



## **Managing Intellectual Capital: Increasing Performance of Higher Education Institutions in Romania**

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### **Abstract**

*Intellectual Capital is a key notion that refers to different intangible variables, such as human capital, structural capital, and relational capital, that have the immense power to provide an essential value to organizations worldwide and ensure entities' competitive sustainability. Additionally, Intellectual Capital represents one of the most vital intangible assets of our knowledge society, based on the fact that, on the one hand, it enriches individuals' abilities to develop and, on the other hand, it offers entities the opportunity to increase their performance, quality and value. Thus, investigating Intellectual Capital is a continuing concern for knowledge management, business process management and information and communications technology, since information in society and social development represent major areas of interest in a constantly challenging and increasingly competitive environment. This research aimed at presenting the advantages and the challenges of managing intellectual capital with the purpose of increasing performance of higher education institutions in Romania. Due to this, the work examined the results obtained by using the following research methods in both public and private higher education institutions in Romania: surveys, interviews, focus groups. Firstly, this paper has shown that Intellectual Capital plays a paramount role in the field of educational management in Romania, in general, and in the higher education institutions in Romania, in particular. Secondly, this paper has emphasized the opportunities and the challenges related to intellectual capital in Romanian higher education institutions. Thirdly, this paper has proposed a scientific model capable to value intellectual capital in Romanian higher education institutions based on the idea that, by exploiting intangible assets, the quality of higher education and the services provided by higher education institutions will increase substantially in time.*

**Keywords:** *Intellectual capital, human capital, performance, higher education institutions, intangible variables, quality of education.*

### **1. Introduction**

Recent developments in the field of economic sciences and business administration have led to a renewed interest in analysing and explaining the importance and the role played by Intellectual Capital in increasing the performance level of organizations [13, 14].

In particular, researchers (especially belonging to the accounting, audit, and economic and financial analysis domains) have shown the increased power played by Intellectual Capital in supporting the entities' management business processes [19], knowledge management assessment [18] and information and communications technology influences, demonstrating the need to evaluate intangible variables and their inputs in the organizations' performance level [17].

Until these days, numerous attempts have been made to link the activity of managing Intellectual Capital to the results obtained by companies worldwide [20, 24], however only a few have chosen to address the manner of increasing performance of higher education institutions in Romania by the aid of intangible capital – and especially by the use of Intellectual Capital components [15, 16].

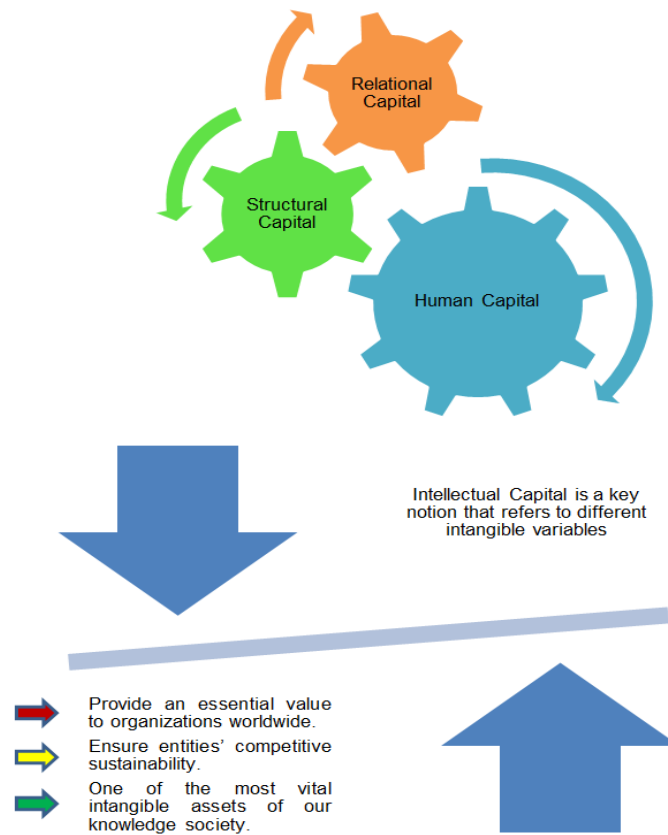
Concerning this study's significance and rationale, it should be pointed out that specialists all around the world have come in their works on several occasions to the conclusion that Intellectual Capital represents "the new wealth of organizations" [22], which represents a clear argument to continue to explore and examine the advantages brought by intangible variables to the efficiency, performance and sustainability of institutions [23].

### **2. Literature review**

A large and growing body of literature has investigated contemporary economy through a double perspective: firstly, by addressing the challenges that occurred from the economic and financial crisis [17], and secondly, by outlining the changes that appeared as a result of the new economy and knowledge society [21].



Fig.1. Intellectual Capital: key components and importance



Legend: This figure underlines the main components that constitute the process of managing Intellectual Capital, targeting the discovery of new solutions meant to increase performance of organizations, in general, and of higher education institutions in Romania, in particular.

Traditionally, it has been argued that the new economy and the knowledge society have based their foundation on the principles of certain dominant elements, such as: creativity; individuals' skills and values; information management skills; innovation; intangible assets; intelligence; know-how; and knowledge (see Figure 1) [12].

However, the generalizability of much published research on this issue is problematic, since the results of investing in intangible assets – such as, for instance, human capital, know-how, research, innovation and development, knowledge development and management, creativity and innovation, are still subjective and difficult if not even impossible to measure [6] – especially according to the traditional accounting indicators and parameters [4], or the generalized economic value accounts [5].

### 3. Methodology

To date, various methods have been introduced and described to measure the processes responsible for managing Intellectual Capital [7, 8].

Given the importance of intangible assets in universities and especially the relevance and significance of Intellectual Capital in educational organizations, this current scientific work aims at providing substantial data referring to the consequences of analysing Intellectual Capital in the process of increasing performance of higher education institutions in Romania.

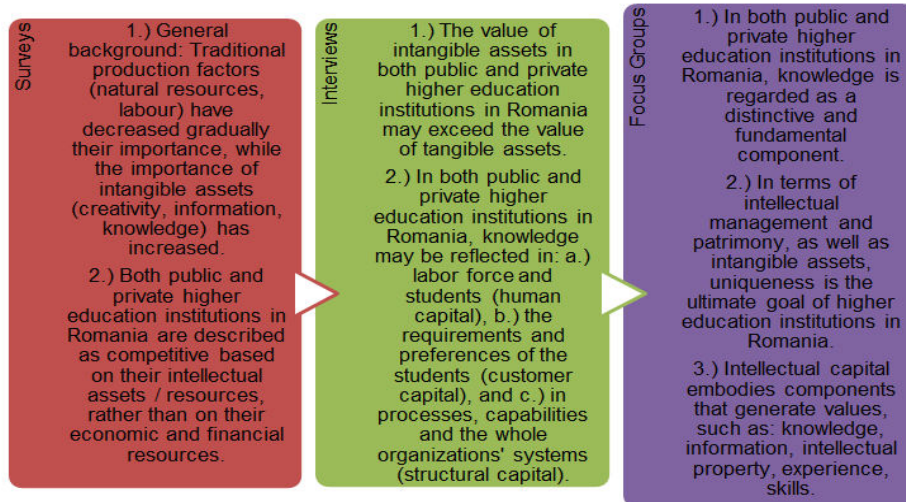
Thus, a variety of methods are used to assess managing Intellectual Capital and to discover the ways of increasing performance of higher education institutions in Romania, as follows: in order to present the advantages and the challenges of managing intellectual capital with the purpose of increasing performance of higher education institutions in Romania, the work examined the results obtained by using surveys, interviews, focus groups in both public and private higher education institutions in Romania.



#### 4. Data analysis and discussions

In terms of data analysis and discussions this scientific paper suggestively entitled “Managing Intellectual Capital: Increasing Performance of Higher Education Institutions in Romania” points out the valuable results obtained using surveys, interviews, focus groups in both public and private higher education institutions in Romania.

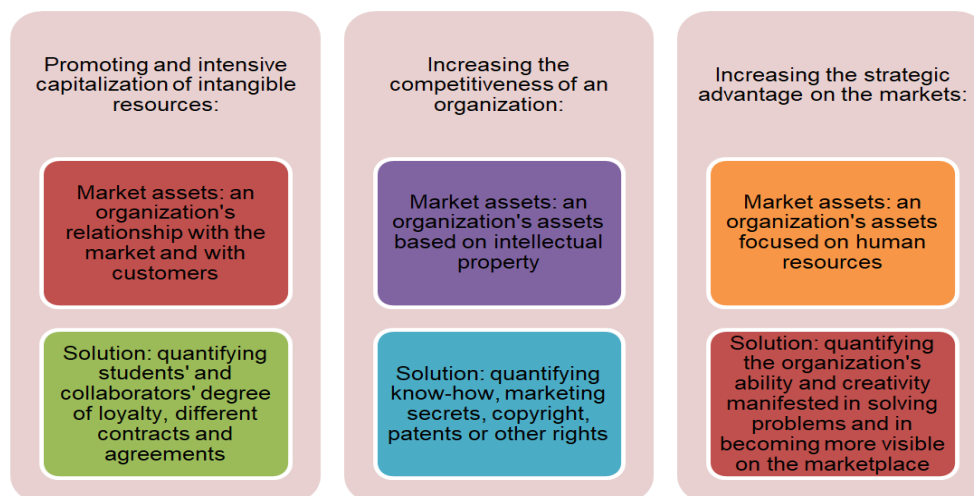
Fig.2. Assessing and managing Intellectual Capital: ways to discover the potential of increasing performance of higher education institutions in Romania



Legend: This figure underlines the results of assessing and managing Intellectual Capital, as well as the manner to discover the potential of increasing performance of higher education institutions in Romania. In like manner, this figure portrait the main results obtained by using surveys, interviews, focus groups in both public and private higher education institutions in Romania.

In addition, it should be stressed that a variety of methods were used to assess managing Intellectual Capital in order to establish the manner of increasing performance of higher education institutions in Romania, having in mind the idea of presenting the most relevant and significant ones, since each method has its advantages and drawbacks (see Figure 2 and see Figure 3).

Fig.3. A scientific model capable to value intellectual capital in Romanian higher education institutions based on the idea that, by exploiting intangible assets, the quality of higher education and the services provided by higher education institutions will increase substantially in time



Legend: This figure describes a scientific model capable to value intellectual capital in Romanian





## 5. Conclusions, limitations and future work

The general conclusions of this study are shown in the figure below (see Figure 4). These results come to complete previous works and research on intellectual capital [1-3], as well as the interpretation of intellectual capital's crucial role in our knowledge based society [7-11].

Fig.4. Conclusions: What does managing Intellectual Capital stand for when it comes to finding solutions for increasing performance in Romanian higher education institutions?

<p>General remarks: Finding an answer to the question: "What does managing Intellectual Capital stand for when it comes to finding solutions for increasing performance in Romanian higher education institutions?"</p>		
<p>Background: a.) The knowledge based economy and society were the ones that replaced the industrial society that appeared immediately after the agrarian society. b.) Although the production of material values represented the essence of both industrial and agrarian society, knowledge based economy and society based in foundation on information and knowledge.</p>	<p>The results of this study have shown that: a.) Intellectual Capital plays a paramount role in the field of educational management in Romania, in general, and in the higher education institutions in Romania, in particular. b.) The opportunities and challenges related to intellectual capital in Romanian higher education institutions refer to, among others, the subjectivity of raw information possessed, and perishability of knowledge and cyber-security threats.</p>	<p>This paper has proposed: A scientific model capable to value intellectual capital in Romanian higher education institutions based on the idea that, by exploiting intangible assets, the quality of higher education and the services provided by higher education institutions will increase substantially in time.</p>

Legend: This table underlines the results of assessing and managing Intellectual Capital, as well as the manner to discover the potential of increasing performance of higher education institutions in Romania.

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