



CO-OP RESOURCES THAT LEAD TO SUSTAINABLE COMPETITIVE ADVANTAGE

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Abstract

This study aims to analyze the organizational resources to assist the co-op to achieve sustainable competitive advantage. The unit of analysis in this study, the co-op itself, has been showing on the market, its growth last year was more than 30%, reaching the second place in its segment on a national level. From this market segmentation are used various resources, as well as physical, human and organizational. The theory of research based view on resources and VRIO model provided the theoretical basis for this study. The research was used characterized with descriptive and objective quantitative method, and data collection via survey and secondary sources. As an instrument of collection, a questionnaire was used; which has been already validated by other theoretical studies. The questionnaire was applied with tactical and strategic-level managers of the co-op, whereas a total of 152 answers respecting a sampling error of approximately 6%. For analysis of the primary data statistic was used: relative frequency, average, standard deviation, Pearson correlation and factor analysis. The main results obtained for a sustainable competitive advantage are physical capital resources with greater perception of influence. The feature of organizational capital was considered of minor influence to the achievement of competitive advantage. However, it is noteworthy that the major averages highlight the items: ethics and respect to Member (physical Capital resource), the mark of the co-op (feature of Organizational Capital), the training offered by co-op and the benefits offered by the cooperative (Human Capital resource). This work helps the perception of managers who experience the daily life of the co-op, in relation to available resources,

highlighting the points to be worked out and that today are a source of competitive advantage. Therefore, enabling new research as well as relating to organizational resources.

Keywords: Co-ops. "Well-resourced" Based View. Sustainable Competitive Advantage.

Introduction

Due to an integrated world in which co-ops are aimed at a sustainable competitive advantage, the changes occur quickly, the technology has been developing constantly, motivating a more critical sense to consumers, thus also causing an increasingly fierce competition between organizations. Due to these circumstances, organizations must increasingly require a focus on your strategic management, since the purpose of it is to establish the Organization a competitive attitude, this attitude encompasses sustainable competitive advantages that guarantee the priority of customers in the future (ZILBER; LAZARINI, 2008).

In this context the resource-based view (RBV) is a perspective that explains the strategic behavior of organizations based on the idea that the selection, acquisition and disposition of resources, as well as the development of unique skills or difficult imitation result in a competitive advantage and differentiation over competitors. (PALMER, 2009). Barney and Hesterly (2007) complement each other saying that if organizations exploit their strengths and weaknesses through the VRIO model tends to be more competitive. The model includes the investigation of competitive resources as physical, human and organizational Resources and these should contemplate the following Value, Rarity, and Imitability and Organization.

With respect to human capital resource Terra (2001) points out that this feature brings competitive advantage of organizations, in addition to the tacit knowledge that its employees have. Impossible to be imitated takes time to be built and in a way is invisible, as it is at the head of each. The co-op movement is garnering a larger share in the market both nationally and internationally. According to the Organization of Brazilian co-ops (OCB, 2014), co-ops are based on certain values such as: solidarity, mutual aid, democracy, equity, equality, social responsibility and honesty. In addition to the values, have the seven principles that guides them, they are: voluntary and free membership, democratic management of members, autonomy and independence, education, training and information, Inter-cooperation and Interest by the community.

To continue research on the co-op segment, it follows the line initiated by Vieira et al (2016) which carried out the study at the national level on the resource based View analysis of co-ops to generate sustainable competitive advantage. Research in this area can contribute to the development of the co-op in the exploitation of resources. The present study seeks to identify which resources can bring competitive advantage to the co-op. In addition to being part of a group of research of the course of administration of the Blumenauense Institute of higher education (IBES).

The research will be presented as follows: in chapter one are introduction; then in Chapter 2 with the issue problem and research objectives that drive the study; Chapter three the theoretical foundation on strategic management, organizational environment, Resources based view VRIO and co-ops; Chapter four presents the research method, along with the criteria and instruments of data collection; Chapter five pre-

sents the main results obtained statement on research followed by the final considerations.

The question problem was: "What organizational resources contribute to a sustainable competitive advantage in the co-op?", the aim of the research was to analyze the organizational resources that lead to sustainable competitive advantage.

Literature Review

Resources Based View

The organizational recognition is considered one of the key factors to the competitive advantage of companies in various segments, and this advantage comes primarily from organizational resources and their skills and secondarily from the industry (sector) in which these same organizations are positioned (WERNERFELT, 1984; PETERAF, 1993).

Also, this advantage source became a perspective that has attracted research on the Resource Based View (RBV), in which the knowledge and understanding of how resources are being applied and combined in the organization strategies has been enhanced. This sustainable competitive advantage assists the administrative practice, being more efficient and effective. (OMAKI, 2005).

Wernerfelt (1984) and Barney (1991) began to advocate the theory of Resource Based View as strategic points of sustainable competitive advantage. The same authors add resources as rare elements of imitation, hard to replace and valuable within a particular organization. Thus Peteraf (1993) complements that the Resource Based View is a model of how organizations compete.

Since the mid-80s, two areas of studies in the field of strategy have been highlighted; on one side Porter's perspective (1980), which sees competitive advantage from the external environment. His assumption is based on competitive forces, introducing terms such as entry barriers, exit barriers and mobility barriers, among others that are simpler to be utilized in the organizational environment (BANDEIRA-DE-MELLO; CUNHA, 2001).

Another aspect of studies in strategy is the Resource Based View (RBV) proposed by Penrose (1959) who made his remarks on the importance of organizational resources and subsequently this view was complemented by Wernerfelt (1984) and Barney (1991) coining the term Resource Based View. This vision requires that organizations achieve a higher performance to develop rare, hard to imitate and still valuable skills and resources (WERNERFELT, 1984; BARNEY, 1991; PETERAF, 1993; TEECE, PISANO; SHUEN, 1997).

During the 90s, Prahalad and Hamel (1990) associated organizations in an illustrative way to the comparison of a tree (its roots promoting nutrition, support and stability), stating that organizations whose better developed core competencies (roots) will have competitive advantage over their competitors, thus emerging the concept of Core Competence. This concept of Prahalad and Hamel came to collaborate and be incorporated into the perspective of the Resource Based View.

In this perspective it is believed that all organizational capabilities lead to the path of profitability, and this competitiveness depends on both the organization's pace

and the intellectual capital found in it. (PEHRSSON, 2000). This corroborates with Barney (2007) when mentioning that the organization's capabilities, being a subset of its resources, being both tangible and intangible helped it to complete and control other resources, which are directly connected to a cycle.

Penrose (1959) defines the firm (the term used by the author for the organization) as a broad set of features that are interconnected to an administrative structure, in which these features can be combined in various ways, forming different productive activities, called services. For Wernerfelt (1984), high earnings are associated with the ownership and use of scarce resources, which can lead to the creation of competitive barriers. Barney (2002) defines resources as assets, skills, competencies, organizational processes, firm attributes, information, knowledge, and also outputs that are controlled by the organization and enable the design and implementation of a strategy.

Barney and Hesterly (2007) determine that resources are all assets that organizations can control and that enable them to idealize and create effective strategies, classifying them in financial, physical, individual and organizational resources, as seen in Table 1.

Table 1 - Types of organizational resources

Resource Types	Characteristics
Financial	All the money coming from any source that organizations use to create and outline their strategies. Obtained through entrepreneurs, shareholders, creditors and banks.
Physical	Physical technology used by organizations which includes machinery, equipment, among others.
Individual	All training, experience, vision and individual skills to lead organizational processes concerning employees and managers at all levels.
Organizational	While individual features are characteristic of each individual, organizational resources are characterized by the mutual influence of the group, including the formal and informal systems of planning, control and coordination, beyond culture and reputation of the organization.

Source: Barney and Hesterly (2007).

Some procedures found in the literature help in the isolation of strategic resources; they allow the development of mechanisms that make resources rare and difficult to imitate, as seen in Table 2.

Table 2 - Resource isolation mechanisms

Isolation mechanisms	Main references
- Unique features, rare and imperfectly stationary. - Organizational culture, tacit knowledge. - Resources not available in the market - History and dependence path - Asymmetric information	Barney (2001)
- Imperfect market factors	Barney (2001), Rumelt, Schendel and Teece (1991)
- Unique combination experiences - Fundamental skills difficult to reproduce	Hamel and Prahalad (1995)
- Exit barriers	Porter (1991)
- Processes difficult to imitate	Schoemaker (1993)
- Co-specialized Assets	Teece (1984)

Source: Gohr et al (2011).

Barney and Hesterly (2007) present a theoretical model that makes it possible to identify the resources with unique characteristics in the creation of competitive advantage, because not all features are factors that influence this advantage. The VRIO model (Value, Rarity, Imitability and Organization) inquires whether the resources are valuable, rare, difficult to imitate and operated by the organization.

VRIO Model

The search for sustainable competitive advantage is constant within an organization. According to the Resource Based View and the VRIO model assessment, resources for obtaining this advantage can be found within the organization. Barney and Hesterly (2007) indicate that there are several ways to utilizing RBV. Its fundamental use is to support managers in identifying which resources and skills may or may not be a source of sustainable competitive advantage. This can be noted through the VRIO model shown in Table 3.

Table 3 - VRIO Model: value, rarity, imitability and organization of resources.

VRIO	Key issues
Value	Does the resource allow the company to explore an environmental opportunity and / or neutralize a threat?
Rarity	Is this resource currently controlled by a small number of competitors?
Imitability	Do companies without the resource face a cost disadvantage to get it or return it?
Organization	Are other policies and procedures of the company organized to support the exploitation of its resources which are valuable, scarce and costly to imitate?

Source: Based on Barney and Hesterly (2007).

The points including the VRIO model and its likely return can be seen in Figure 1, which shows the use of resources and skills of the organization in the VRIO matrix.

Valuable?	Rare?	Difficult to Imitate?	Used by the Company?	Competitive Implication
No	No	No	No	Competitive Disadvantage
Yes	No	No	Yes	Competitive Parity
Yes	Yes	No	Yes	Temporary Advantage
Yes	Yes	Yes	Yes	Sustainable Advantage

Figure 1 - VRIO Matrix

Source: Adapted Barney and Hesterly (2007).

The lack of resources in any of the characteristics of the model may express a disadvantage for the organization before its competitors. However, when it has a well-used, valuable resource that is common and easy to imitate, it will only have competitive parity in the market. But if the organization has a valuable, rare and well used resource available, easy to imitate, its competitive advantage will be temporary; if the organization aims to achieve a sustainable competitive advantage, it needs to have a valuable, rare, hard to imitate and properly used resource.

Correlated Studies

In this section we present correlated studies supporting the RBV thematic approach, contributing to the justification and elaboration of this research. Table 4 highlights some basic studies for the implementation of this research, such as Pavão, Sehnem and Hoffmann (2011) which allowed the elaboration of instruments to evaluate the perception of the resource that can achieve sustainable competitive advantage. Also, there are recent studies by Vieira et al (2016) and Dalfovo et al (2016) similarly using the same instrument and a deductive line of thought. This study follows the same line and extends the analysis to a descriptive analysis and statistical increase by exploratory factorial analysis.

Table 4 - RBV correlated studies

Authors	Objectives	Topics	Types of Research	Main Results
BARNEY (2001)	Discussion of some implications of the Resource Based View positioning in relation to theories based on the SCP of the determinants of company performance industry, neoclassical microeconomics and evolutionary economics.	RBV, SCP	Bibliometrics	So what stands out in this "resource-based" theory is not the differences of application, but the assumptions they share. These include the assumption that resources and capabilities can be distributed unevenly among the competitors and that these differences may be lasting, and also that they may help explain why some firms consistently beat other companies.
ACEDO et al (2006)	Empirically analyzes the assumptions underlying the theory of an inductive perspective.	The Resource-Based View, the view based on knowledge, and the relational view	Qualitative	The study identifies the key trends developed in theory. Second, the analysis of a large body of scientific work that can be considered as an integral part of the theory provides insight into the evolution of theory and dissemination, as well as many other issues (topics covered in the works, connections between them, prolific research center, and so on), which are not speci-

				cally discussed herein.
CRUBELLATE; L PASCUCCI; GRAVE (2008)	Discuss resource notions of the firm and legitimate explanation for the strategic efficiency of organizations	Resource Based View and legitimacy	Qualitative	From the concepts developed within the theoretical target of RBV, strategic efficiency is the product of rational dynamics, albeit limited, of the organization.
WALTER; SILVA, (2008)	Analyze how the Resource Based View (RBV) is being studied in the strategy area in the Annual Meeting of the National Association of Graduate Studies and Research in Administration (EnANPAD).	Resource Based View and Strategy Area	Bibliometric.	Made it possible to achieve the proposed objective of analyzing how the RBV approach is being studied in the ENANPAD strategy area.
PAVÃO; SEHNEM; HOFFMANN, (2011)	identified the relationship between the valuable, inimitable, rare and organizable resources, and sustainable competitive advantage (SCA) in two organizations.	VRIO and SCA.	Qualitative	The fact that one of the companies presents its competitive advantage based on only one resource (network) must be noted. Perhaps this is a sector with a high degree of product imitation, whereas the final product can be acquired by competitors and, from them, can generate the product itself, including some degree of improvement.
VIEIRA et al (2016).	Resources from unions that lead to sustainable competitive advantage.	Organizational resources X Unions	Descriptive and quantitative research	The vision of co-operatives that human capital will have a greater chance to be the competitive edge in the market was confirmed
ERARDT (2013)	Franchising resources leading to sustainable competitive advantage	Organizational resources X Franchising	Descriptive and quantitative research	Organizational capital resource such as the product brand as a facilitator to acquire sustainable competitive advantage
Dalfovo et al (2016)	Human capital as a resource for sustainable competitive advantage in the civil construction sector organizations in Santa Catarina.	Human Capital X Civil Construction in Santa Catarina	Research with mixed method.	Human resource is believed to be essential, given the fact that correlations of secondary data showed positive significance among graduates, number of employees in relation to the revenue of companies. However, when considering the human resource compared to the physical and organizational resources in the perception of respondents, one sees this resource as the lowest one scored for achieving sustainable competitive advantage.

Source: From Research

Methodological Procedures

As for the research, it is characterized as descriptive focusing primarily on the objective in this study. According to Gil (2006), descriptive research has an initial target the description of certain population characteristics or the study of affinities between variables. As for the method adopted for this research, it is part of the quantitative approach that seeks to examine the relationship between variables, highlighting the population studied through the sample. To Richardson (1999) quantitative approach is characterized by the use of quantification in the information collection methods, as well as in the treatment given to it by means of statistical techniques, from the simplest to the most complex.

The unit of analysis of this study was a co-op in Santa Catarina, which has been operating since 1951 and with over 300,000 members and 79 branches. The search application practice was through a questionnaire answered by employees of the cooperative, with strategic positions, in order to identify their perception about the resources that are most relevant to the scope of Sustainable Competitive Advantage.

The population of this research included all 292 strategic and tactical level employees of a co-op in Santa Catarina. Therefore, the research sample was characterized as non-probabilistic by convenience. To Santos and Candeloro (2006), the non - probability sampling is constructed by the researcher according to the defined criteria, not using the case. In the convenience sampling the researcher counts on more accessible elements of the population. We used the method presented by Barbetta (2002) with a sampling error of approximately 6%.

Formula 1: $No = 1 / e^2 - 1 = No / (6\%)^2 - No = 1 / (6/100)^2 - No = 1 / (0.006)^2 - No = 1 / (0.0036) = 278.$

Formula 2: $A = N.No / N + No = 292 \times 278 / 292 + 278 = 81,176 / 570 = 143.$

According to the sampling error calculation, there was a total of 143 employees to be researched, but after the final collection there were 152 valid questionnaires. In the data collection stage, observation demonstrates its key role, because in it essential elements are established to conduct a research by enabling both the formulation of the problem question and the effective research process. (GIL, 2006).

In the present study, based on the research method (questionnaire) by Pavão, Sehnem and Hoffmann (2011), the Survey method was used with an adapted questionnaire with closed questions, in order to identify which resources lead the co-op to get sustainable competitive advantage. The questionnaire model has been replicated in the work of Erardt (2013), Dalfovo et al (2016) and Vieira et al (2016) respecting their necessary adjustments. The application of the instrument was made by electronic media, telephone and survey (personal approach).

The main analysis of data was obtained by inference of descriptive statistics. Creswell (2010) states that the descriptive analysis of the data are the variables of the study which include the definition of the results by means of averages, standard deviations and ranging of scores. We opted for the use of averaging as Barbetta (2002) states

that in order to study the center and dispersion of a set of values the average is often used.

We also applied the Pearson correlation used to know the relationship of interdependence between two quantitative variables. The significance was only understood if the values found are below -0.5 to -1 or above +0.5 to +1. The figures indicate a negative and positive significance, in that order, oppositely proportional or proportional respectively.

In order to identify the resources that are weighted with a sustainable competitive advantage generator for the co-op, analyses were made of primary data, creating graphs and Graphs using Microsoft Office Excel Software. To develop further analysis after the tabulation in Excel, they were imported into SPSS statistical software, thus originating: Cronbach's Alpha, Pearson Correlation, and Exploratory Factorial Analysis. Cronbach's Alpha is an indicator of the accuracy and quality of data; when the Alpha is above 0.5 the data are accepted as reliable. Data were distinguished by Physical Capital Resources (F1-F8), Human Capital (H1-H12) and Organizational Capital (O1-O10) dimension. The data demonstrate high reliability, since the Alpha values were greater than 0.8.

Hair Jr; et al. (2009) presents as exploratory factor analysis the identification of the groups among the responses from questions asked. It was necessary to follow some procedures initially, such as the test of commonalities to see if any question did not have significant value to be maintained in the group. Another indicator to be considered in the factor analysis is the Measure of Sampling Adequacy (MSA), an indicator that analyzes the adequacy of the collected sample; this indicator should be higher than 0.6 according to Hair Jr; et al. (2009) to be significant.

The analysis and interpretation are presented in tables or Graphs, for a better view and understanding of the information acquired, then elaborating the final report.

Data analysis and data interpretation

This chapter seeks to answer the problem question and the aim of this study.

Characteristics of The Co-op Regarding the Impact on the Market

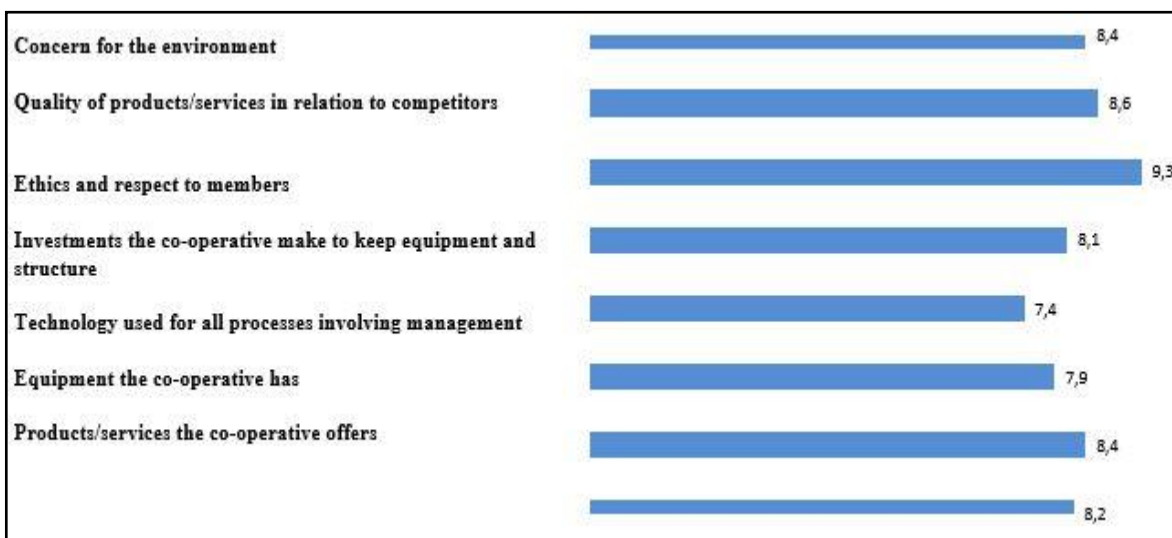
Co-ops cover over 100 countries with 1 billion members. According to the OCB (2014) and Vieira et al (2016), in 2012 the 300 largest co-operatives in the world reached US \$ 1.6 trillion. The body representing the co-ops worldwide is the International Co-operative Alliance (ICA). In Brazil, 13 areas of the economy are part of the co-operativism and are represented in the social-economic scenario of the country, totaling 6,835 co-ops. (OCB 2015). According to the OCB (2015), more than 11 million Brazilians are associated with a co-op branch, being more than 9 million in sectors with larger number of co-ops, as shown in the previous table. The co-ops in Brazil employ today more than 330,000 people in all branches. The agricultural sector also stands out in this index with 161,701 direct jobs (OCB, 2015).

The researched co-op branch is among the top 3 in number of co-op and first in number of members. (CBO, 2015). Following the segment numbers worldwide, national, state and co-op researched. Worldwide the segment of co-op researched account

today with about 208 million co-op members in 57,000 co-operatives, which are spread across 103 countries (BRAZIL co-op, 2015). According to the CBO (2015) in Brazil, cooperativism numbers this segment is also significant. Today, this segment includes in about 1042 co-ops, more than 5.4 million members and is present in about 95% of the municipalities.

In Santa Catarina co-op, in this segment, lies in third place in the ranking of higher values, with 67 units that gather 989,763 members. (Winter 2014). As Portal co-op (2014) researched the co-operative is now in second place as the largest segment of the co-op at the national level. It has over 320,000 members, 79 branches and directly employ 1,129 people.

Perception of features regarding sustainable competitive advantage



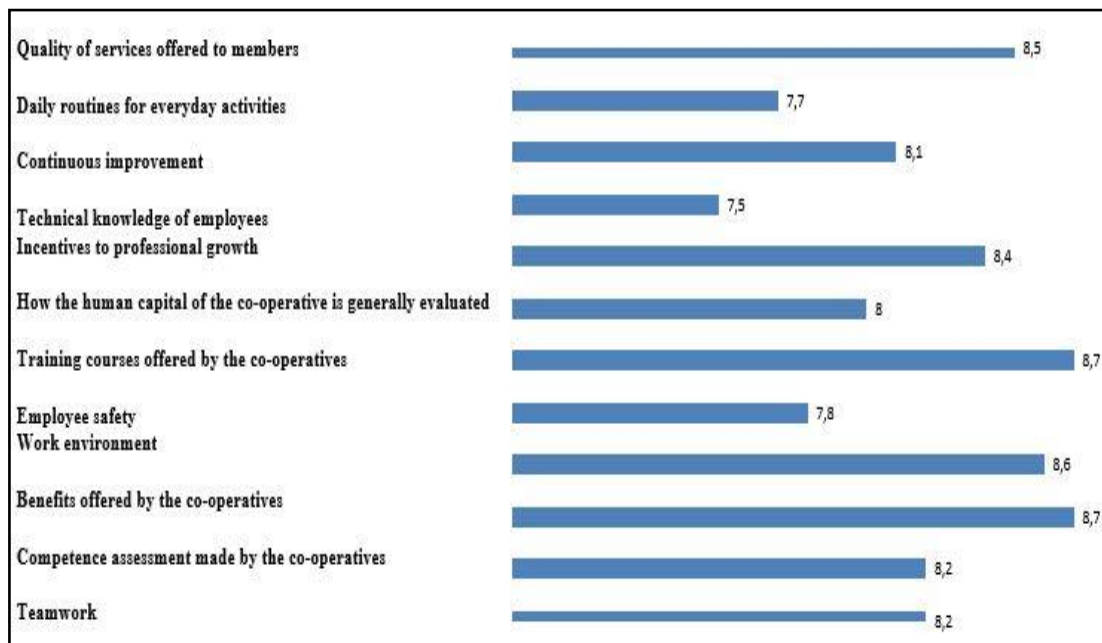
Graph 1 - Average of each item of Physical Capital Resource.

Source: Compiled from the research.

As for the physical aspects of the co-op presented in Figure 1, the item "Ethics and respect to members" was the most important for employees. With 9.3 average, it is believed that the result is related to the code of conduct and ethics that the co-operative has, directing customer service to the various clients of the co-op. Although this statement is among the physical capital resources, it is believed that it is more adequate in human capital or organizational resource. The "Quality of products and services offered in relation to competitors" follows on with an average of 8.6, it is assumed that this is because the co-operative aims to relate to their members in a simple way, thus bringing a sense of belonging. The co-operative has service systems and systems to leaders besides other channels to operate products and services, but from the point of view of respondents "the technologies adopted for all processes involving management" was the statement with the lowest average in the survey, with 7.4. With respect to technologies involving management processes there are still improvements to be made.

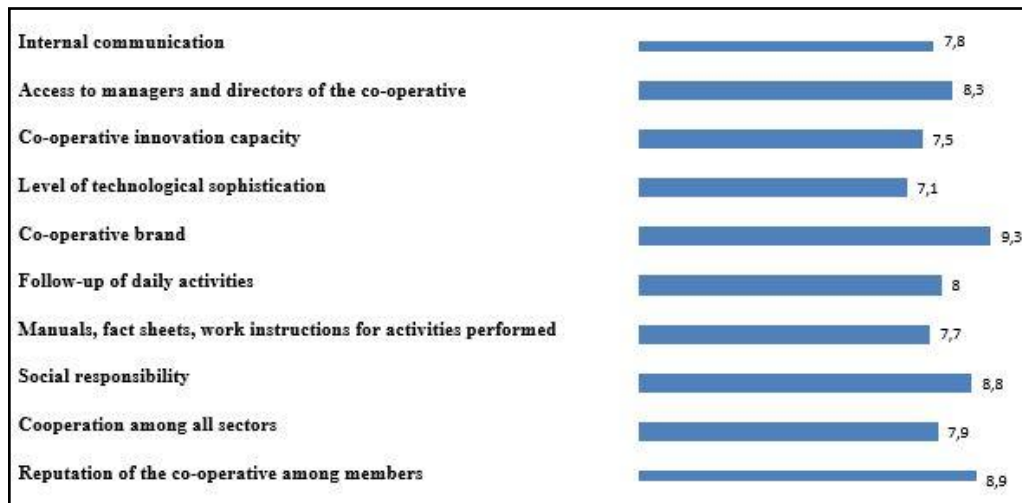
When stratifying the Human Capital Resources shown in Graph 2, it appears that the strategic level of the co-op considers, with an 8.7 average "the benefits offered by the co-op"; it is thought that the result was due to the relevance of benefits such as education aid (undergraduate and graduate studies 50%), food aid / meal tickets, PSP among others - another remarking point for a sustainable competitive advantage with the same average is "Training offered by the co-op", and it is believed that this happened because of the variety of behavioral and technical training courses the co-op offers via its SOL platform - online and classroom ones, besides certifications.

The item with the lowest average, 7.5, was "the technical knowledge of the employees," it is clear that while the co-op offers a wide range of training courses as evidenced in Table 2, employees in strategic tactical level do not realize the effectiveness and efficiency of the training offered. This may occur due to lack of monitoring on the employee after the training course and the effective collection of actions that employees develops with their daily functions. Perhaps the co-op should rethink their training strategies to better monitoring of the results of the training courses offered.



Graph 2 - Average of each item of Human Capital Resource

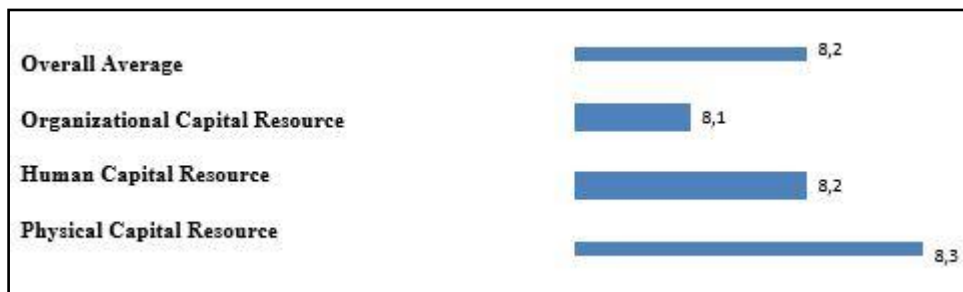
Source: Compiled from the research.



Graph 3 - Average of each item of Organizational Capital Resource

Source: Compiled from the research.

It can be seen that the most important attribute of organizational resources is "the co-op brand" averaging 9.3. It is believed that this average is related to the recognition of members, which leads to over 320,00 members. With the lowest average, 7.1, in this resource we find "the level of technological sophistication that the co-op operates in relation to its competitors." This is believed to be related to the short period of permanence in the market over the competition and the need for improvement in technology. This may be an item that makes the co-op lose competitive advantage with others.

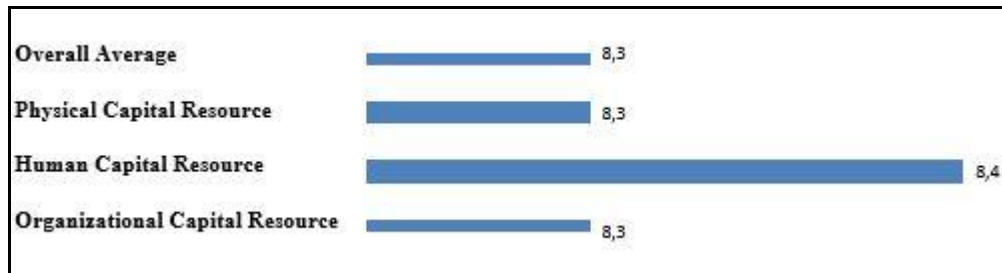


Graph 4 - Average of Resources in the Co-operative

Source: Compiled from the research.

In an overview of the resources, the physical capital resource had the highest average with 8.3, then the human capital resource averaging 8.2 and the organizational capital resource with 8.1. Through the averages found, the general average was 8.2. Graph 5 shows the average of the resources in co-ops in a national level, in order to compare with the averages analyzed by the co-op in this study.

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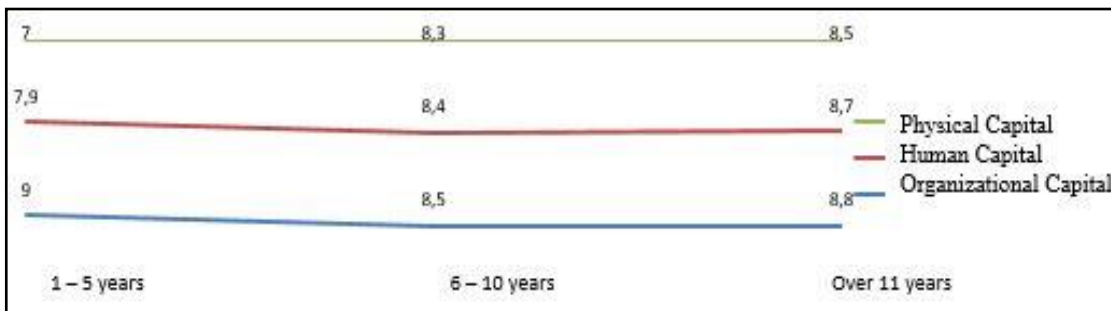


Graph 5 - Average of Resources in Co-ops in a National Level.

Source: Vieira et al (2016).

When making the comparison between the two Graphs, one can see that there was no difference in the physical capital resource; the human capital resource got a variation of 2.4%, the organizational capital resource 2.5% and overall average 1.2%.

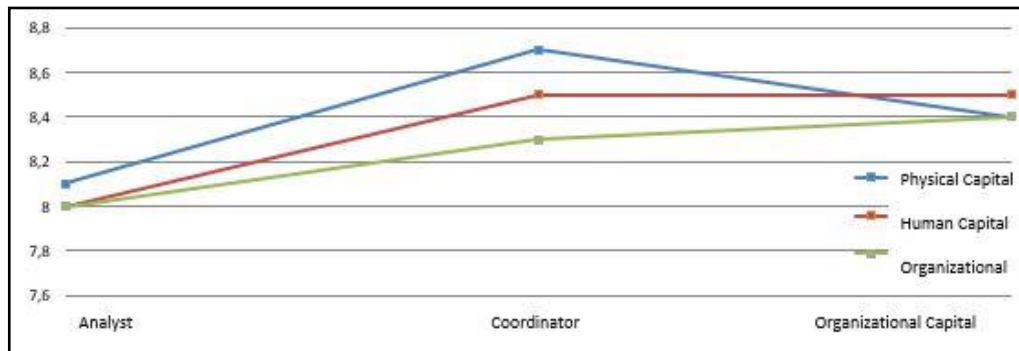
Correlation of internal resources that lead to competitive advantage of the CO-OP



Graph 6 - Comparison of Resources X Working Time

Source: Compiled from the research.

In Graph 6, it can be seen that even in different working times in the cooperative with 1-5 years, 6-10 years and over 11 years, human and organizational capital resources are increasing, while the physical capital resource oscillates. It is also apparent that over the years, in this case over 11 years of experience in the co-op, the organizational capital resource - despite having the lowest score - had the greatest growth variation, about 21% while the human capital resource had 10% and the physical capital resource decreased about 2%.



Graph 7 - Overall Average by Resource X Function

Source: Compiled from the research.

From Graph 7, we can see that the physical capital resource stands out in the view of analysts and engineers, while for business operators and senior cashiers the most important resource is the human capital. The organizational capital resource for analysts, business operators and senior cashiers is respectively similar to the human capital resource and physical capital resource; as for engineers it is the resource with the least influence.

Through Pearson correlation, which evaluates the relationship between two quantitative variables, for the Physical Capital Resource there was a greater correlation between the F3 questions (equipment that the co-op owns) and F5 (investments that the co-op makes to keep their equipment and all their structure), which shows the concern of managers regarding the search for better working conditions and comfort to its members, as shown in the correlation 0.812. It can also be noted that there is a strong correlation (0.779) between the F4 affirmative (the technologies adopted for all processes involving management) and F5 (investments that the co-op makes to keep their equipment and structure), thus presenting the concern of managers in the category of technology.

In the Human Capital resource, there is a strong link between the question H1 "Teamwork" and item H2 "The assessments of competences made by the co-op", highlighting the importance of human capital, obtaining the highest correlation of all questions and resources (0.832). But it is also worth noting the correlation between items H3 "The benefits offered by the co-operative", and H4 "Work Environment" (0.798) and H7 "Investments that the co-op makes to keep their equipment and structure" with H9 "Investments the co-op makes to keep their equipment and structure" (0.798). According to Oliveira, Lages and Morais (2010), based on the continuous creation of value, cooperativism establishes a balance between social and economic agents in the environment, allowing them to grow together.

In the Organizational Capital resource the items O4 "manuals, factsheets, work instructions for activities" and O5 "follow-up of daily activities" are the ones that correlate with (0.775). It is believed that this complies with the IWi's (Work Instructions) the co-op has; it is through them that each procedure is detailed step-by-step, working as the basis for the audits conducted. In this resource we can also see the correlation between items O2 "The cooperation between all sectors" with O5 "Follow-up of daily activities" (0.774) and O7 "The level of technological sophistication that the co-op operates in relation to its competitors" with O8 "the level of technological sophistication that the co-op operates in relation to its competitors" (0.773). According to Oliveira

(2001), operating the organizational resources accurately minimize problems and maximize opportunities.

The Alpha Cronbach coefficient for assessing the reliability of data obtained through the questionnaire - for the first dimension, physical capital resource the overall result of 0.895 was obtained, which shows an acceptable level of reliability within the 8 questions addressed for this resource. Regarding the question "Location of the co-op" the Alpha shows that if this question was not in this group, we would have even higher rates in answers. But the other questions show that if some of the questions were withdrawn, data reliability would be reduced; the question addressing the location of the co-op - which - obtained Alpha 0.918 can improve the index on that value. However, we decided not to leave out any research question as the total Alpha presented an acceptable value.

Through Exploratory Factorial Analysis, the Commonalities Test was the result to the Physical Capital Resource with the exception of the item "Location of the co-op (0.070)" - the others were higher than to 0.6, MSA; all items were above 0.7, the Total Variance Explained focused on one factor with explanation power of 60.42%, the Component Matrix also pointed out the item "Location of the Co-op (0.265)" which was lower than the others (0.7). At the end of the analysis we decided to withdraw this question and keep the others.

The Human Capital Resource showed rates above 0.5 for the Commonalities Test, MSA over 0.9, the Total Variance Explained showed only 1 factor with explanation power of 68.48% and the Component Matrix above 0.7 for all statements, therefore all questions were confirmed as appropriate for that resource block.

The Organizational Capital Resource had a score below 0.5 for the Commonalities Test result only for the question "co-op reputation level among members, (0.496)," all items were above 0.8 on the MSA indicator. The Total Variance Explained, as in other resources, showed one single factor with explanation power of 62.07% and in the Component Matrix all questions had a load over 0.7, so all questions could be considered suitable for this resource block.

Final Considerations

During the research we tried to answer the problem question: "Which organizational resources contribute to a sustainable competitive advantage in the co-op?" The survey showed that all resources are considered a source for competitive advantage, and this can be confirmed by Graph 4, which shows the overall average of 8.2 for the three resources analyzed, where the highlight was the Physical Capital resource averaging 8.3. Through the analysis of the questions average, it appears that the ones with the highest average were "Ethics and Respect for Members" with 9.3, related to Physical Capital, and the same average in the question "Co-op Brand", which is related to the Organizational Capital.

Another procedure confirming the competitive advantage for the co-operative resources is the correlations found by the questions. The indicators highlighted by Pearson Correlation show the Human Resource Capital with higher correlation index - 0.832 - between the questions "Teamwork" and "Competence Assessments made by the co-op." Cronbach's Alpha also pointed to a higher dimension to this feature, with

0.958. In this sense, it appears that the indices presented were high and compatible with the recommendations in literature, confirming that resources can be a source of competitive advantage for the co-op in this study.

According to OCB (2012) and Vieira et al (2016), co-operativism is present in over 100 countries with 1 billion members; in 2012, the 300 largest co-ops in the world reached US \$ 1.6 trillion. Nowadays, the segment researched has approximately 208 million co-operative members in 57,000 co-ops, spread over 103 countries. (BRAZIL co-operative, 2014). In Brazil, the numbers are also significant, with approximately 142 co-ops and more than 5.4 million members. (OCB 2015). In Santa Catarina, this segment is in 3rd place in the ranking of the most important values with 67 units with 989,763 members. (Winter, 2014). The co-op researched is 2nd in the sector at a national level, with more than 320,000 members, 79 branches, and directly employs 1,129 people.

Another point to be mentioned is that in the physical capital resource the question "Ethics and respect to members" was the most important averaging 9.3 in the stratification, representing assertively the relationship that the co-op has with its main stakeholder. The remaining questions obtained in this stratification averages ranging between 7.4 (minimum average) and 8.6 (maximum average). In the stratification of the human capital resource averages permeate 7.5 as minimum in the question "Technical knowledge of the employees" and maximum of 8.7 for "training and benefits offered by the co-op." "Work environment" was also appointed as a source of sustainable competitive advantage averaging 8.6. The stratification of organizational capital resource highlighted "the co-op brand" with an average of 9.3. The fact that the managers point out the co-op's image as a high level of importance to the members shows that we can consider this propellant resource for a sustainable competitive advantage. In this stratification we could also observe that other questions averaged between 7.1 and 8.9.

In the physical capital resource indices between 1,114 and 1,748 were obtained, the question "products / services the co-op offers" showed the lowest rate, and the highest one was shown in the question "Technologies adopted for all processes involving management ". In the human capital resource, the question "employee safety" showed higher standard deviation (1.700), and the lowest deviation was shown by the question "Quality of services provided to co-op members (1,067)." The organizational capital resource had the lowest and highest standard deviation among the three resources. The question "co-op reputation level among members" (0.724) was characterized with the highest degree of importance, thus giving the lowest standard deviation giving this resource a competitive advantage on the market. The highest standard deviation was appointed by the question "Level of sophistication the co-op operates in relation to its competitors", characterizing it as of little importance.

Resource averages were also evaluated by time of work in the co-op. It was observed that the average of human and organizational capital resource had been increasing over the years, while physical capital resource has oscillated. It can be seen that despite the fact that the organizational capital resource had the lowest average (8.5) among resources with over eleven years of operation, it showed the greatest variation of growth (21%). By analyzing the means of resources and the role of respondents managers (analyst, coordinator and business operator and senior cashier),

it can be seen that the physical capital resource stands out in the view of analysts and coordinators, while for business operators and senior cashiers the human capital is highlighted.

From the correlations, in the physical capital resource the items "equipment that the co-operative owns" stood out, with "investments that the co-op makes to keep their equipment and structure." The highest correlation (0.832) was found in the human capital resource, through the "Teamwork" items with "The assessments of competence made by the co-op." The organizational capital resource highlighted the item "manuals, factsheets, work instructions for activities" to "Monitoring daily activities."

Through factorial analysis, the grouping of items in a group for each resource was observed. It was also decided to leave out the question "Location of the co-op" from the physical capital resource factor, due to the commonality of the question having a value far below 0.5, as well as Cronbach's Alpha indicating that the removal of the question would improve in 0.915 and the component matrix showing a value less than desirable.

For future studies, we suggest the continued application of this work to other employees of the co-op studied, in order to obtain a comparison of how all employees see the internal resources - a potential source of competitive advantage. Thus, this work enables researchers of the field the relevance perception of internal resources in achieving sustainable competitive advantage.

References

- BANDEIRA-DE-MELLO, R.; CUNHA, C. A natureza e a dinâmica das capacidades organizacionais no contexto brasileiro: uma agenda para pesquisas sobre a vantagem competitiva das empresas brasileiras. In: ENCONTRO ANUAL DA ASSOCIAÇÃO NACIONAL DOS PROGRAMAS DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO (XXV ENANPAD). Anais... Campinas, 2001, 15 p.
- BARBETTA, P. A. Estatística aplicada às ciências sociais. 5. ed., Florianópolis: Ed. da UFSC, 2002.
- BARNEY, J. B. Firm resources and sustained competitive advantage. *Journal of Management*, v.17, n. 1, p. 99-120, 1991.
- BARNEY, J. B. Gaining and sustaining competitive advantage. 2nd. Ed. New Jersey: Prentice Hall. 2002.
- BARNEY, J. B.; HESTERLY, W. S. Administração estratégica e vantagem competitiva. São Paulo: Pearson Prentice Hall, 2007.
- BRASIL COOPERATIVO. Disponível em: <<http://dicc.brasilcooperativo.coop.br/>>, Acesso em: 20 de maio 2015.
- CRESWELL, J.W. Projeto de pesquisa: métodos qualitativo, quantitativo e misto. 3. ed. Porto Alegre, 2010.
- DALFOVO, M. S.; RUTZEN, F.; MACHADO, M. M.; GONÇALVES, A. Recursos para Vantagem Competitiva Sustentável no Segmento da Construção Civil. *Rev. FSA, Teresina*, v. 13, n. 5, p. 3-25. set.out. 2016.

ERARDT, L. Recursos de Franchising que levam a vantagem competitiva sustentável, 2013. Trabalho de Conclusão de Curso. (Graduação) - Curso de Administração, Instituto Blumenauense de Ensino Superior, Blumenau, 2013.

GIL, A. C. Métodos e técnicas de pesquisa social. 5. ed. São Paulo: Atlas, 2006.

HAIR, J. F.; et al. Análise multivariada de dados. 5ª ed. Porto Alegre: Artmed, 2005. HAIR, Jr.; et al. Análise multivariada de dados. 6ª ed. Porto Alegre: Bookman, 2009.

OCB. Organização das Cooperativas Brasileiras. Disponível em: <<http://www.ocb.org.br/>>. Acesso em: 20 set. 2014.

OCB. Organização das Cooperativas Brasileiras. Disponível em: <<http://www.ocb.org.br/>> Acesso em: 29 maio 2015.

OLIVEIRA, D. de P. R. de. Estratégia empresarial e vantagem competitiva: como estabelecer, programar e avaliar. 3. Ed. ver. São Paulo: Atlas, 2001.

OLIVEIRA, J.M. S.R.; LAGES, V.D.; Moraes, M.P. de. Cooperativismo e estratégias competitivas: um estudo de multicascos nas cooperativas de crédito mútuo e de crédito rural nas cidades de Minas Gerais. Disponível em: <<http://goo.gl/wGtMuA>>. Acesso em: 23 maio 2015.

OMAKI, E. T. Recursos intangíveis e desempenho em grandes empresas brasileiras: avaliações dos recursos intangíveis como estimadores de medidas de desempenho financeiras. In: ENCONTRO DA ASSOCIAÇÃO NACIONAL DE PÓS-GRADUAÇÃO E PESQUISA EM ADMINISTRAÇÃO, 2005, Brasília. Anais... ENANPAD, XXIX. Brasília: ANPAD, 2005.

PAVÃO, Y.; et al. Produção Científica Direcionada A Visão Baseada em Recursos (Resource BasedView - RBV): Uma Investigação Longitudinal, ANPAD, Recife, 2009.

PAVÃO, Y. M. P.; SEHNEM, S.; HOFFMANN, V. E. Análise dos recursos organizacionais que sustentam a vantagem competitiva. RAUSP, São Paulo, v. 46, n. 3, p. 229-246. jul./ago. 2011.

PEHRSSON, A. Strategy competence: a key profitability driver. Strategic Change. Chi Chester: v.9, n.2, p. 89, mar/abr. 2000.

PENROSE, E. The theory of the growth of the firm. New York: John Wiley, 1959.

PETERAF, M. A. The Cornerstones of competitive advantage: a resource-based view. Strategic Management Journal, v. 14, p. 179 – 191, 1993.

PORTER, M. E. Competitive strategy: techniques for analyzing industries and competitors. New York: Free Press, 1980.

PRAHALAD, C. K.; HAMEL, G. The core competence of the corporation. Disponível em: <https://faculty.fuqua.duke.edu/~charlesw/s591/willstuff/oldstuff/PhD_2007-2008/Papers/C08/Prahalad_Hamel_1990.pdf>. Acesso em: 14 set. 2014.

RICHARDSON, R. J. Pesquisa social: métodos e técnicas. 3 ed. São Paulo: Atlas, 1999.

SANTOS, V.; CANDELORO, R. Trabalhos acadêmicos: uma orientação para as pesquisas e normas técnicas. Porto Alegre: AGE, 2006.

TEECE, D. J.; PISANO, G.; SHUEN, A. Dynamic Capabilities ant strategic management. Strategic Management Journal, v. 18, n.7, p. 509 – 533, 1997.

TERRA, J. C.C. Gestão do conhecimento: o grande desafio empresarial: uma abordagem baseada no aprendizado e na criatividade. São Paulo: Negócio, 2001.

VIEIRA, F. L., DALFOVO, M. S.; MACHADO, M. M.; GONÇALVES, A. Recursos de cooperativas que levam à vantagem competitiva sustentável, GEPROS, Bauru, v. 11, n. 4. 2016 (No prelo).

ZILBER, M. A.; LAZARINI, L. C. Estratégias competitivas na área da saúde no Brasil: um estudo exploratório. Rev. Adm. Contemp. [online].2008, vol.12, n.1.

WERNERFELT, B. A resource-based view of the firm. Strategic Management Journal, v. 5, p. 171 – 180, 1984.

WINTER, A. Cooperativas de crédito representam 40% das agências bancárias em SC. Disponível em:
<<http://diariocatarinense.clicrbs.com.br/sc/economia/noticia/2014/08/cooperativas-de-credito-representam-40-das-agencias-bancarias-em-sc-4576767.html>>. Acesso em: 20 maio 2015.

Received: 09/30/2016

Approved: 01/24/2017