ORGANIZATIONAL CAPITAL AS COMPETITIVE ADVANTAGE OF THE FIRM

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Abstract

The elements that constitute the organizational capital of the firm, namely its culture, structure, organizational learning, and processes can be a source of competitive advantage. This paper is an attempt to evaluate organizational capital from the Resource-Based View, according to the model for intellectual capital measurement and management proposed by CIC (2003). An assessment framework for intellectual capital is developed. By means of this framework organizational capital can be depicted as a set of (1) valuable assets, (2) difficult to imitate, (3) to replace, and (4) to transfer, (5) with a prolonged life expectancy, and (6) with a feasible rent appropriation. Building of such an evaluation framework allows further research about other components of the intellectual capital of the firm, bridging the literatures focused on the Resource-Based View and on intangible assets or intellectual capital.

Keywords: Resource-Based View, Intellectual Capital, Organizational Capital, Competitive Advantage.

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ORGANIZATIONAL CAPITAL AS COMPETITIVE ADVANTAGE OF ORGANIZATIONS

Abstract: The elements that constitute the organizational capital of the firm, namely its culture, structure, organizational learning, and processes can be a source of competitive advantage. This paper is an attempt to evaluate organizational capital from the Resource-Based View, according to the model for intellectual capital measurement and management proposed by CIC (2003). An assessment framework for intellectual capital is developed. By means of this framework organizational capital can be depicted as a set of (1) valuable assets, (2) difficult to imitate, (3) to replace, and (4) to transfer, (5) with a prolonged life expectancy, and (6) with a feasible rent appropriation. Building of such an evaluation framework allows further research about other components of the intellectual capital of the firm, bridging the literatures focused on the Resource-Based View and on intangible assets or intellectual capital.

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1. INTRODUCTION

The origins of the Resource-Based View (RBV) of Competitive Advantage as a research stream can be tracked to 1984, with the appearance of the well-known article by Wernerfelt. Since then it has been consolidated with the contributions of various academics (Barney, 1991; Grant, 1991; Peteraf, 1993; Amit & Shoemaker, 1993; Black & Boal, 1994; Teece et al., 1997). This theory is sustained by two fundamental axioms. The first axiom argues that resource endowments are heterogenously distributed among firms, and this explains differences in firm performance. The second axiom affirms that the owning or control over superior resources and capabilities allows the firm to sustain the competitive advantage, allowing to overcome short-living rents. This last axiom prevents competitors in eroding a successful resource-based strategy. This situation appears when the firm controls resources and capabilities which characteristics make them hardly susceptible to imitation, and when market failures exist (Lipmann & Rumelt, 1982; Barney, 1986, 1991; Grant, 1991; Peteraf, 1993; Priem & Butler, 2001). Nevertheless, we must take into account that not all the assets that a company owns or controls have the same strategic value. Some resources can be more valuable than others, and this is the case of intangible assets (Itami and Roehl, 1987; Hall, 1992, 1993; Barney, 1991; Grant, 1991, 1996), also called Intellectual Capital, and which include a wide range of elements such as know-how, reputation, culture, or technology, among others. We can think about different strategic values among different elements of the intellectual capital, as the empirical works of Hall (1992, 1993) suggest, establishing a hierarchy of intangible resources.

Several works have focused on explaining the nature of intellectual capital and in proposing models for their measurement (Kaplan & Norton, 1992; Bontis, 1996; Brooking, 1996; Saint-Onge, 1996; Edvinsson & Malone, 1997; Sveiby, 1997; Euroforum, 1998; CIC, 2003). From a detailed review of these models arises the idea of building a framework which allows the strategic assessment of intellectual capital, according to a robust theoretical perspective as the RBV. Literature on intellectual capital shows a clear lack of this kind of work, and can obtain very useful insights from its academic cousins.

This paper is developed in three main sections. First it gathers the main concepts of the RBV, as well as the most relevant characteristics of strategic resources and capabilities found in previous works, and then provides the theoretical assessment framework. In the second section the nature of intellectual capital is explained from the proposal of the Spanish Knowledge Society Research Center (Centro de Investigación sobre la Sociedad del Conocimiento). In the last part, organizational capital is described, and it is assessed according to the previously developed model that integrates the issues obtained from the RVB analysis and from the previously mentioned model for intellectual capital measurement and management. Finally, the main conclusions derived from organizational capital assessment are pointed out.

2. RESOURCES AND CAPABILITIES

Most of the definitions found in the literature share references to resources as elements, inputs or factors, from which the firm performs its activities. Resources are understood as basic units (Grant, 1991). The definition of Fernández & Suárez (1996: 74) gives us a close enough approximation to this concept. According to this authors, 'a resource is any production factor that is at the disposal of the company, which is to say that this can control it in a stable manner, even if it does not own clear property rights over it'.

Regarding to capabilities, they are understood to be organizational routines (Nelson and Winter, 1982). In essence, a capability is a routine or a set of interacting routines (Grant, 1991: 122). Unlike resources, capabilities arise from the combination and coordination of different resources (Amit & Shoemaker, 1993; Grant, 1996, Prahalad & Hamel, 1990; Teece, Pisano & Shuen, 1997) and reside in organizational routines, that are intangible by themselves (Itami & Roehl, 1987; Leonard-Barton, 1992). Capabilities are knowledge bases whose main source is organizational learning (Leonard-Barton, 1995; Teece et al., 1997), which originate in conditions of uncertainty and complexity (Amit & Shoemaker, 1993), requiring of social interaction, in a continuous feedback between tacit and explicit knowledge (Nonaka, 1991). Learning, as a result of historical dependency (Barney, 1991), constantly shapes organizational capabilities, which are the source of highly specific sustainable rents for the firm (Teece et al., 1997).

The main differences between resources and capabilities are that resources are independent, simple and static, as opposed to capabilities, that are collective, complex and dynamic. The independent and simple character of the resources (Grant, 1991) makes easy their identification, whereas capabilities, due to their complex and collective character (Black & Boal, 1994), are harder to identify. The static character of resources does not allow them evolving by themselves, and rather they are worn away or "they erode" with their use

(Dierickx & Cool, 1989). On the other hand, capabilities can remain unchanged, and even improve through their use (Prahalad & Hamel, 1990), thanks to their dynamic character. Both belong to different levels of embeddedness, being superior at capabilities, given their complexity, when involving the cooperation of several resources (Grant, 1991). They are not only just an aggregation of resources, but also different coordination and cooperation schemes between the implied elements.

Some of these characteristics have been useful in clarifying that the most strategic assets that are owned or controled by a certain firm are intangible, as can be when we think about human capital or about corporate reputation (Amit & Shoemaker, 1993; Grant, 1991). Also, resources display a higher ease for being commercialized in the market (Barney, 1986) and few of them are strategic by themselves (Grant, 1991). Therefore, rent generation comes mainly from capabilities, which, by virtue of their path-dependent accumulation process become more idiosyncratic (Dierickx & Cool, 1989).

Within the RVB approaches the classification of the resources and capabilities is very useful, because each firm can elaborate its own inventory. One initial and simple classification differentiates between tangible and intangible assets (Grant, 1999), according to the physical and material character of resources, as opposed to the immaterial character of some resources and of every capability. Also, to understand the capacities as the coordination of resources and/or capacities that allow the company to take part in certain activities, some kind of classification of activities is needed, for example in functional areas (Grant, 1991) or according to the value chain (Porter, 1985) or other proposals (Hall, 1993).

3. CHARACTERISTICS DEFINING STRATEGIC RESOURCES AND CAPABILITIES

Several proposals focused on the characteristics that must fulfill the resources and capabilities to be considered strategic can be found in the literature. Nevertheless, consensus is far from reached in the identification of these characteristics. Authors only agree partially, and in these cases, the terms used to describe similar things are quite different. The compilation of all the characteristics found and the analysis of the relations between them allows us to identify the basic characteristics that must fulfill the strategic resources and capacities and they are as follows:

- Inimitability (Barney, 1991; Dierickx & Cool, 1989; Reed & DeFillippi, 1990; Grant, 1991; Peteraf, 1993; Black & Boal, 1994; Fernández & Suárez, 1996; Vicente-Lorente, 2000), is the difficulty which competitors found in order to copy the resources and capabilities of the company through internal development.
- Value (Barney 1991), is the utility of the resource for successful competition in a certain industry. Then value depends on the fit between the resource or capability with the strategy and the adjustment on this one with its environment (Aaker, 1989; Amit & Shoemaker, 1993).
- Apropriability (Grant, 1991) is the possibility of the company to take control over the rents generated by the resources and capabilities which it has.

- Durability (Dierickx & Cool, 1989; Grant, 1991; Prahalad & Hamel, 1990) talks about the life expectancy of the resources and capacities that are the source of competitive advantage.
- Insubstituability (Dierickx & Cool, 1989; Barney, 1991; Peteraf, 1993), represents the situation in which alternatives to replace a resource or capability, by means of a resource or capability with similar or equivalent character, do not exist.
- Non-transferability (Dierickx & Cool, 1989; Barney, 1991; Grant, 1991; Peteraf, 1993) is the difficulty to freely buy and sell the resources in the market.

Barney (1991) argues that the resources that are simultaneously rare and valuable can generate competitive advantage, and if these resources are also hard to imitate, irreplaceable and hard to transfer, they will sustain the advantage. Of this it is deduced that scarcity and value are necessary conditions in generating competitive advantage, but they are not sufficient to support the same, because the resources must also be hard to imitate, irreplaceable and hard to transfer (Priem & Butler, 2001). These characteristics illustrated by Barney summarize, in a certain way, most of the characteristics proposed by other authors. In this sense, we want to emphasize the fundamental contribution of Barney (1986a, 1991, 2001), to the development of the RBV. In fact, in the present work, to the characteristics of value, inimitability, insubstituability and intransferability enunciated by Barney (1991), only two more have been added: appropriability and durablity (Grant, 1991; Amit & Shoemaker, 1993).

4. INTELLECTUAL CAPITAL

Although it has been recognized for a long time that the economic prosperity rests in the knowledge -intellectual capital- and its useful application (Teece, 1998), the emphasis on it is relatively new. Managing the intellectual capital of the firm has become one of the main tasks in the executive agenda. Nevertheless, this work is especially difficult because of the problems involved in their identification, measurement and evaluation. It is in this situation when the models of intellectual capital become highly relevant, because they not only allow us to understand the nature of these assets, but also to carry out their measurement.

The term Intellectual Capital is used as a synonym for intangible or invisible assets since the work by Stewart (1991). The fact of calling it 'capital' makes reference to it's economic roots, because it was described in 1969 by the economist Galbraith like a process of value creation and assets at the same time. The definition by Bueno-Campos (1998: 221): 'basic competences of intangible character that allow to create and to maintain competitive advantage' argues how we can tie intellectual capital to the RBV.

A joint perspective for intellectual capital understood as resources and strategic capacities, led to us to raise its assessment in order to state its consistency as such. For this purpose we have used the Intellectus model (CIC, 2003), developed from the revision of the previous main models of intellectual capital, although mainly based on the Intelect model (Euroforum, 1998). Their relatedness can lead us to think about the Intellectus model as an evolution of the Intelect one, because the human team involved in the later has been almost the same than in the former.

The study of non-financial factors which have strong influence over firm outcomes has been the guide for the proposals on intellectual capital measurement and management that has been reviewed. The main contribution of these (Kaplan & Norton, 1992; Bontis, 1996; Brooking, 1996; Saint-Onge, 1996; Sveiby, 1997; Edvinsson & Malone, 1997), has been to provide a framework for structuring and classifying the different components of intellectual capital, as well as to establish series of indicators for intellectual capital measurement. In Spain the proposal of Euroforum (1998) and the one of CIC (2003) must be highlighted. Both models represents a powerful tool to carry out intellectual capital measurements, but considering different aspects. The reasons in to chose the Intellectus model are based on its main characteristics: (1) amplitude, this is the possibility of measurement of all the components of the intellectual capital that a company has or controls; (2) dynamism, that focus on measuring the present stock of intellectual capital that a company controls, but that simultaneously allows to identify the future potential of that capital; (3) flexibility, so that it allows to adapt to the reality and own staples of each business landscape or firm; and (4) feasibility, which implies using robust ways to measure, as well as a first-hand access to the people involved in the development of the model.

Among the reviewed models the Intellectus model was the one that fulfills more closely the previously selected characteristics. This does not mean by no way that the other models could be of inferior quality, but that they reach a worst fit to the characteristics that we defined as excellent in our research purpose. Also, the classifications of intellectual capital given by these models shows a high degree of consensus about the existence of three main blocks of elements: human capital, structural capital and relational capital. Each capital or block is conformed by a set of elements that share some basic characteristics. For each element can be identified several variables in order to measure the element, reaching the direct performance of the measurement activity by means of sets of indicators.

5. ORGANIZATIONAL CAPITAL AND SUSTAINABLE COMPETITIVE ADVANTAGE

The different types of intellectual capital represent different types of intangibles, which in spite of their strategic nature would not have the same value for the firm as is seemed to be suggested by the works of Hall (1992, 1993), Itami & Roehl (1987), Aaker (1989), or Prahalad & Hamel (1990) that emphasize the importance of certain intangibles. The establishment of these differences can be considered as a useful help for strategic management, so they can help in making decisions about the actions that the firm must perform and about the implementation of programs that allow to protect, to maintain or to develop those more valuable intangible assets.

In this work we only carried out the evaluation of the organizational capital at an elementary level, for this a matrix of double entrance was constructed that ties the organizational capital and its elements on one side, and the 6 basic characteristics that must fulfill the resources and capabilities to be considered strategic on the other side (see figure 1). The results will allow us to determine if the evaluated element is a source of competitive advantage and also if that advantage can be sustainable.

	Elements of Organizational Capital			
Characteristics of strategic resources and capabilities	Culture	Structure	Organizational Learning	Business Processes
Value	✔	✔	✔	✔
Imitability	✔	x	✔	x
Substituability	x	x	✔	x
Transferability	✔	✔	✔	x
Apropriability	✔	✔	✔	✔
Durability	✔	x	✔	x
Effects				
Competitive advantage	✔	✔	✔	✔
Sustainable competitive advantage	✔	x	✔	x

Figure 1.- Organizational Capital Assessment Matrix

The organizational capital arises splitting structural capital in technological and organizational capital. Organizational capital is the set of intangibles of explicit as implicit nature that structure and develop the organizational activity of the firm effective and efficiently (CIC, 2003). It includes rules, norms, routines and organizational culture, that help to form a way of making the aforementioned, and takes to the development of organizational competence (Bueno-Campos, 1998). It is the support for the development of other types of capital, without which these cannot unfold.

Organization routines can be separated from the individual because one of its more important functions is indeed to reduce the dependency of the company on an individual or group of individuals. The conforming elements in organizational capital, according to the proposal of CIC (2003: 42) are: culture, structure, organizational learning and processes, which make reference to the different capabilities of the organization.

5.1. CULTURE AND SUSTAINABLE COMPETITIVE ADVANTAGE

According to CIC (2003) organizational culture is the set of values, norms and behaviors shared and by most members of the organization which influence firm performance and returns. Organizational culture is an element of cohesion conformed by the values and beliefs of people who take part in the firm and therefore constitutes it's manner of existence, it provides it's identity and it determines its behavior towards the internal (employees) and the external customers (clients, suppliers and other agents).

This is valuable as it enables the firm in doing things for its employees, customers, suppliers and other stakeholders, and also allows sales increasing, wider commercial margins, and diminishing costs. In short, organizational culture adds financial value for the company (Barney, 1986b) and relates it with the competitive environment (Amit & Shoemaker, 1993). The value of a certain culture rest over its peculiarity or singularity, because when the attributes that shape that culture are not common to most companies, they allow to take advantage form the dynamics of the ex-ante competition (Peteraf, 1993).

The competitors are disadvantaged in order to copy the culture of the company since it requires several certain conditions and time for its formation. It implies historical dependency, social complexity and causal ambiguity, and it is therefore hardly imitable.

The RBV understands firms as idiosyncratic social inventions, limited by its history (Barney, 1991), because they reflect the unique circumstances of its foundation, the unique personalities of its founders and the unique circumstances of its development, unique experiences that form their culture. The culture is also inimitable in order to be measured, so it is not possible for individuals to observe and to describe what isolated elements of that culture that add value to the organization (Lippman & Rumelt, 1982) since the values, symbols and beliefs are difficult to describe. Also to categorize the relations of these with the performance of the company does not allow a rigorous description (Barney, 1986b: 661), therefore it is almost impossible for the potential imitator to copy that it cannot describe clearly.

Nevertheless, culture not seems absolutely irreplaceable, because different cultures can lead to quite similar outcomes, when they are rightly coupled with other elements as firm strategy. This means that the company must, rather than develop an alternative culture, look for its own. The search for cultural imitation is surely difficult, and quite practically unfruitful. The first option is more feasible (to develop an own culture), although the results of the cultural developing process will can only be long term observable, because the development of an own culture will imply a considerable amount of time and effort.

Organizational culture is hardly transferable, because a market where it can be acquired does not exist, and when taking root in the complex network that is the organization (Vicente-Lorente, 2000) it is not easy to transfer nor acquire the company whose culture is wanted to emulate, since the process of merger and assimilation with the existing culture is slow and expensive, and the risk of the potential benefits to dissipate is high.

Culture seems to be one of the intangibles with an wider life expectancy (Hall, 1993). We can found firms that have a long life span and keep alive the culture that their founders established.

In terms of property rights, although the boundaries of organizational culture are not very clear, the benefits that it can originate belong to the firm, and they will not disappear yet, even if some individuals leave it, because culture it is an organizational capability (Barney, 1986b).

In short, culture can be highly valuable and adaptable, difficult to imitate and to transfer. It has in addition an life span, and although it can be replaced this does not represent a serious threat, because obtaining an alternative own successful culture would be quite difficult for competitors. Hall (1993) places culture in fourth place among the most important intangible resources for a firm to have. Peters & Waterman (1982) also place this assets among the eight attributes of an excellent firm.

5.2. STRUCTURE AND SUSTAINABLE COMPETITIVE ADVANTAGE

Organizational structure is the set of means and processes devoted to the formal organization of the firm (CIC, 2003). Formal organization is a planned structure and represents a deliberate attempt to establish relations outlined between the components in charge to fulfill the objectives efficiently (Kast & Rosenzweig, 1987). The formal structure is something necessarily intangible and abstract like, for example, the relationships of authority between people within an organization, which do not have physical existence but that influence in an important way the running of the firm.

The traditional form of the organization is based on structures focused in control, designed with the objective to optimize the use of few physical resources such as machinery capacity, materials and human labor (Chandler, 1962). However, different models of structure have tried to overcome the traditional form in a search for adaptation to the objectives and characteristics of each firm. So, two companies in the same market with different and equally efficient structures can be found. Hence, we can deduce that the structure, as well as culture, is susceptible to substitution.

The formal structure of the organization and its external links play an important role in innovation management and in how the competence and capabilities evolve (Teece, 1996). The relevance of this relationship of the structure with its environment has already pointed our by the contingency approach (Burns & Stalker, 1961; Lawrence & Lorsch, 1967). Authors from this stream state that the structure of the company must fit to the external environment, so that this can fluctuate between mechanical structures and organic structures, according to changes in business uncertainty and dynamism. From this we can deduce that the value of the structure will be based on its fit to the environment conditions. This conclusion is supported by paradigms Organizational Theory, based on the search for stability and for the reduction of uncertainty levels by means of structures and processes of balance. Nevertheless, recent studies seem to indicate that in hypercompetitive surroundings the stability of the structure has limitations. Rindova & Kotha (2001) analyze the structure and competitive advantage of companies in highly competitive surroundings co-evolving in a dynamic fashion, according to which they call “continuous morphing”. This way we can state that the of the structure depends on the competition and change rates present in the environment. Thus, the more competitive and changing the industrial environment, the shorter life expectancy for the competitive advantage obtained from organizational structure.

In regard to the implementation of the hierarchy principle in the structure, as well as levels of vertical and lateral integration, we found specific aspects of the structure of each firm that although are not to difficult to observe, they are not so easy to imitate, because they involve different forms of communication, cooperation and integration between the different members embedded in the structure. Thus, some authors understand organizations as systems devoted to information processing (Cyert & March, 1963; Nadler & Tushman, 1988). This system captures information from outside the company and it also incorporates the internal knowledge and information present within the firm, making it able to perform its activities, deploy and redeploy its different assets. This way, Mendelson (2000) claims for the design of an organizational system specially focused on effective information processing and fast response.

It is necessary to mention that structure and culture maintain a strong relationship between them, which means the first is as hard to transfer as the second. Most of the success of a certain culture rest on its fit to other factors. The same can be argued for structure, and for the fit between them. As an example we can think about the structure preferred by the organizations who implement TQM balances, which must deal with the trade off between important control needs over the activities and the flexibility needed to respond and adapt to fast market changes (Douglas & Judge, 2001). Finally, property rights about the rents generated by organizational structures do not pose apropriability problems.

In summary, the structure can be a valuable capability for the organization, it can be adaptable, difficult to imitate and to transfer, and although its duration can be variable and is susceptible to substitution, it represents a source of competitive advantage whose support will depend on a suitable management that allows it to surpass the mentioned limitations.

5.3. ORGANIZATIONAL LEARNING AND SUSTAINABLE COMPETITIVE ADVANTAGE

Organizational learning represents the capability of the organization to acquire new competences and knowledge with the purpose of responding to change dynamics and organization development (CIC, 2003). It is the ability of the company to manage and to mobilize its resources in a competitive response (Jashapara, 1993), being therefore valuable when the components of the company fit to its environment through knowledge creation, capture, and transfer.

Organizational learning can be a source of rent generation since its nature results from its evolution through the particular history of the firm (path dependence) and from its characteristics. That is to say, it is specific of the company (Nelson & Winter, Teece et al., 1997). This ability is the key for developing new routines or for improving the existing ones. There are several kinds of organizational learning, it can be inherited learning, learning through experience, vicarious learning, grafted learning or learning through deliberate search (Huber, 1991). Any particular learning process rest on complex cognitive dynamics, specially when it involves the whole organization. Besides, learning depends not only on investment efforts, but also on the previously accumulated knowledge or experience. This issues determine the absorptive capacity of the firm (Cohen & Levinthal, 1990), which allow it to be more efficient in knowledge capture, assimilation, and application. These characteristics related to complexity, path dependence, and idiosyncratic nature, make organizational learning barely imitable.

Learning faster than competitors can be a source of competitive advantage, but ‘learning to learn’ or ‘learning to unlearn’ can be a more valuable one. Learning processes are especially important in technology intensive environments, where competition is understood as a learning race (Powell, 1998). These processes are intrinsically social and collective and happen not only through the imitation and emulation of the individuals, but also by collaboration and interaction in understanding complex problems. Knowledge facilitates the acquisition of more knowledge according to the principle of efficiency in the accumulation of assets (Dierickx & Cool, 1989), but only with the organizational capacity to learn, knowledge can be applied from one project to another and from one unit to another (Powell, 1998). The knowledge thus generated is translated in to new models of activity, routines or a new logic of organization (Teece et al., 1997). Organizational learning can not be replaced or substituted by no other capability. It is necessary to improve efficiency levels in current activities and to be able to perform new activities as a response to the needs of the competitive environment.

Organizational learning is not easily to transfer, so that it is developed gradually in the company, which is not a machine but a living organism that learns by means of the combination of tacit and explicit knowledge (Nonaka, 1991). This author indicates that observation and emulation of technical competitions by means of the socialization process are a key step in obtaining tacit knowledge, which constitutes an important isolation mechanism that avoids imitation and allows support for the competitive advantage. When learning is an organizational capability and not just an addition of individual knowledge accumulation, specially if the ability to learn of each individual is embedded in the culture and structure of the company, it does not display problems about property rights.

The ongoing exercise of learning favors flexibility and adaptation, and favors further learning too. Therefore, this capability presents a wide (almost infinite) life expectancy, longer than any individual learning skill, and able to remain in the company even if some of its members leave.

In summary, it can be said that organizational learning is a valuable organizational capability, difficult to imitate, to replace, and to transfer. Besides it has a prolonged life expectancy and it does not show difficulties for rent appropriation regarding the benefits that learning causes. We can concludes then that organizational learning can be an important source of sustainable competitive advantage.

5.4. BUSINESS PROCESSES AND SUSTAINABLE COMPETITIVE ADVANTAGE

Business processes make reference to the activities that shape the operations that the firm carries out and that can be directed to internal or external clients (CIC, 2003). A way to perform processes analysis comes from the value chain (Porter, 1985). The main tasks of business processes are coordination and integration, learning, and reconfiguration (Teece et al., 1997). From business processes arise organizational capabilities and core competence, that can be the origin of competitive advantage.

They are valuable as soon as they look for the adjustment of firm activities (production, logistics, administration, etc.) with the market requirements (Amit & Shoemaker, 1993). Also, the more they interrelate and they coordinate to each other, the more difficult it will be for the possible imitators to copy them, since they will be more socially complex when involving more ways to work, an increased necessity of communication, flexibility and routines (Nelson & Winter, 1982). Its transference becomes difficult when taking root in the activities of the company other resources and capacities -with a high degree of complementary- cannot separate from what they involve (Reed & DeFillippi, 1990). Nevertheless, when connections between different activities are not present, then transferability and imitation are easier.

Processes can have a wide range of substitutes, and quite different processes can lead to similar results. This unfolds an important threat for the superior firm returns based on a certain process. Regarding to durability, we must say that although the purpose of a certain process can have a long relevance in that industry, the duration of processes by themselves can be quite short. It will depend on the uncertainty and innovation rates present at the industry level. Finally, as well as the previously commented elements of organizational capital, business processes do not present difficulties for rent appropriation.

In short, processes represent valuable organizational capabilities, but with variable protection mechanisms against imitation and transfer, and showing a life expectancy according to environmental and technological change. They do not present appropriability problems, although several substitutes can be found by other firms.

6. DISCUSSION AND CONCLUSIONS

The main contribution of this paper is the development of a framework for resource and capabilities assessment, according to the criteria employed in the Resource-Based View of competitive advantage. This framework allows the firm to evaluate its internal factors and to determine the potential of each element for sustainable competitive advantage through the fulfillment of the characteristics of value, imitability, substitutability, transferability, life expectancy, and appropriability.

Previous literature in the RBV has highlighted the strategic nature of intangible resources or intellectual capital. Among the wide coverage of intangible assets, the organizational capital is supposed to support any other kind of elements of intellectual capital developed within the firm. If it is not managed properly it will not allow the unfolding of human capital, technological capital, business capital and social capital (CIC, 2003). This reasons have lead us to develop the mentioned RBV assessment methodology for organizational capital, namely organizational culture, structure, organizational learning, and business processes. From a starting point, every element of the organizational capital appears to have a high strategic potential, because they constitute organizational capabilities as they are defined by the RBV.

From the research results we found similar conclusions about value and property rights. On the one hand, all elements that conform the organizational capital are valuable for competing in the industry, and because they allow firm adaptation to market requirements. On the other hand, due to their organizational capabilities fashion, these elements are not depending on certain individuals, so the rents which can be generated are easily appropriated by the firm.

From the different elements of organizational capital, learning an organizational culture show the highest potential for sustaining competitive advantage. Structure and business processes take risks of imitation and substitution by competitors, and their life expectancy depends heavily on the environmental turbulence. We must remark the purpose of every component of organizational capital: provide coherence to the whole organization. When they involve specificity and complexity, and when the complement each other and the environmental demands, they can turn into assets difficult to imitate and to transfer, allowing the company to maintain its competitive advantage. Therefore, interaction and relatedness between elements is the key for having a strategic organizational capital, and fostering these characteristics will be the main task for the manager in charge of its development.

The framework devoted to the strategic assessment of organizational capital can also be a great help in the analysis of other types of intellectual capital as human capital, technological capital, business capital or social capital. Besides, it would be a good roadmap in studying the relations between elements and sets of elements that conform intellectual capital. For example, it would be very interesting to establish the relationship between organizational capital and human capital. Further research in this stream would strengthen a prescriptive theory about intellectual capital management, in the search for gaining sustainable competitive advantage.

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