

http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

# CAPITAL MANAGEMENT AND MEASURING INTANGIBLE ASSETS FOR PUBLIC ORGANIZATIONS, REVISITING THE LITERATURE

Iván Andrés Ramirez Pinzón PPGCI (IBICT/UFRJ), Brazil Universidad Sergio Arboleda, Colombia E-mail: ivanrapi@gmail.com

Úrsula Maruyama CEFET-RJ, Brazil E-mail: maruyama.academic@hotmail.com

> Submission: 08/06/2016 Accept: 25/07/2016

#### **ABSTRACT**

Public administration is not alien to knowledge society or to the "new economy". Thus, it is transforming itself to these new requirements, improving its processes to meet the needs of citizens. In this context intangible assets play an important role and become a source of competitive advantage, but only if they are properly managed. Therefore, it is necessary to previously identify intangible assets. This paper revisited the literature in order to comprehend intellectual capital model reflecting different capitals which make up institutions. This study aims to propose an intellectual capital model that enables measurement and management of intangible assets in public administration, including specific issues of public entities.

**Keywords**: intangible capital; Public Administration; strategy.





http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

1. INTRODUCTION

We are immersed in a dynamic environment, complex, variable and uncertain

(PRAHALAD; HAMEL, 1990) that affects all economic sectors, both in private and in

public. In addition, it produced a transformation of the economy in which the

intangible assets are the main factors of value creation and wealth (GRANT 1996;

AMIT; SCHOEMAKER, 1993; BUENO, 1998).

This perspective leads to redefine the civil service and the public service from

the new approach, which requires to know that assets related to information,

knowledge, talent. Organizational learning has public authorities, seeking

mechanisms to know and measure the value of knowledge and public intellectual

capital, to learn how to create, transform and transmit, and thus to carry out an

efficient and effective management of these resources.

These factors enable the performance of the public service and enable its

management to provide the precise capabilities to achieve flexibility, responsiveness

and quality to meet the demands of citizens and other social actors. Despite the

actuality of these concepts, we have to be aware that ideas related to intellectual

capital are not new, active immaterial always have existed in organizations. It

happens that the interest increases as extending the new economy based on

information technology, growing service businesses and appear more entities based

on knowledge.

This study aims to review the literature on intangible capital and knowledge,

highlighting the importance these resources have in the public sphere from the two

main strands of thought on capital.

2. ROLE OF INTANGIBLE IN THE PUBLIC SECTOR

Intangible assets are having a growing importance for the company and

supporting its competitive advantage as its specific characteristics make them have

a strong potential differentiator respect amongst competitors (SALAS, 1996;

BUENO, 1998). Factors such as the company's image, technological knowledge,

human capital or brand are variable with a weight increasing in explaining business

success (NAVAS; ORTIZ DE URBINA, 2002).

Thus, the private sector do not have estimated efforts to draw models of

measurement and management of intangible capital or to find new indicators to

@ <u>0</u>

35

http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

evaluate more precisely organizations strategies. However, public authorities have provided very little interest as, registration and management of intangible assets or intellectual capital. Besides, despite its undoubtable interest, intangibility is more present in the public sector than in private companies (BOSSI et al., 2005).

In the public sector, intellectual capital has a greater range than private sector: first, because the objectives of public bodies are not profitable; secondly because the resources used more intensively are immaterial; and thirdly because the most frequent objective of management is to provide services and these are, in essence, intangible.

Nevertheless, public administration has faced with real delay compared to private companies, the importance of intangibles as critical to a proper strategic direction and as quality generators and competitive advantages. Finally, public sector looks forward to making less effort in studying, registration, management and measurement.

#### 3. ECONOMIC AND ADMINISTRATIVE THESIS

But what kind of assets are we talking about? There are different concepts such as: "intangible assets", "intellectual capital", "human capital", "immaterial assets," "invisible assets", "knowledge capital", "intellectual assets", etc. It seems that we are before a lack of widespread basic agreement on any kind of research or publication (KNIGHT et al., 1993; SWAN; SCARBROUGH, 2001). In our work we use indistinctly the "intangible" and "intellectual capital" terminology, as numerous authors did (LEV, 2003; CAÑIBANO et al, 2004, SÁNCHEZ., 2008).

Intellectual capital and knowledge (BONTIS 2002) are concepts that are closely related to the point that some authors believe they are synonymous (DARROCH; MCNAUGHTON, 2002). We state, as most scholars of this subject (PELUFFO; CATALAN, 2002; OLEA; SOLÉ, 2002; SANGUINO, 2003; VIEDMA, 2000), that they are different concepts - although there is subtle line between them. Knowledge is the basis of intellectual capital, the most important component of intangible assets and the main source of innovation systems in the value creation process for organizations and competitive advantages. Intellectual capital is a broader concept which includes not only individual and organizational knowledge,



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

but also elements such as customer loyalty, employee satisfaction, databases or market information.

On the other hand, there are multiple classifications of intangible that have appeared since the nineties – the apex of intellectual capital theory. First classifications of these features are due to authors such as Brooking (1997), Sveiby (1997), Edvinson and Malone (1997).

Currently, among all existing classifications, the most used is the one which breaks down intellectual capital into three major components: human capital, structural capital and relational capital (EUROFORUM, 1998; ROOS; ROOS, 1997; BUENO, 1998), which are based the proposed Edvinsson and Malone (1997).

In the preparation of the public sphere models to measure intellectual capital, it is usually from three classic: human, structural and relational capital adding the appendix "public." The structural capital public is dismembered in *public organizational capital*, *public technological capital*, and *relational capital*, according to Intellectus model (BUENO et al., 2003).

lt presents briefly the contents of each of these cities: public human capital: The public human capital refers to the knowledge, either explicit or tacit, individual or social, that have members of the organization and groups, as well as its ability to generate, that is, the ability to learn and to share knowledge with others for the benefit of the organization, and that is of great use to achieve the mission of the entity. In turn the human capital is based on three groups: (i) values and attitudes, (ii) expertise and (iii) competition.

*Public structural capital*: is the set of knowledge and derivatives intangible assets of action processes that are owned by the organization and get it when people leave, unlike what happens with human capital (MERINO et al, 2004).

*Public relational capital*: includes the set of intangible derived from relationships that keeps the organization with the different agents linked to it (BUENO et al, 2003). It breaks down into two: public capital and relational capital of the entity.

The public capital collects organization utility to develop its role as a public service to citizens. The public entity relational capital refers to the value that have relations with the key players linked to the entity main activity.



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

4. OWNERSHIP/HOLDING THESIS

The new thesis on the forms of appropriation / exploitation of the worker's

intellect, that is, those that are dominated today as a kind of immaterial production,

this is the argument that knowledge would have grown in importance. This

knowledge could not be reduced to its technical dimension, once formalized by the

capital in traditional industries. With this, "the knowledge of experience, discernment,

coordination capacity, self-organization and communication. In a nutshell, forms a

living knowledge acquired in everyday traffic, which would form a resistance to

capital appreciation logic.

The unfolding of capitalist productive forces would have created, with this, an

exploration niche antagonistic labor to the capitalist valorization process. Knowledge,

high central product in contemporary capitalism, would tend to establish itself as a

"non-commodity". If, at the one hand, capitalist forces try to maintain access to this

knowledge the goods, on the other, this task cannot be completed in its entirety, as it

would be in dissonance with the capital expansion movement.

The extent of commodity production would not allow the restriction of the

operation of certain works. For the same, the universalization the products of

immaterial labor characterize the knowledge formalized and codified as a good of

unrestricted access.

In terms of Gorz (2003), the radicalization of immaterial production would

become therefore essence of the expression of a "communism of knowledge." This

cognitive productive force, generated in interstices "of capitalist society, the daily

experiences of individuals would, finally, the theory of value / work to excrescence,

as would mark one contradiction between universalization logic of immaterial goods

and forms to merchandise.

The redesign the historical form of capital appreciation today would base the

non-operational character of Marxism as an analytical tool. So are structured are two

closely related problems. The first is with respect to a new productive, synthesized

by immaterial type of production. The second is linked to the operability of Marxist

social theory and the analysis of immaterial production.

To immaterial work is adopted an 'autonomization process' regarding recovery

processes and capital accumulation. Its immeasurability would become a matter of

@ <u>0</u>

38

http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

life or death for the recovery process. Once the capital can restrict immaterial production to the value of change, the logic of social reproduction would be guaranteed. In the meantime, the production of new information necessarily presupposes new knowledge accumulated and disseminated by the worker and, grin, grin, the tension would remain ever present.

It turns necessary to restrict, then the product knowledge to their own logic, limiting, the capital. The suggestion presupposes, first, a turn of the control of knowledge process could be sued for himself; and second, a reduction of the immediate job, causing a reduction of the payment and the amount of change of goods. With this, the monetary value of goods is tended to reduce, which would imply that the wealth and profits produced decrease at the point of disruption capitalist accumulation base.

Cognitive capitalism would be announced in the whole of this analysis, as anteroom of the "crisis of capitalism in its strictest sense". Such remark supports the idea of a ticket to socialism from capitalism interstices rather than overcoming it. Finally, this reading is based overcoming the antagonism between social classes based on the prescription of a consensual alternative social conflicts, a kind of pact gentlemen

Set up this way, an ambivalence, therefore, that the "knowledge capital" can enter the circulation, it must be converted into commodity capital, it should be associated with the traditional forms of capital, since "it is not capital in order usual, and does not have as a primary destination to serve the production of excess value, nor no value, in the usual sense. "not adjusting to the traditional standard of capital appreciation and at the same time, developing a central productive force, "knowledge capital" would present itself as a moment of negation of capitalism. Still, that "Wealth creation is separated from the creation of value", individuals should recognize their tendency on the basis of an awareness. With this, the market value would lead to a wealth that could not be regulated by capital.

On the one hand, a commodity production so that deepens the capitalist economic rationality, the other an immaterial mode of production in which would be the principles of social transformation articulating within the same logic, the same system. The output from the viewpoint of capitalist production, is transform



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

"knowledge capital" in capital goods so that it can enter the circulation process. The knowledge capital takes the form of merchandize, it is characterized as capital. Its peculiarities are subject to capital as a social relation.

#### 5. IMMATERIAL PRODUCTION AND SUBJECTIVITY

The ability to acquire new information, new technical knowledge provide the immaterial worker strategic area of their productive activity. Its activity goes back to the principles of craft activity in which the employee held the domain of the work process on account of its production expertise. Let's see how Negri forwards the question: The immaterial labor - one that produces intangible goods such as information, knowledge, ideas, images, relations and emotions - tend to be hegemonic. (...) Immaterial labor can only be achieved collectively, exchanging information, knowledge. (...) Everyone who works with information or knowledge - the farmer develops the specific properties of the seeds to the software programmer - uses common knowledge transmitted by others and contributes to produce it (LAZZARATO; NEGRI, 2001).

There is, thus, an attempt to re-appropriation of Marx's theory as producing a "cycle" extended not only related to industrial production, but also the formation of a collective of workers interrelated for producing consumer knowledge, which would refer to the prospect of reconfiguration of the general intellect (general intellect). Accordingly, the traditional industry, as an organization locus of political resistance, would give rise to large company, a factory society, (i.e. production / consumption / distribution) would become one and the same thing that synthesizes the immaterial production.

This production and exploitation of immaterial work goal as a central productive force would be radicalized to universalize the exploitation of the worker's subjectivity, making play the real assumption of their social status. As indicated Lazzarato: "It is immaterial work that activates and organizes social production / consumption ratio. The trigger both productive cooperation and the social relationship with the consumer, is materialized in this communication process (and, therefore, work and consumption).

Still, the appropriation of immaterial work concept ends up being mediated by the individual figure, or rather the isolated worker. There is, as a result, the



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

naturalization of what would be the full and conscious of their actions worker. Accordingly, the craftsman, with the control of the work process is the figure to be rescued from the past. The only able to acquire a political awareness of its becoming. The consumer producer is therefore stuck in analogy to the artisan as a full employee, and is now referred to as potential political subject in the context of a producer society of immaterial goods.

In practice, the changing forms of labor exploitation would result in the restoration of the content of qualifications required to forms of commodity production. However, today, these contents, forming a specific subjectivity, endow certain workers to form an anti-capitalist type of political struggle. To buy, to consume information within the production process, would create a process of political resistance. The political struggle was in these terms placed in retail.

The crowd, a central concept to define the policy Negri, is related not to the group of workers, but the consumer worker isolated, that the accession to the specialization of labor process, (i.e. retraining could contribute to the densification of social ties), to strengthen the social fabric integrating the political activity in the crowd. This would create what we might name of unlinked individuals corporation of their work or in terms of Negri, what would be the "biopower".

Biopower, in Negri's terms, indicating the end of the state, so the forms of representation of institutionalized and clandestine politics and between the lines confirm the place of large corporations as synthesis and expression of the contemporary way of life.

The policy, for Negri, is defined then as a set of isolated actions, dispersed in "crowd." Each individual becomes a political subject at the time of production or consumption of goods information. Only at this time is that the individual could tune into the "global society". The policy on the market and the integration of politicians of all countries would be entangled by the conscious purchase of new products. So, here is a complete negation of the concept of social class and, therefore, an apology consumer producer citizen as a political subject.

In this new version of the Messiah, able to transform capitalist society, the relationship between the qualification and the subjectivity of the central becomes worker. With the transformation of labor skills, the formation of anti-capitalist



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

struggle, marked by the incorporation of professional qualifications is taken, therefore, as a basic assumption of political intervention and social transformation. The extent of industrial logic to society would serve a social production no longer attached to the restricted universe of Taylorism-Fordism production, but immersed in total social relationship.

Consumption of information products, immaterial, enlarge social fabric, allowing the creation of a new anti-capitalist project. Would break the forms of domination activated by competition and finally the constituent power would manifest itself as a social power. With this, it would have more sense analytically characterize a separation between production and circulation. All would be to Negri, producers. In fact, all have specific functions and turn more functional would be the same as creating the foundation for a new society.

To illustrate his criticism, Lazzarato analyzes the formation of this new subjectivity based on the Japanese factory. Points out, at the expense of it, for a displacement of "content" of the skilled worker for the multipurpose worker.

In his words, "there is a shift from 'contents up', implementation of decision-making. Responsibility that is required to random automated plant management and the continuous improvement of the durability and quality of the product. " There would be, in the process, an internalization of Taylorist prescriptions to automatic machines, but a new professional framework become necessary to provide the command to this production line.

#### 6. MEASURING INTANGIBLE CAPITAL

To enable companies to effectively manage the intellectual capital of the company and maximize its value creation potential is fundamental, not only identification and evaluation, but also its measurement that can be performed by a value share generated by capital intellectual within the company, or through the relationship between business variables that lead to a certain amount of intellectual capital.

Objectively, Kaplan and Norton (1997) argue that what cannot be measured cannot be managed, showing the importance of identifying and measuring intangible assets. If not rated, measured by indicators of an element, proper identification is not possible in your presence and will not be able to control its evolution.



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

Companies always have employed methods to value their assets, traditionally financial measures have been the most used to achieve this purpose, however, the knowledge economy puts of relief that these methods were obsolete and insufficient to collect the value of assets intangible, therefore, there have been a large number of methods for the measurement of intangibles. The fact that there are multiple models indicates the difficulty and tenacity of the experts of this theme to reveal the value of

intellectual capital as well as the importance awaking among academics the

phenomenon of intangibles.

Models for managing intellectual capital can be classified attend to different criteria, Luthy (1998) and Williams (2000) grouped in four categories are: methods of direct intellectual capital, market Capitalization methods, methods of back on assets, and Scorecard methods. All models have been developed for private company and several of them later applied to entities in public sector.

It is understood that almost any of the methods is likely to apply to the public sector, with the only saved to contemplate spare characteristics that differentiate to the public-private management. However, it must be borne in mind that the public sector is not at all homogeneous, the activities of the member organizations are multiple, virtually cover all economic sectors, legal forms that can adopt are different, may have a greater or lesser degree autonomy, funding formulas may also differ.

Although there is a big goal common to most public entities is to improve citizens' well-being, there are multiple generic and specific objectives as the efficient allocation of resources, income redistribution, promote development, improve people's health, improve safety, etc. Furthermore, the stakeholders (stakeholders) are different and have their own goals.

Therefore, would have to analyze the organization in question, determine what are the objectives to be achieved related to intangibles (see intangible, enhance intellectual capital, establish a culture of knowledge and learning, improve quality, achieve excellence, managing strategically, etc.), choose the model that best suits their characteristics and finally adapt the model to the organization due to the previously mentioned factors.

Of the different models, in a preliminary analysis the best suited to the public sector are the so-called "scorecard methods." In fact, according to the literature



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

reviewed and published experiments, most of the models used in the administration belong to this group, although there are also many designs that are team own, company or people who have implemented the same way that It occurs in the private

sector.

Internationally the three most popular models are the Scorecard Report, translated into Spanish as Frame Integral Command, the Intangible Asset Monitor and the Skandia Navigator. In this sense Chaminade and Cañibano (2004) show that among the most popular methods are the Framework for Comprehensive Control (BSC) Kaplan and Norton (1992, 2000), Intellectual Capital Assets Monitor (SVEIBY,1997) and Navigator (EDVINSSON; MALONNE,1997).

In turn, Viedma (2002) states that these three models symbolize the most representative methodology of regular theory of intellectual capital, according to Adrienssen (2001), and constitute the foundations of the current paradigm of intellectual capital. In many countries the majority of public organizations that have deployed some initiative to manage the intangible conducted from the perspective of excellence and quality, and therefore are based on quality systems.

#### 7. FINAL CONSIDERATIONS

Public administration must respond to rights deriving from society transformation and citizen demands, standing in the center of their decisions. For this management should be more competitive, to increase the satisfaction of citizens and stakeholders, improving the provision of services by detecting what are the good management practices and hence aspects should be modified in order to obtain excellent results.

This perspective leads to redefine the civil service and the public service from the new approach, which requires to know that assets related to information, knowledge, talent and organizational learning have public authorities, seeking mechanisms to know and measure the value of knowledge and public intellectual capital, to learn how to create, transform and transmit, and thus to carry out an efficient and effective management of these resources.

It is important to note the difference of the characteristics theses of immaterial labor as the main productive force, that the logic of capital has, in aspects that are usually identified as economic, synthesis. Nevertheless, it is impossible to arrest a



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

"sphere" of economic isolation. The economy is only a theoretical construction of a reality that needs to be "cut" to be perhaps rebuilt. There is, therefore, the "economic" or "political" in its pure form.

The synthesis governed by capital in the figure of the economic, the relationship circulation production of goods, is the expression of a synthesis of different elements that gain economic representation. In this process it is basic to rely on an intellectual capital model that facilitates the measurement and management of intangible assets, which is why we present in this paper a proposal of model based on the methodology formulated by Scorecard balance and (MERITUM, 2002).

Thus, part of the mission model that proposed the organization and vision about what you want to become to propose a set of strategic objectives. The terminology then to describe the different capital is adopted by Intellectus model, so that the components of intellectual capital (human capital, structural capital and relational capital) break down into elements and in turn they are divided into variables, which are measures, ultimately, by indicators.

#### REFERENCES

ALBAGLI, S. (2014) Inovação no capitalismo cognitivo. In: SIQUEIRA, M.; COCCO, G. (orgs.). **Por uma política menor: arte, comum e multidão**. Rio de Janeiro: Fundação Casa de Rui Barbosa, p. 211-224.

ALBAGLI, S. (2013) Informação, saber vivo e trabalho imaterial. In: ALBAGLI, Sarita (org.). **Fronteiras da Ciência da Informação**. Brasília: IBICT, Cap. 5.

ADRIENSSEN, D. (2001) **Weightless wealth. Four modifications to standard Intellectual Capital theory**, paper for the 4th World Congress on the Management of Intellectual Capital, Hamilton, Ontario Canada, p. 1-10.

AMIT, R.; SCHOEMAKER, P. (1993): "Strategic Assets and Organizational Rent", Strategic Management Journal, v. 14, p. 33-46.

BONTIS, N. (2002): "National intellectual capital index: Intellectual capital development in the Arab Region, Institute for Intellectual Capital Research, Ontario.

BOSSI, A. et al. (2005) Reflexiones en torno a la aplicación del capital intelectual en el sector público, **Revista Española de Financiación y Contabilidad**, v. XXXIV, n. 124, p. 215-245.

BROOKING, A. (1997) El capital intelectual. El principal activo de las empresas en el tercer milenio. Paidos Ibérica, Barcelona.



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

BUENO, E. (1998) El capital intangible como clave estratégica en la competencia actual, **Boletín de Estudios Económicos**, nº 164, August. p. 207-229.

BUENO et al. (2003) La importancia del capital social en la sociedad del conocimiento. Propuesta de un modelo integrados de capital intelectual, l Congreso Internacional y Virtual de Intangibles.

CAÑIBANO et al. (2004) **Lecturas sobre intangibles y capital intelectual,** AECA, "Directrices para la gestión y difusión de la información sobre intangibles (informe de capital intelectual)", p. 237-273, Madrid.

CHAMINADE, C.; CAÑIBANO, L. (2004) **Lecturas sobre intangibles y capital intelectual**, AECA, "La gestión de los intangibles y el aprendizaje empresarial", p. 163-182, Madrid.

DARROCH, J.; McNAUGHTON, R. (2002) Examining the link between knowledge management practices and types of innovation, **Journal of Intellectual Capital**, v. 3, n. 3, p. 210-222.

DVINSSON, L.; MALONE, M. (1997) Intellectual capital realizing your company's trade value by finding its hidden brainpower, Harper Collins, New York.

EUROFORUM (1998) **Proyecto Intelec, Medición del Capital Intelectual**, El Escorial, Madrid.

GORZ, ANDRE. (2003) **O imaterial**: conhecimiento, valor e capital. Tradução Celso Azzn Junior. Annablume, 2005.

GRANT, R. M. (1996) **Dirección estratégica**. Conceptos, técnicas y aplicaciones, Cívitas, Madrid.

KAPLAN, R. S.; NORTON, D. P. (1992) **Balanced Scorecard**: measures that drive performance. Harvard Business Review, enero-febrero.

KAPLAN, R. S.; NORTON, D. P. (2000) **Cuadro de Mando Integral** (The Balanced Scorecard). Gestión 2000, Barcelona, 2ª ed.

LANDAETA et al. (2004) **Capital Intelectual en la Administración Pública Española**: El proyecto SICAP, Revista Electrónica de Ciencia Administrativa (RECADM), Volumen 03, nº 01, mayo/2004. Access on 01-06-2005. Available at: www.presidentekennedy.br/recadm/

LAZZARATO, M; NEGRI, A. (2001) **Trabalho imaterial**. Formas de vida e produção de subjetividades. Rio de Janeiro: DP&A, 2001. Capítulo 2.

LATOUR, B. (1994) On Technical mediation—philosophy, sociology, genealogy. **Common Knowledg**e. v. 3, n.4, p.29-63.

LEV, B. (2003) Intangibles: medición, gestión e información. Deusto, Barcelona.

LUTHY, D. H. (1998) **Intellectual capital and its measurement**. Available at www3.bus.osakacu.ac.jp/apira98/archives/pdfs/25.pdf. Access on 12-02-2005.

MERINO, B. et al. (2004) **Capital Intelectual en la Administración Pública**: El caso del Instituto de Estudios Fiscales Madrid, Februery 2004, nº 21. Access on 01-08-2005 Available at



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

http://www.madrimasd.org/revista/revista21/investigacion/proyectos1.asp

MERITUM (2002) Guidelines for managing and reporting on intangibles, Intellectual Capital Report, January, Ed. Fundación Airtel Vodafone.

NAVAS, E.; ORTIZ DE URBINA, M. (2002) El Capital Intelectual en la empresa: Análisis de criterios y clasificación multidimensional, **Economía Industrial**, n. 346, v. IV, p. 163-171.

KNIGHT, T. et al. (1993) "Networking as knowledge work: a study of strategic interorganizational development in the financial services industry", **Journal of management studies**, v. 30, n. 6, p. 975-996.

OLEA, M.; SOLÉ, F. (2002) La formación, la gestión del conocimiento y los intangibles en las organizaciones, Pedagogía Laboral. Bases y estrategias para la formación de las organizaciones, Ariel.

PRAHALAD, C. K.; HAMEL, G. (1990) The core competence of the corporation, **Harvard Business Review**, v. 68, May-June, pp.79-91.

PELUFFO, M.; CATALÁN, E. (2002) Introducción a la gestión del conocimiento aplicada al sector público, Instituto Latinoamericano y del Caribe de Planificación Económica y Social, August 2002.

RAMIREZ, Y. (2010) Intellectual capital models in Spanish public sector, **Journal of Intellectual Capital**, v. 11, n. 2, p. 248-264.

ROOS, G.; ROOS, J. (1997) Measuring your company's intellectual performance, **Long Range Planning**, v. 30, n. 3.

SALAS, V. (1996) Economía y gestión de activos intangibles, **Economía Industrial**, n. 307, p. 17-24.

SANCHEZ, P. (2008) **Papel de los Intangibles y del Capital Intelectual en la creación y difusión del conocimiento en las organizaciones**. Situación actual y retos de futuro, ARBOR CLXXXIV 732 July-Aug, p. 575-594.

SHAW, E. (1999): "A guide to the Qualitative Research Process: Evidence from a small firm study", **Qualitative market research: An International Journal**, v. 2, p. 57-70.

SUAREZ, M. (2003) **Intangibles**. Determinantes psicológicos en contabilidad, I congreso internacional y virtual de intangibles, junio 2003. Access on 04-04-2005 available at http://psicondec.rediris.es/abstract/index.html

SVEIBY, K. E. (1997) The intangible assets monitor, **Journal of human resource costing and accounting**, v. 2, n. 1, spring, p. 73-97.

TRUJILLO; RODRIGUEZ (2003) Las nuevas herramientas de gestión de los intangibles: una aplicación al sector de la automoción, Madrid+, nº 16, April-May 2003.

VIEDMA et al. (2004) La gestión del capital intelectual en Mataró, Medición, control y gestión de los intangibles, p. 201- 225, Deusto, Barcelona.

VIEDMA, J. M. (2001) ICBS Innovation Capability Benchmarking System, **World Congress on Intellectual Capital Readings**, Butterworth Heinemann, p. 243-265.



http://www.ijmp.jor.br v. 8, n. 1, January - March 2017

ISSN: 2236-269X

DOI: 10.14807/ijmp.v8i1.494

VIEDMA, J. M. (2000) Gestión del Conocimiento y del capital intelectual, Ponencia en el 2º y 3er. **World Congress on Intellectual Capital and Innovation**, en Hamilton, Ontario (Canadá).

VIEDMA, J. M. (2002) **Nuevas aportaciones en la construcción del paradigma del capital intelectual**, access on 15-01-2005 available at http://gestiondelcapitalintectual.com

WILLIAMS, M. (2000) Is a company's intellectual capital performance and intelectual capital disclosure practices related? Evidence from publicly listed companies from the FTSE 100. Paper presentado en McMasters Intellectual Capital Conference, January 2001, Toronto.

