions:

- study of the innovation capacity of each organisation has to be made related to the creation, adoption and exploitation of the innovations using specific techniques (hybrid technique A'WOT, used also for the comparison of the different decisional factors regarding the innovation);
- measurement of the effect of the inter-organisational innovation on the economic performance by including into the indicators system of certain characteristic output values and consideration of these ones as a second layer of the output;
- economic increase is possible by inter-organisational innovation due to the orientation of the decisions toward the reinforcement of the creation capacity by respect to the production capacity, aspect necessary in the period of passage to the economy based on knowledge;
- efficient study of the expenses occasioned by the inter-organisational innovation is achieved by comparing the recovery rate of the innovative investments at the organisation level with the rate of the innovative investments at the inter-organisational level.

Inter-organisational creative innovating mechanisms represent the devices and levers of action in a future economy based on knowledge, having as target the functioning in net by inter-organisational and inter-personal collaboration. Functioning in net contributes essentially to the identification of the advantageous industrial and agricultural niches, to the forming of the synergic sustainable structures that facilitate the implementation of the innovations in utilizable and saleable products by promoting the new technologies and of the informational society. Strengthening the capacity to create is a way out of economic and financial crisis.

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