



Sustainable competitive advantage in Construction: Study of Central Region of Parana

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Abstract

In the fierce market competition, the companies need different strategies that give them a competitive advantage that may result from resources controlled by organization. In this way, search linked to the resource based view (RBV), well founded by Penrose (1959), Wernerfelt (1984) and Barney (1991), allow identifying those resources able to generate competitive advantage. This article seeks to identify the sources of sustainable competitive advantage in the constructing companies in the center-western region of Parana State, through a qualitative research approach we investigated three companies in this sector which are located in the central region of Parana State. For data analysis, we used the VRIO model developed by Barney (2007). In this model, some resources stand out as potential generators of competitive advantages when they are valuable, rare, inimitable and organizational within the context in which they are introduced. The results have shown that companies which operate in this line of business are dependent primarily of ten essential resources and two are introduced as potential sources of sustainable competitive advantage: 1) Experience and track record in the market; 2) Structure, organization and planning.

Key-words: Resource; Competitive Advantage; VRIO

Introduction

Considering the difficulty of business management and environmental dynamics, there is a need for appropriate strategies to enable the achievement of competitive advantage and the consequent superior performance of the organization (BARNEY, 1991; PRAHALAD; HAMEL, 1990).

The study of competitive advantage in the field of strategy allows different perspectives, one of them is the search for understanding the competitiveness of firms in certain sectors, which can also be elucidated from the resource-based view (RBV) widely studied and defended by authors as Wernerfelt (1984) and Barney (1991).

The RBV, characterized as a perspective based on the management of internal resources and the company's performance, emphasizes the competitiveness of available resources to achieve the desired performance. This strand allows the recognition of tangible and intangible resources of the organization and can also be called capabilities and skills and remain as core elements in the search for competitive advantage for an organization (BARNEY, 1991).

Given these brief considerations, this article seeks to identify the potential resources to generate sustainable competitive advantage in construction companies of central region of Parana State. As for its structure, the article begins with a brief presentation of the theoretical framework in which we discuss the concepts related to RBV, the competitive advantage and VRIO method, followed by the methodological procedures applied to three construction companies located in the center-western region of Parana State. Finally, there are the final considerations and references used in the study.

Theoretical Framework

Two aspects permeate the studies on gaining competitive advantage in the development of business strategies. The first one emphasizes environmental issues, referring to the positioning of the company on a particular economic sector, and Porter (1986) is one of its main authors. This component prioritizes environmental analysis on the strategy choice, by having an exogenous view of the organization, concerned with the structure and the positioning of the company (PORTER, 1986).

The second aspect refers to the resource-based view (RBV), object of this study, which has been, with great emphasis, discussed in recent decades, and its main premise is to analyze the company's competitiveness based on its resources and

internal aspects. In this context, it seeks to explain why some companies get competitive advantages over the others (WERNERFELT, 1984; BARNEY, 1991;).

Penrose (1959), in his seminal study for the development of RBV, noted that a company is a set of skills and manageable capabilities, arguing that the growth and success of businesses depend on the possession and effective use of skills and heterogeneous capabilities. The author brought up the argument that the uniqueness provides the basis for the development of the firm, so that by controlling unique, singular resources, companies develop unique capabilities.

Wernerfelt (1984) resumed Penrose's studies understanding that we can describe any organization by its capabilities and resources. These resources should be systematized so that they are strategically superior to those of its competitors. Wernerfelt (1984) also suggests that: a) the analysis of companies in terms of their resources would bring a new light and different criteria to the traditional product perspective; b) some resources could lead to high profits, serving the company in analogy for entry barriers; c) the strategy of a major company should involve a balance between exploitation of existing resources and the development of new resources and d) acquisitions could be seen as resources purchases.

The RBV is used to evaluate available strategic resources for the company and its basic principle is that the basis for the competitive advantage of a company is in the way it applies the valuable resource pack it holds (WERNERFELT, 1984). In this model, companies are seen as tangible and intangible resource packages, which form a unique combination with each other, and these resources can be maintained, renovated and shaped according to the interest of the organization.

As resources we consider all assets, capabilities and organizational processes controlled by the organization to enable strategies that improve its efficiency and effectiveness (BARNEY, 1991). In Barney's view (1991), the resources can be classified into three main groups: the tangible resources include physical assets: plant, equipment, cash flow and financial assets; the intangible resources that correspond to organizational resources: organizational culture, brands, procedures, rules and routines and human resources that have the knowledge, experience and professional qualifications of operational workers and managers. These resources should be compared with the other competitors, identifying those that allow, in use, to obtain better financial results (GRANT, 1991).

In this context, Hall (1989) states that the tangible assets are easily measurable by conventional accounting mechanisms and become fragile in relation to imitability by competitors. With respect to intangible assets, Hall (1989) considers them less visible for competitors and hardly understood and replicated, that is, the intan-

gible assets are normally able to support or weaken the competitiveness of the company.

In the definition of Barney (1991) there is one scope that extols the need for the company to have the ability to create value and stand out from its competitors. The ability to create value not only helps differentiate the organization from its competitors, but it can also hinder its competitors from obtaining such resources (HARVEY, 2004).

This thought supports the idea of Barney and Clark (2007), observing that a company has competitive advantage when implementing a value creation strategy that is not being implemented simultaneously by their current or potential competitors, who are unable to duplicate the benefits of this strategy, translating the idea of intangibility and dynamism of this resource.

In this context, the understanding of terms such as resources, skills and abilities developed by the organizational actors, has advanced to the concept of skills and capabilities, especially with the work of Prahalad and Hamel (1990) who developed the concept of essential competencies or core competencies, thus valuing intangible assets as key competitive advantage generators.

For Prahalad and Hamel (1990), the organization should have a portfolio of skills and not a business portfolio. They explain that the competitiveness of a company in the short term comes from its attributes of price and performance of existing products and in the long-term competitiveness results from the ability to form key competences at lower cost, higher speed and thus getting better results.

The virtuosity to develop new sources of competitive advantage in an environment open to the competition where there is constant change, are translated by Teece et al. (1997) by dynamic capabilities. The authors say that the key to strategic management is the adaptation, integration and reconfiguration of internal and external organizational skills, resources and operational skills to address rapidly changing environments. (TEECE et al., 1997).

Prahalad and Hamel (1990) describe as core competencies, those skills involving collective learning and that can be the basis of competitive advantage. Peteraf (1993) links the notions of economic rent to the notion of competitive advantage in the conceptual model of the theory of resources. The model developed by the author indicates that competitive advantage derives from the heterogeneity and imperfect mobility of resources.

The use of the term competitive advantage can be found in Ansoff (1965), which defined it as an advantage to understand, in a proactive way, market trends ahead of competitors and to adjust to the offers because of this proactivity. However,

for Whittington (1993), the prominent concept of competitive advantage comes from the economic and military origins of the literature on strategy. Grant (1991) stated that the use of competitive resources as a source for generating competitive advantage came up from the dissatisfaction with the theory of structural industry analysis that previously dominated the study of strategy.

The competitive advantage term is commonly used in the business strategy literature and its concept is related to superior performance of some companies over others. The superior performance would be a consequence, a likely result of strategies also influenced by the costs of acquiring the necessary resources (BARNEY, 1986).

To explain the competitive advantage, Porter (1985) uses as a tool the concept of the value chain. In his view, a company would have a competitive advantage developing the most important activities within the value chain at a lower cost than the competition. In turn, Ghemawat (1986) states that competitive advantage may stem from: a) benefits of size (economies of scale, scope or experiences); b) benefits of privileged access to resources (markets, raw materials) and c) the exercise of options to ensure strategic flexibility.

Roman et al. (2012), contribute to the concept when considering that competitive advantage can be supported in different functional areas within the company and cites example of actions to meet the smaller cycles of deliveries of the product; have product quality and reliability; comply with delivery promise; be able to produce products quickly and possess flexibility to adjust to changes in the volume and achieve low costs. Relying on this thought, Slack et al. (1997) points out five items that can generate competitive advantage in a company: reliability, cost, flexibility, quality and speed.

Cool et al. (2002) argues that competitive advantage can be gained by both privileged position in the industry, that cannot be replicated by competitors (CAVES, 1984), and resources obtained in imperfect factor markets (Barney, 1986), not fully mobile (Peteraf, 1993), immune from imitations (Rumelt's, 1984) and irreplaceable (Barney, 1991).

The RBV provides a structure for the study of competitive advantage by determining that the unique resources of a company are crucial to the economic result (BARNEY, 1986, BARNEY, 1991; PETERAF, 1993). The RBV suggests that companies are able to generate competitive advantage if they own and manage resources that are rare, valuable and difficult to imitate (WERNERFELT, 1984; BARNEY, 1989).

Peteraf (1993) complements that to turn a short-run competitive advantage into a sustainable competitive advantage it is required that these resources are het-

erogeneous in nature and not perfectly mobile. Effectively, this means that resources are valuable if they are neither perfectly imitable nor replaceable without much effort (Barney, 1991). If these conditions are met, the resource can sustain returns of the company above average.

Two models on the resource-based view mark Barney's studies: VRIN (valuable, rare, inimitable and non-replaceable) and VRIO (valuable, rare, inimitable and organizational). The VRIO model is considered an evolution to the initial VRIN model due to the approach to the organization.

Table 1 - Questions present in VRIO model

	Related issue
Valuable	Does the resource or capabilities enable the company to employ a value creation strategy surpassing their competitors or reducing their weaknesses?
Rare	Does only a small number of competitors currently control resources and capabilities?
In-imitable	Do companies without this resource face a cost disadvantage to get it or to return it?
Organizational	Does the company organize its other policies and processes to support the exploitation of its valuable, rare and costly to imitate resources?

Source: Adapted from Barney and Clark (2007)

The proposal of the author with the VRIO model is guided by four questions highlighted in table 1, and the answers to the questions will be the perception of resource capacity to generate sustainable or temporary competitive advantage.

Regardless of classification of resources or capabilities, Barney (1991) states that among the resources of the firm, only a few are able to generate a competitive advantage and, moreover, only a few firms can maintain this capability and make it a sustainable competitive advantage. Also it is noteworthy that the sustainable competitive advantage is related to long-term strategies and should trigger lasting results, unlike the competitive advantage that generate temporary results (BARNEY, 1991).

Table 2 shows the VRIO model and shows when a resource is considered a sustainable competitive advantage to be exploited by the company's managers.

Table 2 - The VRIO framework

Valuable?	Rare?	Costly to imitate?	Exploited by Organization?	Competitive Implications	Economic Performance
No			No	Competitive disadvantage	Below Normal
Yes	No			Competitive parity	Normal
Yes	Yes	No		Temporary competitive advantage	Above Normal
Yes	Yes	Yes	Yes	Sustained competitive advantage	Above Normal

Source: Barney e Clark (2007, p.70).

Resources or capabilities are considered "valuable" when they enable a firm to conceive or adopt strategies that improve its efficiency and effectiveness (BARNEY, 1991). The question of value deals with the resources and capabilities of a company that allow it to explore opportunities or neutralize external threats (BARNEY; CLARK, 2007).

Regarding the "rare" resources, Barney (1991) says that a valuable resource of company cannot be a competitive advantage if a large number of competitors or potential competitors own it. If a particular resource or ability, considered valuable, is present in a large number of competitors, each of them has the ability to adopt a strategy that exploits the value of the resource or capability, thus the resource not being rare will be unable to generate competitive advantage (BARNEY, 1991).

A resource or capacity controlled by many competitors in a specific sector, is unlikely to be a source of competitive advantage for any of them. Valuable resources or capabilities, but common, are sources of competitive parity and not competitive advantage (BARNEY; CLARK, 2007).

For analysis of the "inimitable" resources or capabilities Barney (1991) considers that a valuable and rare resource can be a generator of sustainable competitive advantage only if the companies that do not have it, cannot get it. The fact that a competitor might be able to reproduce particular resource or capability, if obtained with higher cost, makes the imitation imperfect or limited, and allows the company, that possesses the resource at lower cost, the possibility to enjoy a competitive advantage (BARNEY; CLARK, 2007).

The "organizational" term changed the VRIN model into VRIO, replacing the question of substitutability by organizational term. The substitutability comes to resources or skills that can be considered equivalent. Barney (1991) defines the equivalence between two resources or capabilities when they, though different from each other, enable the implementation of the same strategy, or give companies the same capacity, and no longer a competitive advantage.

With the creation of the organization term, the author creates a strategic nature in this attribute, since the resources or skills are those with greater intangible emphasis than the others, thus generating a distinct advantage and, consequently, more difficult to be replaced. The question of the organization refers to the fact that despite having valuable, rare and hardly inimitable resources and capabilities, the company can take an advantage of this potential to generate competitive advantage of these resources, only if it is properly organized to exploit them in an efficient way. However, it is noteworthy that the attribute "organization" despite strategic implies that, only to be organized, does not generate competitive advantage. This attribute is applied to VRIO model only in conjunction with others and it is fallacious to consider that only a single resource can generate competitive advantage (BARNEY; CLARK, 2007).

Other types of RBV proposed by Dierickx and Cool (1989), Grant (1991), Peteraf (1993) and Collis and Montgomery (1995) propose attributes using different terminology than those proposed by Barney and Clark (2007), but in some way they end up being incorporated by the four attributes of VRIO model.

The typology, proposed by Dierickx and Cool (1989), considers that for a resource or capacity to be able to generate sustainable competitive advantage, it should not be easily: a) purchased from the market; b) imitated or replicated; c) replaced by other resources. In the same context, Grant (1991) proposes that the resources and skills must be: a) durable; b) non-transparent; and c) nontransferable.

The conditions of potential to generate a competitive advantage by a resource or competence proposed by Peteraf (1993) involve the simultaneous occurrence of: a) possession of superior resources compared to competitors; b) imperfect imitability and substitutability; c) resource acquisition constraints on favorable terms; and d) imperfect mobility.

Typology of attributes proposed by Collis and Montgomery (1995) that the resources or business skills will only have potential to generate competitive advantage if they are "approved" in five tests: a) inimitable; b) durability; c) have appropriability; d) substitutability; e) competitive superiority. As we can observe the typology chosen by different authors use different terminology to describe the same attributes.

The main concepts involving this study were presented, in the next section will be described the methodological procedures adopted in the conducted research.

Methodological procedures

To identify potential resources and competitive advantages generators in construction companies this study is based on multiple cases and on the qualitative research (YIN, 2001). The focus of the investigation lies with companies in the sector of construction present and active in the Guarapuava micro region in the state of Parana (IPARDES, 2012).

In addressing the issue of RBV, we seek to identify resources that provide essential skills of organization and underlie the competitive advantage present in the performance of these on the market. Therefore, in specific terms the article aims to: 1) identify among the resources available in the companies, which of them can generate competitive advantage; 2) check among the surveyed companies what features they have in common and the importance of these resources in business strategy; 3) analyze the performance of companies to maintain and protect its resources, showing the direction and composition of basic skills, according to the VRIO model presented by Barney and Clark (2007).

The survey was conducted in three constructing companies operating in the central-western region of Parana, which were intentionally chosen by the size of the company, with the construction company "A" of great size; "B" medium and a "C" small size, using semi-structured interviews with the management level professionals. The collection of research data in companies "A" and "C" happened directly with the co-owner, in the company "B", with the administrative manager of the construction company. Data analysis followed the assumptions of the thematic content, guided by theoretical categories originated in the theoretical framework, presenting the information of respondents in full, enriching the discussion on the subject.

Presentation and analysis of data

Characterization Industry and Enterprises Surveyed.

Among the various sectors of the national economy, the construction sector has been emphasized for being a driving sector for the region's economic growth. Business confidence involved in the sector is a reflection of public policies sustained on heavy investment of public and private capital to promote the sector.

The significant results are noticed in the industry since 2004 and according to the Brazilian Institute of Geography and Statistics (IBGE), the sector has been grow-

ing on average 4.65% per annum. In the first quarter of 2014, the importance of the construction sector for GDP of the Brazilian economy was 3.68% (IBGE, 2014).

The construction market absorbs a considerable number of workers and the sector's importance to the economy can be seen in the creation of jobs allocated to the sector. According to IBGE, the sector accounts for 5% of job created in the state of Parana (IBGE, 2014).

In the last census conducted by IBGE in 2010, in Guarapuava, main city of the studied micro-region, the sector accounted for 7% of formal jobs created in the city. The census also found that if it adds up to the informal construction sector, it accounts for 9% of jobs created in that municipality (IBGE, 2014).

In this scenario, the expansion of the construction sector is in line with economic growth and regional development, and a key to keep the gear of the economy active, generating income and wealth for the country.

The three companies studied in Guarapuava micro-region in Parana state (IPARDES, 2012), operate in the construction sector: construction company "A" that has operated in the city for 20 years, has 800 direct and 500 indirect employees operating in residential construction, commercial and small hydroelectric plants, where we interviewed the co-owner of the organization.

The second one that was searched is the construction company "B", that has operated in the city for 1.5 years, has 50 direct employees and its main area of expertise is the construction of private residential properties, commercial properties and housing projects for low-income focusing on government programs *Minha Casa Minha Vida* (My House My Life). We interviewed its administrative manager.

The third construction company called "C", where we interviewed its co-owner who declared that started the activity informally more than 15 years ago, has 14 direct employees, operates in residential and commercial buildings, including medium and small reforms.

Resources characterization from the perspective of VRIO framework

The VRIO model proposed by Barney (1989) and adapted by Barney and Clark (2007), identifies the generation of competitive advantage through shared resources and structured according to: 1) the importance of perceived value; 2) the rarity to identify the importance of the resources; 3) imitability when considered that the more difficult to imitate, the greater the resource potential to generate competitive advantage; and 4) if the resource presented is exploited by the organization.

The application of VRIO framework allows the analysis of a specific resource within a set of relevant features, strengthening its peculiarity, transforming it into a sustainable competitive advantage for the organization and can be managed strategically. When there are two or more resources so configured, they can be worked synergistically, adding more value to the model and providing a competitive potential, which may reflect in superior performance of the organization, depending on further management of this differential (GONCALVES, COELHO; SOUZA, 2011).

Table 3 - Competitive Advantage Generation Potential

Recourse kind	Valuable	Rare	Inimitable	Organization/ Resource exploration	Competitive implications
Skilled labor	Yes	Yes	No	No	Competitive parity
Experience and track record in the market	Yes	Yes	Yes	Yes	Competitive advantage
Structure, organization and planning	Yes	Yes	Yes	Yes	Competitive advantage
Finances – market strength	No	No	No	No	Competitive parity
Differentiated project and projects implementation	No	No	No	Yes	Competitive parity
Quality of performed services	Yes	No	No	No	Competitive Parity
Specialization in Niche Market	Yes	Yes	No	Yes	Temporary competitive Advantage
Inventory	Yes	Yes	No	No	Competitive Parity
Relationship Network	Yes	No	Yes	Yes	Temporary competitive Advantage
Competitive pricing	No	No	No	No	Competitive Parity

Source: primary research data.

In the three investigated companies, we observe constant concern about work organization, relationship with customers and other construction companies in order to establish partnerships. In addition, the quality of provided services, delivery on time and reliability observed by customers were highlighted in interviews. Therefore, the research questioning about the identification of essential resources of the company, that underlie the skills, was well received and the collaboration of respondents was spontaneous.

Regarding the essential resources of companies, the research allowed to identify ten resources, and, by applying the VRIO model, three of these resources were mentioned by all respondents: a skilled labor; the experience and track record in the market; and the relationship network. Analyzing the results, it is observed that the skilled labor resource is cast as competitive parity, even though it is a valuable re-

source, it is not considered rare by the interviewees and can be imitable by competitors.

The data show that the "experience and track record in the market" and "structure, organization and planning" allow identifying a competitive advantage as having four characteristics related to VRIO analysis. The remaining resources were mentioned by at least one of the interviewees, and framed among at least one of four characteristics of VRIO model, what shows the importance of heterogeneity to the construction industry, regardless of company size.

For the furtherance of the study also investigated the connection between sustainable competitive advantage and the intrinsic characteristics of the essential resources presented in the survey, which is shown in Table 4 below.

Table 4 shows the classification of resources as the tangibles and dynamism, revealing that the two resources shown in Table 3 as a competitive advantage are also classified here in intangible and dynamic, supporting the studies of Hall (1989) and Barney (1996).

Table 4 - Classification of resources as the tangibles and dynamism

Kind of resource	Type of resource	Classification as tangible	Classification as dynamism
Human	Skilled labor	Intangible	Dynamic
Organizational	Experience and track record in the market	Intangible	Dynamic
Organizational	Structure, organization and planning	Intangible	Dynamic
Organizational	Finances – market strength	Tangible	Static
Organizational	Differentiated project and projects implementation	Intangible	Dynamic
Organizational	Quality of performed services	Intangible	Dynamic
Organizational	Specialization in Niche Market	Intangible	Dynamic
Physical	Inventory	Tangible	Static
Organizational	Relationship Network	Intangible	Dynamic
Organizational	Competitive Pricing	Intangible	Dynamic

Source: primary research data.

When comparing the potential resources generator, considering specifically the two essential resources generators of competitive advantage ("experience and track record in the market" and "structure, organization and planning"), it can be said that they might be intangible and dynamic resources being hardly understood and replicated by competitors and then able to sustain the company's competitiveness in the market, what justify the potential generator of competitive advantage and con-

sistent to what Barney (1989) and Dierickx and Cool (1989), classified as causal ambiguity.

These resources also enable the company to create value and stand out from its competitors. This can be evidenced in the report of the respondent from company "A". When asked about it he makes it clear that:

[...] 15-year-experience on the part of engineering. Over these 15 years the company acquired easy understanding of projects as many are projects from foreign companies what would be difficult for a newcomer company to access this knowledge.

The respondent from company "C" complements with the following statement: "I think it is the experience I have and the organization and administration of works and staff."

Another important resource is the skilled labor, which also fits as intangible and dynamic resource, according to Barney (1989), it is a resource capable of generating opportunities, regardless of the requested time. In that sense, Bulgacov, Arreola and Gomel (2012), consider that this resource, if well explored, can be a key driver of sustainable competitive advantage for its intangibility to be difficult to measure and dynamism, when considering individual capacities. Its relevance in the study comes from the fact that it is considered to be a competitive parity resource, even though common to companies, as declared by the company interviewed "A" when asked about the difficulty of resource imitation:

I think the easiest to copy in my business is the personal resource, because if you pay better you ends up taking the personnel from other firm and get the gained knowledge, I find this the easiest to be copied.

Even though the resource is valuable, it is not rare and does not become inimitable, that is why the competitors also have it. Even though they are trained by the company they work at, they also received training from companies they worked for before, this information can be seen in the account of the respondent from company "C":

[...] The complicated issue in this market is the training given to employees because you train them, invests in somebody and he is able to do a good job, and suddenly he leaves and goes to work for your competitor. Of course this also occurs in the reverse process, the employees of other companies, trained by them, come to work with us, this way the company also gains an employee trained by the market.

In analyzing the context above, it is observed that employee training is equivalent between companies, thus justifying recourse be evaluated as a competitive parity.

The recourse called "quality of service" shown in Table 4 as intangible and dynamic is primarily the result of the efficient execution of construction services and the application of its human resources, this recourse was considered as valuable only by the construction company "A", not considered rare or inimitable by any of the three firms.

Two other resources analyzed and presented in Table 3 as a temporary competitive advantage is the expertise and the relationships network, listed in Table 4 as intangible and dynamic.

By analyzing the resource called relationships, we identify a temporary competitive advantage. This resource, even though it is difficult to imitate, valuable, and exploited by the organization, it is not uncommon on the market. Thus, each competitor has his relationships network, complex or not. Fact that commonly occurs in the market, where a supplier, part of a network has other relationships with other construction-based competitors in the region.

Similarly, the resource identified as expertise in the niche market, presented by company "A" refers to a specific audience and adapted part of its structure to serve them. When asked about the possibility of imitation, reported:

[...] My construction projects for high income public, can also be copied by other companies if they have staff competent to perform these works, because we realize that in other cities, there are also major construction companies.

This statement shows that the resource can be imitated in the future by competitors from the same city or competitors from other regions can come and compete in this niche, featuring this resource as a temporary competitive advantage as shown in Table 3 and also being an intangible and dynamic resource, according to Table 4.

Two other features are discussed here: the "differentiated projects and execution of projects" and "competitive prices" listed in Table 3, as essential resources of competitive parity and also in Table 4 put as intangible and dynamic resources. Both features, often treated as market differentials, with services that could ensure a certain competitive advantage, here are shown as common strategies to everybody in the sector and do not provide competitive advantage.

Also worth mentioning the financial resources and stocks of materials, presented in Table 3 as resources of competitive parity and in Table 4 as tangible and static, which differ from all others presented by those characteristics that allow them to be easily measured and quickly recognized by the competition, which does not necessarily mean that they can be copied due to the complexity of the resource.

Final Considerations

In order to identify the potential resources that generate competitive advantage in construction companies in the central region of Paraná State, using for this purpose the resource-based view, the study showed the presence of 10 resources essential to the surveyed companies.

Based on the presented essential resources and how they contribute to the generation of sustainable competitive advantage, this paper found that two resources are potential generators of this advantage, which are: 1) experience and track record in the market; 2) structure, organization and planning. So, besides being essential resources to these companies, still allow its classification as sustainable competitive advantage generators and determining as a competitive advantage to companies in the construction sector in the surveyed area.

The study also listed out some resources that have temporary competitive advantage, they are: 1) the specialization in niche market; and 2) network of relationships. The comparative method described by Bulgacov, Arrebola and Gomel (2012), allowed us to analyze the resources that are not shown in the search, only one characteristic of VRIO model thus it is identified in the survey as an important resource for the organization, but it is not considered a sustainable competitive advantage.

Still, when analyzing the heterogeneity of essential resources identified in the survey, three were cited in three interviews: 1) skilled labor; 2) the experience and track record in the market; and 3) the relationship network, and the three are framed in different stages of research. The labor was considered a competitive parity feature, the experience and track record as a competitive advantage and the relationship network as a temporary competitive advantage.

You can identify the surveyed construction companies recognize and treat their essential resources as a result of tools, generating value products, both for the company and for its customers, allowing them to compete and differentiate in the market, as assume Prahalad and Hamel (1990).

Finally, the study supports the body of knowledge in the field of strategy and competitive advantage in a way that suggests at this point to new studies that can identify innovative ways for the development and management of essential resources. You can also inquire through the use of longitudinal survey, the development of competitive advantage and which resources are essential in this process in organizations of the same sector and region surveyed here as well in other sectors and regions.

REFERENCES

- ANSOFF, H. I. **Corporate Strategy**: an analytic approach to business policy for growth and expansion. New York: McGraw-Hill, 1965.
- BARNEY, J. B. Strategic factor markets: expectations, luck and business strategy. **Management Science**, v. 32, n. 10, p. 1231-1241, 1986.
- BARNEY, J. B. Asset stocks and sustained advantage: a comment. **Management Science**, USA, v. 35, p. 1.511-1513, 1989.
- BARNEY, J. B. Firm resources and sustained competitive advantage. **Journal of Management**, vol. 17, n. 01, p. 99-110, 1991.
- BARNEY, J. B.; WRIGHT, M.; KETCHEN Jr, D. J. The resource-based view of the firm: Ten years after 1991. **Journal of management**, v. 27, p. 625-641, 2001.
- BARNEY, J. B.; CLARK, D. N. **Resource-Based Theory. Creating and sustaining Competitive Advantage**. New York: Oxford University, 2007.
- BULGACOV, S.; ARREBOLA, M. C.; GOMEL, M. M. Recursos compartilhados: uma aplicação da visão baseada em recursos em um condomínio tecnológico no Paraná. In: **Revista de Ciências da Administração**, v. 14, n. 32, p. 92-106, 2012.
- CAVES, R. E. Economican alysis and the quest for competitive advantage. **The American Economic Review**, v. 74, n. 2, p. 127-132, 1984.
- COOL, K.; COSTA, L. A.; DIERICKX, I. Constructing competitive advantage. In: PETTIGREW, A.; THOMAS, H.; WHITTINGTON, R. **Handbook of strategic management**. London: Sage, 2002.
- COLLIS, D.; MONTGOMERY, C. Competing on Resources: Strategy in the 1990. **Harvard Business Review**, v, 73, p.118-128, 1995.
- DIERICKX, I.; COOL, K. Asset accumulation and sustainability of competitive advantage. **Management Science**, v. 35, n. 12, p. 1.504-11, 1989.
- GHEMAWAT, P. Sustainable advantage. **Harvard Business Review**, v. 64, n. 5, p. 53.-58, 1986.
- GONÇALVES, C.A; COELHO, M de F; SOUZA, E. M. VRIO: Vantagem competitiva sustentável pela organização. **Ciência Administrativa**, Fortaleza, v. 17, n. 3, p. 819-855, 2011.
- GRANT, R. M., The resource-based theory of competitive advantage: implications for strategy formulation. **California Management Review**, v. 33, n.3, p. 114-135, 1991.
- HALL, R. The management of intellectual assets: a new corporate perspective. **Journal of General Management**, v. 16, p. 251-275, 1989.
- HARVEY, T. W. **A framework for understanding the financial performance of the firm using the resource-based view**: an empirical investigation. Tese de Doutorado em Administração, Cleveland State University - USA, 2004.
- Instituto Brasileiro de Geografia e Estatística – IBGE. **Pesquisa anual da Indústria da construção**. Disponível em: <<http://www.ibge.gov.br/home/estatistica/economia/industria/defaulttabpdf.shtm>>. Acesso em: 29 jul. 2014.
- INSTITUTO PARANAENSE DE DESENVOLVIMENTO ECONÔMICO. Relação dos municípios do estado ordenados segundo as mesorregiões e as microrregiões geográficas do IBGE - Paraná – 2012. Curitiba, 2012. Disponível em: <http://www.ipardes.gov.br/pdf/mapas/base_fisica/relacao_mun_micros_mesos_parana.pdf> Acesso em: 29 jul. 2014.
- PENROSE, E. T. **The Theory of the Growth of the Firm**. New York: John Wiley, 1959.
- PETERAF, M. The cornerstones of competitive advantage – a resource based view. **Strategic Management Journal**, v. 12, n. 3, p. 95-117, 1993.
- PORTER, M. **Competitive advantage**: creating and sustaining superior performance. New York: Free Press, 1985.

PORTER, M. **Estratégia Competitiva**: Técnicas para Análise de Indústrias e da Concorrência. Campus, Rio de Janeiro, 1986.

PRAHALAD, C.; HAMEL, G. The core competence of the corporation. **Harvard Business Review**. v. 90, n. 3, p.79-91, 1990.

ROMAN, D. J. *et al.* Fatores de competitividade organizacional. **Brasilian Business Review**, n. 1, p. 27-46, 2012.

RUMELT, R. P.; SCHENDEL, D.; TEECE, D. J. **Fundamental issues in strategy**: a research agenda. Boston: Harvard Business School, 1984.

SLACK, N. *et al.* **Administração da produção**. São Paulo: Atlas, 1997.

TEECE, D. J.; PISANO, G.; SHUEN, A. Dynamic capabilities and strategic management. **Strategic Management Journal**, v. 18, n. 7, p. 509-533, 1997.

WERNERFELT, B. A resource-based view of the firm. **Strategic Management Journal**, vol. 5, pp. 171-180, 1984.

WHITTINGTON, R. **What is strategy and does it matter?** London: Routledge, 1993.

YIN, R. K. **Estudo de Caso**: planejamento e métodos. Porto Alegre: Bookman, 2001.

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