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Rizea (Pirnea), Ionela Carmen

Bucharest Academy of Economic Studies, Bucharest, Romania

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Development and improvement of the relationship between innovation and intellectual capital – requirement of performance in romanian companies

PhD. Ionela Carmen Rizea (Pirnea), Bucharest Academy of Economic Studies, Bucharest, Romania

Abstract

In a knowledge economy, innovation is the competitiveness key and the acquisition and dissemination of knowledge in social systems is the result of collaboration between individuals and communities of interest. Managers can not measure the innovative capacity of the organization, but they may improve his performance. Managers can improve the rate and quality of innovation and competitiveness on the market. Intellectual capital through its three forms - human capital, organizational capital and structural capital, it makes organizational performance. The purpose of this article is to highlight the relationship between innovation, intellectual capital and organizational performance.

JEL classification: L25, O32

Keywords: *innovation, entrepreneurship, human capital, intellectual capital, structural capital, performance.*

Innovation – the source of competitive advantage

Innovation is an important concept in the new competitive context. Knowledge is based on innovative processes and innovative potential can be developed through training and retraining. Innovations are analyzed from several perspectives that significantly influence their definition. There are basically two approaches, one focused on outcomes, where innovation is a new idea or a new process, and proceedings. According to the procedural approach, there is a distinction between macroeconomic and microeconomic approach between the sociological and organizational theory. This typology can be complete according to the degree of novelty or routine radical innovations, and depending on content, product innovations, or social process. With the expansion and an upgrade knowledge structure there are new opportunities for proliferation of radical innovations. Innovative pressure is growing stronger as a result of reduced innovation cycles, and innovation is the decisive factor associated with transfer of know-how and intellectual property rights [8].

At the organizational level, the management of innovation brings to the fore entrepreneurship-oriented to the site, new flexible structures to create a relaxed atmosphere aimed at creation, with more space for maneuver needed to develop and promote new ideas to employees. Specialized studies indicate even the existence of a new management ideas as a management tool in business. At its core is the implementation of an innovative culture throughout the organization. It is characterized, for example, the maneuvering space for employees, the possibility of interpersonal communication, tolerance of mistakes, the delegation of responsibility, orientation towards teamwork.

The innovation is both a social process facilitated by the efficient management of human resources. as well as a result on the personal transformation matter .

The defining of innovation as a social process, and not as an administration, the role is to highlight the fact that innovation is a difficult process of conducting a real capacity for self-organization, a source of competitive advantage. Social context and individual level analysis of social dynamics are elements that contribute to the development of innovation within the organization.

To achieve an innovative project is necessary that the vision has to be individual and consistent with the intelligence, expertise and collective will (figure 1).

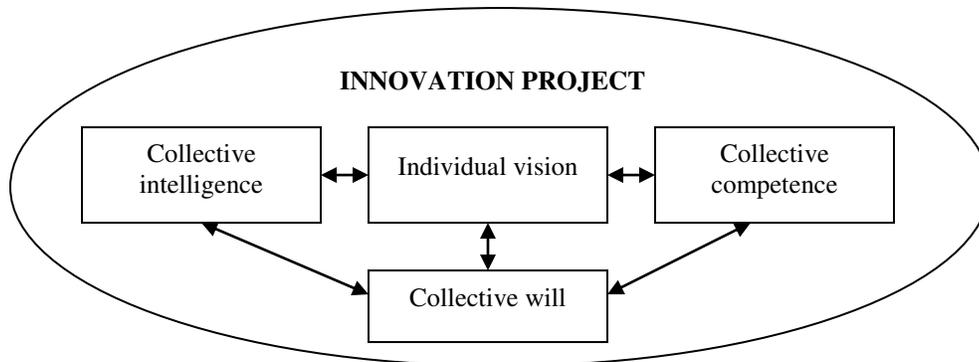


Figure 1 - *The prospects for innovative project* [3]

Innovation can be perceived as a routine process which removes the routine and obsolete strategies the routine to enable the development of organizational creativity. Vicar and Troilo consider, that all phenomena of chaos and disorder are inherent in the innovative process that supports the creation of intellectual capital [4].

Intellectual capital and influence on the organization

The intellectual capital can be defined as the native resource of an organization, that through the extraction and processing, is converted into the highest good price.

In the literature there are different views on the components of intellectual capital. One opinion assumes that there are 5 components of intellectual capital, namely [2]:

- human capital - makes reference to the tacit or explicit. Knowledge that humans possess. like the ability to generate knowledge that is useful to include the organization's mission and values and attitudes, skills and know-how;
- technological capital - refers, to the combination of knowledge directly related to technological system development activities of the organization responsible for obtaining goods and services;
- organizational capital- represents a combination of explicit and tacit knowledge, the formal and informal and within an efficient mode, develops an organizational structure on the organizational activity of the firm. This activity includes culture (tacit knowledge and informal), structure (explicit and formal cunoșințe) and organizational learning (renewal processes explicit and tacit knowledge, formal and informal);
 - *business capital* – refers to the values of the organization, that are kept by the main agents - customers, suppliers, partners etc.
 - *Social capital*– refers to the organization's values, that are stored with other social agents and other neighbors.

Edvisson and Malone, referring to intellectual capital affirms: *"Perhaps the role of intellectual capital is more easily explained using the metaphor. If we imagine the company as a living organism, for example, a tree can be said that the organization plans, annual and quarterly reports, company brochures and other documents represent the trunk, branches and leaves. An wise entrepreneur will consider whether the tree can produce fruit. Analyzing the tree superficially, we can clearly see the direction of growth, shape and size, but usually, while this is done, many forget that almost half of the tree mass is located in its roots. The condition of the roots represents the tree's foundation and its future value creating capability. Similar to this, financial information gained by accounting provides only superficial insights into the situation of a company since it does not include information about intellectual capital. Accounting information provides a review about*

business activities of the past. This is intellectual capital \pm the roots and measure the company's investigation of the dynamics of which is visible below the surface represented by products and company buildings,,[6].

According to Edvinsson and Malone, the market value of the firm, the firm performance is given by finance capital and its intellectual capital. Intellectual capital is divided into: *human capital* - represented by the skills, abilities, creativity and employee values, philosophy and *culture of the organization and structural capital*.

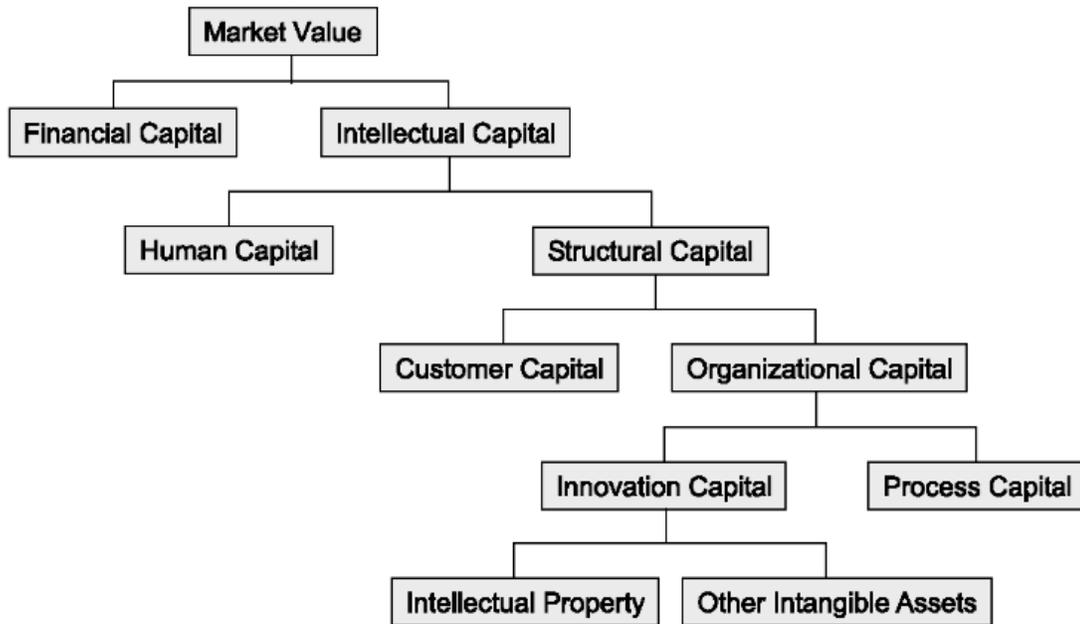


Figure 2 - *Edvinsson Model* [7]

At the organization level, intellectual capital refers primarily to the tacit knowledge of personnel or human capital (individual skill, training, experience, values and social skills).

In Edvinsson model, the intellectual capital is composed of two major elements of human capital and structural capital, as can be seen in Figure 2.

Human capital is the sum of all knowledge, skills and experience of employees.

Structural capital is defined as a set of powers and human capital elements of infrastructure support.

Customer Capital is represented by the value of customer relationships.

3. Organizational performance - a result of intellectual capital

Intellectual capital, through its forms makes the organization's performance.

The existent relationships between the intellectual capital, and the performance organization takes to the establishment of development in an new career , based on acquiring a portfolio of fullest skills. The professional career development should be part of a map of knowledge within the organization. This map, of knowledge has a great value to the organization, because it includes the networks of knowledge that are created between the employees and how they are organized around production.

The performances of an organization can and they would be approached in terms of effectiveness and efficiency.

They acquire a new content for the knowledge-based organization, under the influence of several factors. These factors are based on the quality of human capital and valences of the organization as human resource, people are carriers of knowledge. These factors are [1]:

- large shared knowledge in the firm;
- the growth of the share and importance of quantifiable inputs, represented by tacit knowledge;
- transformation of an external stakeholders into components and / or participants in the firm's intellectual capital;
- the ecological environment of the firm is an essential element of the inputs and outputs of knowledge based business.

The market value of a firm is given by its tangible and intangible assets, with the trend of reduction in the physical capital (tangible assets) involved in obtaining products or services that contribute to the economic performance of the company. In the category of tangible human capital assets is a substantial component.

Are known and proven financial benefits derived from investment firms in people, mainly in education and their training, this investment has a high rate of recovery, benefits in the form of increased labor productivity, the development of professional skills, innovative capacity, the increased mobility of workers. However, many organizations have seen education and training of employees as a cost rather than as investments. Orientation, knowledge-based economy, is that employees are considered assets in the company. Human capital is considered an intangible asset such as alongside the other components of intellectual capital. According to the latest trends, employees are seen as potential investors in their own human capital [11].

Organization of human capital needs for the business to succeed. Knowledge economy suggests that vision, to see people as critical contributors to the success of the organization.

The individuals decide to invest capital in the organization to themselves. organization and his administration are concerned about investing in qualitative and quantitative development . Capital providers are employees who want to ensure that vo first rewards for their vested (through wages, bonuses, etc.). The organization is interested in human capital performance and will manage accordingly. The organization will address how it can invest in human capital to add value to its business.

4. Innovation and performance in romanian companies

At organizational level, measuring performance in innovation is usually achieved through a variety of indicators, among which we mention: % hours spent on developing new innovations; % conversion rate of ideas;\$ cost savings resulting from innovation projects; % Of employees involved in the innovation process.

Another example of a report on innovation performance, this time at the national level, the "Index of Innovation Capacity. "

Over half of the companies in the EU27 are innovative, a European Commission study shows. In Romania, one of three companies innovate, but only 13% collaborate with foreign partners, claims the survey.

Romania does not stand too good at innovation chapter, only 33% of firms reporting any new activities in 2006-2008. Of these, only 13% have collaborated with other institutions or companies to produce innovations, and only 7.6% have collaborated with partners in the euro area, the percentage of companies that collaborate with partners in other parts of the world (USA, India China) is also lower [10].

In order to form an overall picture of the SMEs in Romania, knowing the nature of innovation activities carried out under particular importance. Research conducted by the National Council of Private Small and Medium Enterprises in Romania and Agency for Implementation of Projects and Programmes for SMEs, present in the White Paper on SMEs in Romania in 2010, found that innovation efforts of SMEs have focused primarily on new products - 29.90%, new technologies - 20.54%, managerial and marketing approaches in November - 14.01%, upgrading computer

systems - human resources training 10.24% and - 9.09%. A rather high percentage can be observed in firms that do not focus on innovation - 36.63%, which demonstrates that Romanian entrepreneurs do not consider innovation a top priority in economic crisis (Figure 3).

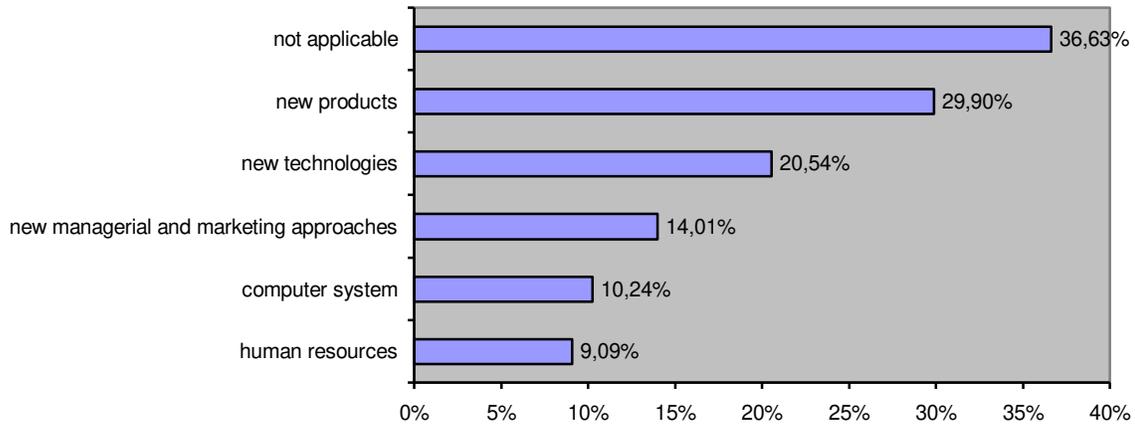


Figure 3 - **The nature of innovation activities in SMEs in Romania** [5]

In terms of overall economic performance of SMEs estimated for 2010 compared to 2009, we find that it expected weaker results than 31.02% of companies are identical in 27.86% of organizations are significantly lower than the 22.82 % of the units, better than 15.51% of companies and better only 2.79% of the companies.

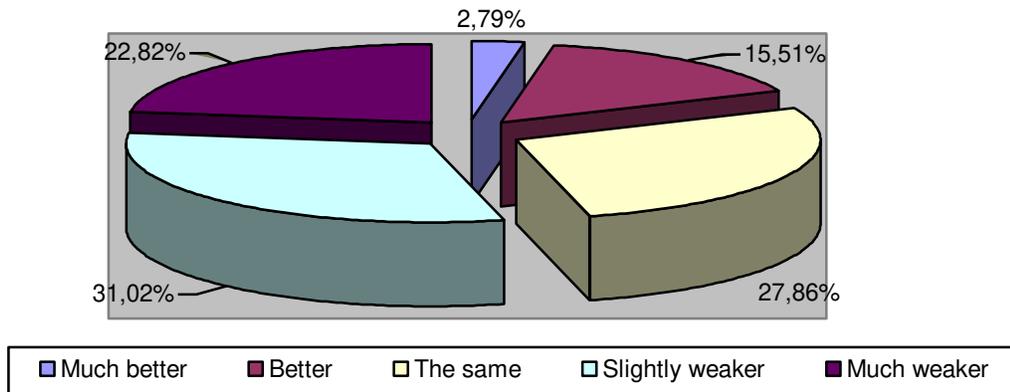


Figure 4 - **The structure of SMEs according to the dynamics performance in 2010 compared to 2009** [5]

These percentages show that, although a slight positive trend compared with the dynamic performance in 2009 compared to 2008, the SME sector in Romania has been considerably affected in 2010 by the great recession domestically and internationally, as can be seen from Figure No.4.

Conclusions

In the knowledge era, each organization is constantly changing. The way they are managed crises that occur during this period depends on the success of the organization. A key factor in managing these crises is intellectual capital.

Intellectual capital is both a contributor to enhancing the organization's performance and the outcome of the ongoing transformation of knowledge. Organizations that have employees with higher intellectual capital, income will be outstanding for a period of time [9].

The evolution of society is emerging era of knowledge. The information center is giving rise to intellectual capital. Intellectual capital is the currency of the new millennium. The using it wisely is the key to success in the Knowledge Age. Intangible resources and intellectual capital are vital to a sustainable competitive advantage and long-term development.

Relationship between intellectual capital and organizational performance leads managers to seek and find new ways of describing and measuring intellectual capital.

The qualities of human capital within the organization is reflected in business performance for the plan. It is impossible to get benefits through knowledge management if individuals are willing and motivated to share knowledge, or if organizations do not lose structural rigidity to enable information and knowledge to run.

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