The Economics of Intangible Assets: From just Value-to-Value Creation

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Abstract. "What can be measured can be managed." This managerial rule supposes that every measured resource is automatically managed. The literature shows the difficulties to measure the human capital as an internal resource. At the same time, this intellectual capital is the most important in the creation value for the company. Indeed, this managerial approach seeks to find the best way to explore how to create value by investing in the intellectual capital. In contrast, the accounting approach, ignore the importance of the intellectual capital as intelligible assets. This paper will present the difference between the managerial approach and the accounting approach of the intangible assets and how could this difference influence the decision of companies.

Keywords: Intangible assets · Intellectual capital · Managerial approach · Accounting approach

1 Introduction

Effective management of assets is the key to return on investment. Thus, in order to remain competitive and maximize shareholder value, organizations must become more effective and efficient in the management of their assets. There are four groups of assets identified into financial capital, human capital, intellectual capital and social capital. In the economics of knowledge, human capital is treated as one of the critical internal resources in organizations [1]. The human capital is tangible assets and can be measured. In contrast, intellectual capital is an intangible, and it refers to the flowing examples: best practices, experience, and process generation. Therefore, intellectual capital management aims to achieve strategic goals by focusing on the tactical management of intangible assets [2], but the lack of ability of information systems to identify, measure and control intangible assets lead managers to failure in detecting, exploiting and managing of the intellectual capital inside organizations [3].

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From the literature review, definitions related to intellectual capital management mostly were based on the importance of the concept of value. By examining the various definitions, the intellectual capital management is about all mechanisms of creation, extracting and maximizing value [1, 4–25].

According to Jones [26], the accounting system fails to record and present relevant information of intellectual capital and it can be regarded as inadequate as a source of information for control and decision-making. This information is lacking the importance of the value created by the human assets and the real value of people to organizations. For Jones [26], the difficulty for organizations is to measure if the value of the human assets is increasing or decreasing even if it is being used effectively by the firm. In addition, the investment of human assets stands at a high level because of the advance of technology, the shortage of skilled personnel and complexity of organizations.

2 The Value Creation of Intangible Assets in the Managerial Approach

From the literature review, the concept of intellectual capital had various definitions and theories developed so far. Thus, the intellectual capital is an interdisciplinary domain that gives a diversity of meanings and interpretations. Indeed, in managerial approaches, it refers to intangibles resources that determine the value of an organization, and the competitiveness of an enterprise [27]. Therefore, intellectual capital is knowledge of an enterprise accumulated by their human capital and cannot be accurately measured. Thus, companies have to develop methods of increasing corporate value by using effective intellectual capital management. Innovation and knowledge are driven by intellectual capital become the key to corporate success, especially in the knowledge-based industry [28]. For Roos et al. [29] IC is classified as structural and human capital, thinking and non-thinking assets and it needs different management approaches than other types of capital. IC is an invisible assets of organization which include: employee competence and their capacity to face variety of situations such internal structure (e.g. management, structure patents, concepts, models, research and development capacity and software) or external structure (e.g. image, brands, customers and suppliers relations).

Hence, IC is an intellectual material that remains to the ability [19] of creating new knowledge and how it can be used to create wealth [30]. It also refers to what human can do individually and collectively within the organisation or outside it (e.g. relationships of the organization with suppliers, distributions and customers). Previous studies have recognized IC as components of market assets, system, human-centred assets intellectual property [31, 32]. These invisible assets include intangible resources presented in Fig. 1 that contribute to the creation of value for the organization need to be well measured in each situation.

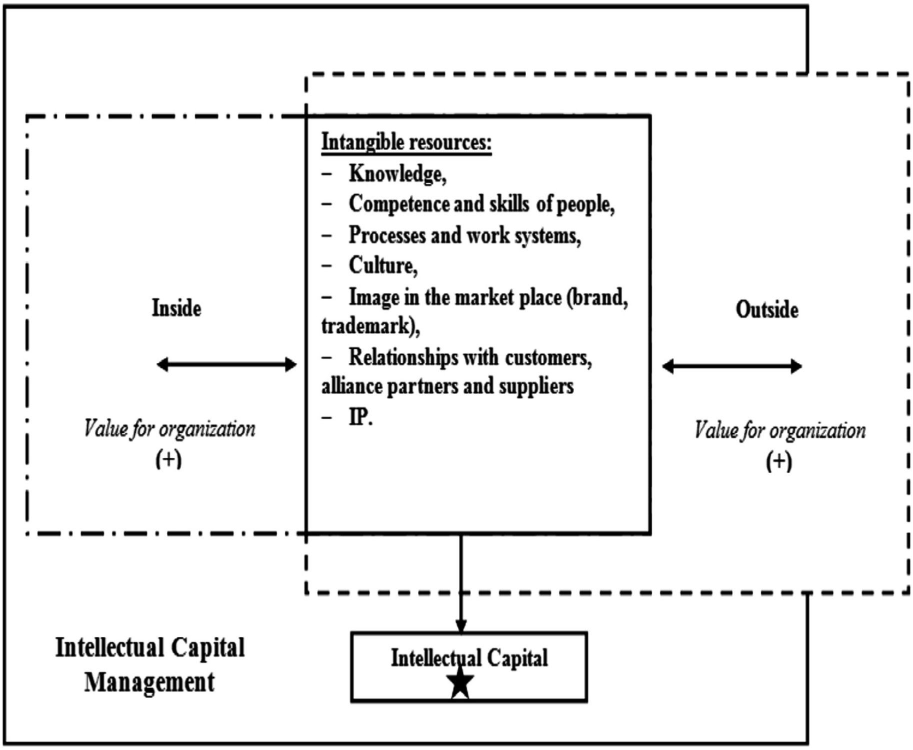

Fig. 1 Components of intellectual capital and value creation in the ICM

In order to be more competitive in the knowledge economy, the organization needs an increasing use of intangible assets. For Shakina and Barajas, [33] the key feature of intellectual capital is its ability to enhance the effectiveness of other resources, including tangible assets. Therefore, the authors affirm the existence of a close connection between the modern concepts of value-based management and intellectual capital.

The real contribution of intellectual capital to the organization's value can be measured if only we adopt efficient indicators based on intellectual capital outcomes limited in time with a cost-reducing approach. Thus, the value created is now clear, and organizations have to use benchmark from competitors in two positions, such the internal or external value added. Firstly, internal value is about all intangible resources that exist within the organization, and can be recycled internally due to the contribution of a professional employee (stars) and transmitted to others employees in a nested circle.

This value creation is from the inside of the organization and needs intellectual capital management based on detecting and promoting target talented people. Secondly, and complementary to the internal value, the external value is the image of the organisation vis-à-vis other and itself. When we talk about the organization's external value we mean how efficient is this organisation in attracting profits and perduring loyalty's clients. Indeed, even if this value is from the outside, the external value is based on the abilities of intellectual capital to respond to the market needs. Thus, this is the role of the professional employee (stars) to increase external value using succeeded human multidimensional interactions. We believe that effective intellectual capital management based on a real combination between the internal and external dimension of value involves to the organization the challenge of managing intellectual capital selectively in a peaceful social climate far from conflicts of interest. The problem is how to guarantee the best selection of talented target employee and to reach equity between professional employees without losing the level of motivation.

The economy of value brings new human constraint to the organisation that complicated the mission of intellectual capital management. Conscious by its own contribution value-added to the organisation, the employee that constitute the intellectual capital become more exigent in term of valorization and career management. Therefore, organization risk to lose its intangibles assets created and developed by the professional employee if they leave from the organization to the competitors. In this situation, the intellectual capital management is oriented to consider the intangible assets especially intellectual capital as a real capital with future gains and risk. In this dynamics, many organizations have done it without realizing that they are adopting an intellectual capital management approach.

3 The Intangible Assets in the Accounting Approach

In the accounting approach [*IAS 38*], the intangible assets are long lived assets used in the production of goods and services. They are characterized by their physical lack and represent a legal right. In addition, they represent a competitive advantage created or acquired by the proprietor. Thus, *IAS 38 Intangible Assets* outlines the accounting requirement for intangible assets, which are non-monetary assets, without physical substance and identifiable (either being separable or arising from contractual or other legal rights). Since February 1977, IAS 38 history had begun by the exposure of the draft E9 Accounting for Research and Development activities. In March 2004, IAS 38 was revised and applies to intangible assets. The objective of IAS 38 is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another IFRS. The IAS 38 applies to all intangible assets other than [IAS 38.1]:

- *Financial assets,*
- *Exploration and evaluation assets,*
- *Expenditure on the development and extraction of minerals, oil, gas, and similar resources*
- *Intangible assets arising from insurance contracts issued by insurance companies.*
- *Intangible assets covered by another IFRS, such as (IRFS 5, IAS 12, IAS17, IAS19, IFRS 3).*

From the IAS 38 [34, p. 339], [35, p. 89], the intangible assets are defined as an identifiable non-monetary asset without physical substance and it include the flowing examples: *computer software, patents, copyrights, motion picture films, customer lists, mortgage servicing rights, fishing licences, import quotas, franchises, customer or* *supplier relationships, customer loyalty, market share and marketing rights*. Generally, it can be found in two situations (research and development). Firstly, the research concerned all original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding. The intangible assets are considered as an investment in a new knowledge research activities. The IAS 38 gives the following examples:

– *Activities aimed at obtaining new knowledge.*
– *The search for alternatives for materials, devices, processes, products, systems or services.*

Secondly, the development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use. In this second situation, the intangible assets are all activities of developing or pre-producing prototypes and models, exactly the development of tools and materials used in production. The IAS 38 gives the following examples:

– *The design, construction, and testing of pre-use or pre-production prototypes and models.*
– *The design of tools and dies involving new technology.*
– *The design, construction, and operation of a pilot plant that is not of a scale economically feasible for commercial production.*

From intangible assets definition [IAS 38.8], there are three critical attributes: identifiability [IAS 38.12], control and future economic benefits. The intangible assets are identifiable when it is separable or arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations. Thus, intangible assets are capable of being separated and sold, transferred, licensed, rented, or exchanged, individually or together with a related contract. Besides, they can be acquired by separate purchase, as part of business combination, by a government grant, by exchange of assets, by self-creation (internal generation). It is generally accepted that in the accounting approaches, expenditure to acquired and develop human resources has conventionally been regarded as an expense and not as an asset because conventionally the concept of an asset has not covered such expenditure [26]. In contrast, this expenditure can produce a value which can yield long-run benefits to the organization. Thus it is admitted that the human assets have a probability to be considered as investment but with a high level of risk. The problem is that human assets could not be evaluated as a machine or other assets. Until human have not a fair value, it is difficult to consider them as an asset or report them to the balance sheet, for the accounting approach, the humans could not be sold in the market. This condition excludes the human assets from accounting treatment. It is easier to consider them expenditure and reduce the risk of the fair value. On the other hand, market gives a fair value for professional football players. From the fact that clubs spend more money on player acquisitions, player registrations, therefore players are considered intangible assets and represent a significant part of the total assets of major European football clubs [36].

According to Schotté [37] clubs “buyers” and clubs “sellers” can exchange football players at a fixed price on a market, considering that the same club can occupy both roles successively. This situation is inseparable from the fact that players are considered in accounting terms as assets of the club. From this point of view, there is no opposition between economic logic and sports logic when club manager invests in their human assets to improve the performance of their team. In addition, the price of a player does not exist before the exchanges, it depends on the value that the various potential buyers grant him on the basis of a shared belief. Thus, these players can be exchanged for very large sums when the clubs’ managers believe in the virtues of their transfers. Over the past decade’s standards of accounting have changed significantly from historical cost accounting to promote market value accounting in order to communicate an up-to-date value of companies’ balance sheet to investors and other stakeholders [38].

4 Conclusion

The main goal of this paper is to describe why an organization should pay attention and manage intellectual capital even it doesn’t excite in the accounting approach, especially when intellectual capital is considered as a hidden intangible asset [39]. An organization becomes more powerful if it creates value by transforming their intellectual capital into new processes, products and services.

Thus, the organization recognized that the intellectual capital or intangible assets were the most important assets of many of the world’s largest and most powerful companies; it is the foundation for the market dominance and continuing profitability of leading corporations [17]. On the other hand, corporations sometimes choose not to focus on value creation and, instead, unintentionally make decisions that systematically decrease the long-term value of their businesses [17]. Indeed, financial accounting systems ignore this hidden value, created by an unidentifiable, unseprable and uncontrollable intangible assets.

Our reflection is that the time comes to move from fair value-to-value creation by adopting effective intellectual capital management based on the dynamic of creating value in a nested circle. A further contribution of the research is to test and validate the model of value creation in the ICM based on value creation indicators of high R&D in the small and medium enterprises. More research is required to develop a deeper understanding of the relationships between intellectual capital starts and the increase of value creation internally and externally.

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