

## **THE DEVELOPMENT OF THE INTELLECTUAL CAPITAL - THE CURRENT ROMANIAN CONTEXT**

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### **Abstract**

*The progress of an economic system is related to the development of the innovation economy in close correlation with intellectual capital. Nowadays economy is the economy based on new knowledge, innovation, know-how, new web sites and technologies and their realization in different spheres of economic activity. The accelerated renewal of the technological base of society, the formation of the innovative economy, condition the reformation of human activity, which leads to the formation of the new way of life of many people.*

**Keywords:** *intellectual capital, economic development, Romania*

**JEL classification:** *E22, O34*

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### **1. Introduction**

In the new concept of the knowledge society, organizations must highlight and develop intellectual capital, intangible assets, and in the end, their knowledge. The future will belong to the economic organization that through training, is concerned with the continuous development of its intellectual capital, and the development of its knowledge base, so that knowledge must be identified, assimilated and stored in usable forms within the organization.

The conceptual development of intellectual capital was made in two different but convergent directions. A first direction was generated by the need to increase the company's competitiveness capability and to achieve the strategic advantage on increasingly competitive markets by intensifying the use of intangible resources. Among these resources, emphasis was placed on

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information and knowledge, trademarks and patents, organizational behavior and organizational culture geared towards excellence. So wise use of intellectual capital is the key to success in the era of knowledge. That is why it can be regarded as the hidden value of an organization until recently immeasurable.

## **2. The intellectual capital - a vital, strategic resource**

Intellectual capital refers not only to the existence of assets, values or resources, but also includes the organization's ability to turn one resource into another. Only the presence of resources does not generate value. It is important how these resources are highlighted, and especially how one resource is transformed into another.

The new economy is a validation of the vision expressed almost half a century ago by John Kenneth Galbraith, when he first suggested the use of the intellectual capital (G. Roos et al., 1997).

In an organization, there is an intellectual material consisting of knowledge, information, intellectual property and experience that does not appear in the annual financial report but can contribute to the realization of its products and services, and this can be considered to be the intellectual potential.

This potential has the ability to transform the technological and managerial processes into a series of active, value-creating, operational elements, that are integrated into the company's material and immaterial final products.

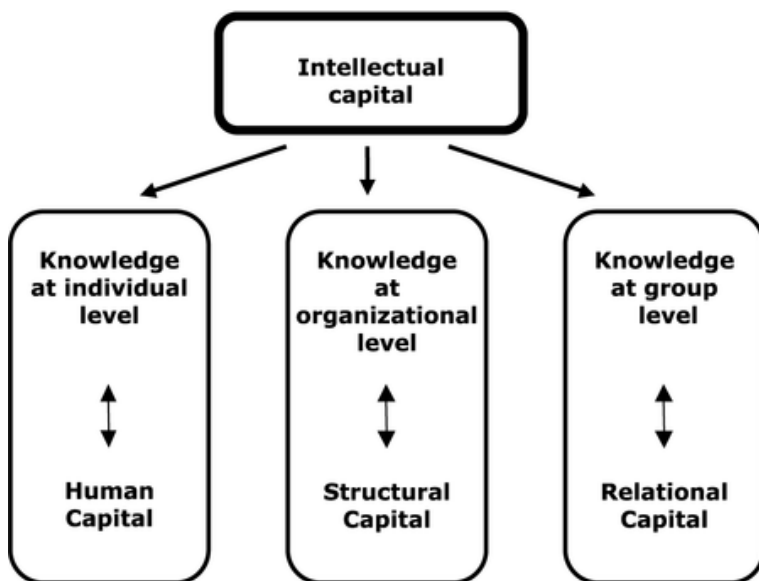
The importance of capitalizing knowledge through intellectual capital on the performance of a company was presented in literature for the first time in 1997 (G. Roos) and then in 2001 (S. Pike), when the concept of intellectual capital was theoretically grounded.

The literature in the field includes a multitude of definitions of Intellectual Capital (IC) (Tan et al, 2008).

From all definitions we studied, we decided to choose for this project the one which considers the intellectual capital as a dynamic system of intangible resources and activities that underpin the sustainable competitive advantage of organizations (universities or other institutions).

To completely define intellectual capital, we must take into consideration its components, as well. The components of intellectual capital are: human capital, structural capital (infrastructures) and relational capital.

**Figure 1: Intellectual Capital components**



Source: Emerald, *Journal of Intellectual Capital*,  
[http://www.emeraldinsight.com/content\\_images/fig/2500050407001.png](http://www.emeraldinsight.com/content_images/fig/2500050407001.png)

Intellectual capital includes four classes of intangible assets, namely:

a) Market assets: trademarks, market segments, ordering stocks (to the extent that the production process can cover), distribution channels, assignment contracts, licensing or franchising, etc. Efficiently used, such assets create competitive advantages on the market;

b) Infrastructure assets: technologies, working methodologies, specific technical procedures that make an organization work efficiently. This type of asset forms the culture of the organization, its financial structure, the databases, the management systems. These values determine how employees

work and communicate with each other, establishing inter-party relationships within the organization;

c) intellectual property assets: copyright, software, patents, industrial designs, factory brands, product, service (industrial, commercial), know-how, technical secrets of manufacture;

d) human values: professional skills of employees, including experience, ability to solve problems, leaders, etc. These values are crucial to the organization because it is costly to engage, form and maintain such values at a high level. Talent and professional skills are in the hands of individuals, not in the organization they work for. Also, because people work together, collaborating, all human values can be greater than the sum of the parts if the organization has managed to form a collective in which creative capacity is stimulated. (Marr, 2005)

### **3. The Romanian context**

Nowadays, we consider that the main features of the European economic environment and, to a certain extent, of the Romanian one, are:

- technological innovation - the accumulation of an impressive volume of knowledge in all areas, increasing competition on the market requiring the adoption of the latest technologies;

- Occupational instability - employees are forced to change not only their work place but also their profession. This instability is much more accelerated in the transition from a planned economy to a market economy;

- tax cuts - in the long run, as competition will increase the pressures of economic agents on governments, they will be getting higher in order to reduce taxation. This means that the state will have to either withdraw more and more from supporting public services, including education, or identify other sources of funding.

Globalization changes sensitively the way businesses run and accelerates the diffusion of "know-how" and innovation.

From this perspective, organizations need to become more competitive. This makes it imperative to reformulate the principle of comparative advantage by calling for a more suggestive concept in the context of the new economy and the knowledge society, that of the competitive advantage.

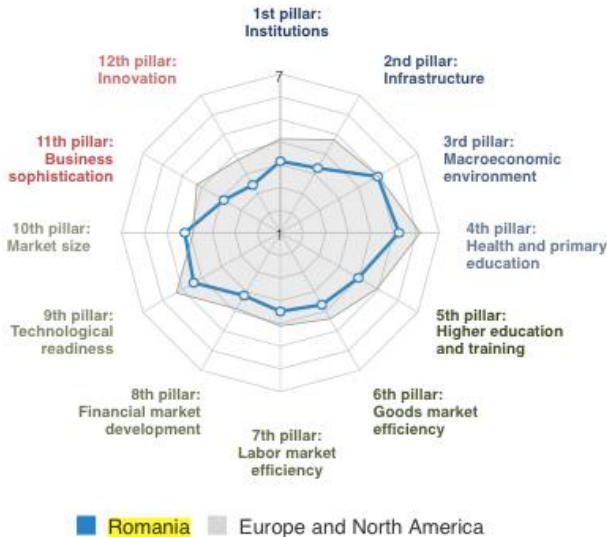
So, the main factors that allow Romania to become innovative are:

- consistent investment as an order of magnitude in education in general and in higher education, in particular;
- quality information and technology base;
- high levels of government spending on research and development;
- effective intellectual property protection laws that support research and development.

Continuing these ideas mentioned above, The Global Competitiveness Index 2017-2018 edition, for the *12th pillar: Innovation*, ranks Romania, at 96\137, scoring 3.1 (1-7), with a ascending trend.

**Figure 2: The Global Competitiveness Index 2017-2018 edition, Romania,**










Key indicators						
Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Rank	78 / 144	76 / 148	59 / 144	53 / 140	62 / 138	68 / 137
Score	4.1	4.1	4.3	4.3	4.3	4.3



Source: The Global Competitiveness Index 2017-2018, Klaus Schwab, World Economic Forum, <https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018>

In detail, considering the 12th pillar, the Innovation Pillar, as the figure shows, the most well ranked is the third component, the Quality of scientific research institutions, followed by PCT patents and availability of scientists and engineers.

**Figure 3: The Innovation Pillar for Romania**

 <b>12th pillar: Innovation</b>	96	3.1	
12.01 Capacity for innovation	109	3.7	
12.02 Quality of scientific research institutions	57	4.0	
12.03 Company spending on R&D	110	2.8	
12.04 University-industry collaboration in R&D	97	3.1	
12.05 Gov't procurement of advanced technology products	133	2.3	
12.06 Availability of scientists and engineers	80	3.8	
12.07 PCT patents applications/million pop.	51	3.9	

Source: The Global Competitiveness Index 2017-2018, Klaus Schwab, World Economic Forum, <https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018>

In conclusion, The Global Competitiveness Index, shows a small increase from 2017, but a lower rank considering the 2013 report.

Romania's accession to the European Union, represents only a level of professionalism, cultural and economic evolution, in constant adaptability to a new, internationally integrated economic environment, to an integrated world, a unique world that requires unique people.

This implies the capture and development of all cultural and human values, which increases the importance of national identity and effort in economy development, thereby enhancing the role of intangibles values and their role with in value creation.

#### **4. Conclusions**

The new economy is becoming more and more important in the business spectrum of highly developed countries, demonstrating the decisive role played by intellectual capital in achieving the competitive advantage of companies.

This intellectual capital is, however, the hidden part of the value of a company, because it represents the company's intangible resources, which can not be measured by the financial metrics used to measure tangible resources.

The new knowledge-based economy is characterized by increasing the amount of knowledge embedded in material products and the unprecedented dynamics of immaterial products.

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