DYNAMIC CAPABILITIES IN AGRIBUSINESS ORGANIZATIONS: THE CASE OF DEALE DAIRY INDUSTRY

ABSTRACT

Increasingly knowledge becomes indispensable for achieving competitive advantage and thus a difference to companies. Thus, the study aimed to identify how dynamic capabilities can become a competitive advantage from the resources and expertise of a dairy industry. As for the methodological procedures, an exploratory and qualitative research was conducted, the case study type, and the data collected were analyzed using the technique of content analysis. The main themes of the study on knowledge combined with the resources and organization skills as a competitive advantage, the dynamic capabilities operating in the internal business processes, and how people can become important for a company that pursues strategies. As significant data, it highlights the features and functions of knowledge as a competitive advantage, definitions about competitiveness and strategy, as well as the vision based on dairy sector resources.

Keywords: Dynamic Capabilities; Resources; Competitive Advantage.

CAPACIDADES DINÁMICAS EM ORGANIZAÇÕES DO AGRONEGÓCIO: O CASO DA INDÚSTRIA DE LEITERRIA DEALE

RESUMO

Cada vez mais o conhecimento se torna indispensável para o alcance da vantagem competitiva e desse modo, um diferencial perante as empresas. Desta forma, o estudo teve por finalidade identificar como as capacidades dinâmicas podem se tornar vantagem competitiva a partir dos recursos e competências de uma indústria de lácteos. Quanto aos procedimentos metodológicos, foi realizada uma pesquisa exploratória e qualitativa, do tipo estudo de caso, e os dados coletados foram analisados utilizando-se a técnica de análise de conteúdo. As principais temáticas do estudo foram sobre o conhecimento aliado com os recursos e competências da organização como vantagem competitiva, as capacidades dinâmicas atuando nos processos internos da empresa, além de como as pessoas podem se tornar importantes para uma empresa que persegue estratégias. Como dados significativos, destacam-se as características e atribuições do conhecimento como vantagem competitiva, as definições a cerca de competitividade e estratégia, tanto quanto da visão baseada em recursos do setor de lácteos.

Palavras chave: Capacidades Dinâmicas; Recursos; Vantagem Competitiva.
1. INTRODUCTION

In the business environment, competitiveness has been steadily increasing and becoming a decisive factor for the survival of organizations. Competitiveness is the ability of a company to formulate and implement competitive strategies, which allows it to permanently expand or conserve a sustainable position in the market (FERRAZ; KUPFER; HAGUENAUER, 1997).

In an increasingly globalized world, with constant changes and transformations, it is noted that the business environment is becoming more and more demanding, and this intense competition among markets requires companies to be able to effectively develop and manage their resources whether financial, structural or personnel.

Brazil has traditionally been a major milk producer. The activity that began with extractive characteristics already has a prominent position in the national economic scenario, being currently one of the main agribusinesses in Brazil (SIQUEIRA et al., 2010). According to IBGE (2015), in the fourth quarter of 2014, 6,528 billion liters of milk were acquired by the milk processing industries, indicating a decrease of 0.2% over the fourth quarter of 2013 and an increase of 4.8% over the third quarter of 2014.

In the external scenario, Brazilian milk sales in natura registered 16,520 kilos, an increase in quantity in the 4th quarter of 2014.

The study is justified by the fact that a differential is needed for companies to remain competitive in the market, assuming that if there are well-prepared employees, the results will be better. Collis (1994) defines dynamic capacity as the ability of the company to innovate faster, or better, than the competition.

The company to be researched is Laticínio Deale, which operates a factory plant located in Almirante Tamandaré do Sul, a small town in the South of Brazil, and has two directors, one manager and 51 employees. For 14 years in the market, producing cheese, ricotta, cream, curd, butter and dairy drinks, its products are marketed in the main supermarkets of Rio Grande do Sul, São Paulo and Rio de Janeiro.

Understanding the dynamics of competition in a sector increasingly susceptible to transformations and threats of all kinds, the aim of the study is to identify how dynamic capacities become competitive advantage from the resources and competencies of a dairy industry. In this way, it becomes relevant to understand how the knowledge allied to the resources and competences of the organization can become competitive advantage in the same segment, which defines differences for the companies in a scenario of extreme competition.

2. LITERATURE REVIEW

According to Coutinho and Ferraz (2002) the competitiveness of a company lies in its ability to formulate and implement competitive strategies that allow it to maintain a sustainable position in the market in a lasting way. For these
authors, in order to compete in the market integration environment, companies need to invest in their efficiency.

In terms of competitiveness, Coutinho and Ferraz (2002) propose a model of competitiveness analysis based on internal factors of the company, structural factors and systemic factors. For the authors, the structural or sectoral factors are those in which the company maintains a certain influence and that characterize the competitive environment in which it is, that is, the characteristics of the consumer markets, the configuration of the industry and the competition.

Porter (1986) reiterates that the dynamics of competition in an industry is determined by five forces: the entry of new competitors, the threat of substitutes, the bargaining power of customers, the bargaining power of vendors and rivalry among current competitors. An organization's ability to compete depends on its ability of changing and developing new strategic directions, its thinking process, to consider ideas and solutions that are not yet known, plays an important role in terms of acquiring competitive advantage (GONÇALVES; PIRES; SANTOS, 1999).

For Polanyi (1983), knowledge can be either embedded in people (tacit knowledge) or embedded in products, services and tools, processes, or recorded in documents (explicit knowledge). The interaction between explicit and tacit knowledge is the main dynamic of knowledge creation in the business organization (NONAKA; TAKEUCHI, 1997).


RBV considers that the source of the competitive advantage lies primarily in the resources and competences developed and controlled by the companies, and only secondarily in the structure of the industries in which they are positioned (ARAGÃO; FORTE; OLIVEIRA, 2010). Also, RBV motivated the development of a model to analyze the strengths and weaknesses of companies, focusing on the barrier of acquiring the resources available to the company. The model depends on two fundamental assumptions: resource heterogeneity and resource immobility (BARNEY; HESTERLY, 2011).

Barney (1991) defends that not all the resources of a firm have the potential of a sustainable competitive advantage. In order to reach this level, it is necessary to present four attributes: it must be valuable, in order to exploit the opportunities and neutralize the threats; should be rare among current competition; must be imperfectly imitable and there can be no strategically equivalent substitutes for these resources. Wang and Ahmed (2007) mention the existence of three component elements of dynamic capacities, defined as absorptive, adaptive and innovation capacity (Table 1).
Table 1 - Adapted model of the components of the dynamic capacities

<table>
<thead>
<tr>
<th>Adaptive capacity</th>
<th>It is the company's ability to identify and capitalize the emerging market opportunities. The ability to adapt reinforces the company's ability to flexibly adapt resources and align its resources and capabilities with environmental changes at the right time.</th>
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<tr>
<td>Absorptive capacity</td>
<td>It is the company's ability to recognize the value of new external information, to assimilate them, and to apply it for commercial purposes, since the ability to evaluate and utilize external knowledge largely depends on the previous level of knowledge.</td>
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<tr>
<td>Innovative capacity</td>
<td>It is the company's ability to develop new products and markets by guiding the strategic alignment of innovation behaviors and processes. It can become a differentiating competence of the company, through the development of the collaborative capacity, the learning and the innovation generated in the interactions with stakeholders.</td>
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Nelson and Winter (1982) focus on the analysis of dynamic capabilities in the internal aspects of the company. For them, the existence of dynamic capabilities is related to strategic and organizational processes. In addition, authors such as Wang and Ahmed (2007) relate the existence of dynamic capacities to the dynamism of the environment, that is, to environments of rapid and constant transformation.

According to Araújo, Guedes and Ornellas (2012), Dynamic Capability Theory refers to the connection of the lags of the studied perspectives by adopting a process approach: to act as a form of access between the firm’s resources and the changing business environment, the dynamic resources help the firm to adjust its set of resources and thus maintain the firm's competitive advantage, which, on the other hand, can be quickly eliminated. Table 2 summarizes the authors' views that define dynamic capacities as a set of skills and abilities.

Table 2 - View of dynamic capabilities as a set of organizational skills, behaviors, and capabilities

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definition of Dynamic Capabilities</th>
<th>Components of Dynamic Capabilities</th>
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<tr>
<td>Collis (1994)</td>
<td>Ability to innovate faster or better than the competition.</td>
<td>• Operational capabilities&lt;br&gt;• Ability to develop new strategies quickly or better than competition&lt;br&gt;• Ability to learn how to learn</td>
</tr>
<tr>
<td>Andreeva and Chaika (2006)</td>
<td>Dynamic capabilities are those that enable the organization to renew its key competencies as changes occur in the operating environment.</td>
<td>• Entrepreneurial Leadership Skills&lt;br&gt;• Capacity of organizational change (development of non-specific skills, people's loyalty to change, and organizational mechanisms to facilitate change processes)</td>
</tr>
<tr>
<td>Helfat <em>et al.</em>  (2007)</td>
<td>Ability of an organization to purposefully create, extend, or modify its resource base.</td>
<td>• Ability to change the resource base&lt;br&gt;• Ability to act on a recurring way to modify the resource base&lt;br&gt;• Ability to search for and select the changes to be made (deliberation)</td>
</tr>
</tbody>
</table>

Source: Camargo and Meirelles (2014).
2.1 The Dairy Industry

The growing consumption of food, in general, has been especially marked in emerging economies, where the growth of dairy consumption is only one of them (SALGADO, 2013). For the author, with the increase of the global population, the average consumption per capita is the main explanatory factor for the increase in the demanded quantities of dairy products. In the last 15 years, with the growth of demand in non-traditional regions both in consumption and in production, it is an interesting aspect that has been pointed out as one of the main causes of the transformations of the world dairy sector.

The growth in dairy demand above milk production capacity has led to significant changes in its structure in the global market, especially since the 2000s. In the last three decades, world milk production has increased by more than 50%, from 500 million tons in 1983 to 769 million tons in 2013 (FAO, 2016).

Some countries in the developing world have a long tradition of milk production, and milk or its products have an important role in the diet. Other countries have established significant dairy production only recently. Most of the former countries are located in the Mediterranean and Near East, the Indian subcontinent, the savannah regions of West Africa, the highlands of East Africa, and parts of South and Central America. Countries without a long tradition of dairy production are in Southeast Asia (including China) and tropical regions with high ambient temperatures and/or humidity. Dairy production has not been able to meet demand growth, which is influenced by the economic improvement of emerging countries. Thus, the decision to produce is not due to the forecast of demand anymore, and starts being due to real consumption (SALGADO, 2013).

In the state of Rio Grande do Sul, Brazil, especially in the northwest region of the state, one can observe ideal conditions for milk production. This aspect can be verified over the years not only with the growth of the sector, but also with the reach of higher levels of productivity that can reach, on average, 16.9 liters/cow/day (DIEL et al. 2014).

3. METHODOLOGICAL PROCEDURES

To reach the objective, a qualitative and exploratory research was carried out. As for the technical procedure, it is a case study. The agents that participated in the research were selected intentionally, being the Deale Dairy Industry Directors, named Respondent A and Respondent B, who became available to participate in the survey and respond to the questionnaire that was applied with the presence of the researcher.

The questionnaire integrated 34 open questions elaborated from the analysis categories based on the literature review: Strategy: an integrated and coordinated set of commitments and actions defined to explore core competencies and gain competitive advantage (HITT; IRELAND; HOSKISSION 2008). Resources: advantages, capabilities, organizational processes, attributes, information, among others, in addition to all the intrinsic knowledge accumulated by the organization (BARNEY; HESTERLY, 2011). As for the analysis of the data, the technique used was the content analysis of the interviews conducted. For Bardin (1997),
in content analysis, text is a means of expression of the subject, with which the analyst seeks to categorize the units of text (words or phrases) that repeat, inferring an expression that represents them.

4. EMPIRICAL ANALYSIS

4.1 Company Characterization

Deale Dairy Industry has emerged from a partnership between two proprietary partners. Located in the municipality of Almirante Tamandaré do Sul, Highway 286, in the North of Rio Grande do Sul, Brazil, it is dedicated to the specialized production and distribution of cheeses, operating for more than five years in the market and employing 51 employees. It commercializes its products in six Brazilian states, including Rio de Janeiro, São Paulo, Rio Grande do Sul, Paraná, Santa Catarina and Bahia. Its main clients are supermarkets such as Dia Brasil, Vianense, Guapo and Real do Eden.

Deale vision is "Positioning among the largest dairy companies, being recognized nationally and internationally for the guarantee of quality of its products and respect for the environment". And, according to the information provided by the interviewees, it has as a Mission "To bring health and quality to people in a sustainable way". Its product portfolio consists of nine types of cheeses, curd, dairy drink, butter, ricotta and cream.

Encouraged by the expansion opportunity offered by the dairy sector in Brazil, Deale expanded its business in 2014 through a project to build a milk processing plant in the municipality of Aratiba, Rio Grande do Sul. The initial processing capacity was 9.6 million liters of milk per year, and it can reach up to 72 million liters from the complete implementation of the project.

4.2 Variables related to Strategy

In the face of the constant changes that have been taking place in the organizational environment, competition and the search for recognition, organizations are increasingly worried about ensuring their place in the market and mainly differentiating among competitors in order to remain competitive.

In this context of analysis, strategies are emerging, increasingly used by companies operating in competitive markets. According to Hitt, Ireland and Hoskisson (2008), strategy is an integrated and coordinated set of commitments and actions set out in order to explore core competencies and gain competitive advantage. When it comes to strategy, one of the ways to communicate it to the members of a company occurs through the tool of strategic planning.

Regarding the formulation of strategic planning at Deale, it can be noted that it is prepared by the Directors (owners) and by the Company Manager. In a systemic analysis, it was also possible to observe that the other hierarchical levels of the company do not participate in its formulation, that is, it is developed by the top of the company.

And, from the interviews conducted, it can also be noted that the strategy adopted by Deale is differentiation. Through the focus on technical training of employees and market research, the company has strived to produce and offer its customers differentiated products, in
view of the high competition and variety of products available on the market to the consumer public.

With respect to the company's internal factors, identified as strengths and weaknesses, the study data revealed that strengths are those related to the resource base, both tangible and intangible, which contribute to the improvement of its market share and financial performance.

In this respect, the most important points were identified regarding product quality, excellent customer relations, proper distribution that is important to maintain customer loyalty, order delivery at the right time and in the right place, good relation with the community.

The weaknesses, on the other hand, are understood as any resources of the company that can cause loss of competitive advantage, position or financial status. In the studied company, there was little investment in advertising aimed at the target market, employee turnover, lack of formal strategic planning despite efforts in the direction of discussion of strategies, goals and targets to be achieved.

And, analyzing the resources in the competitive dimension that contribute to Deale having a differential against the competition, according to the interviewees: One difference is the quality of the service provided, that is, to manufacture products with the purpose of conquering the consumer.

Deale works in a way that pleases its customers with a differentiated quality, with the greatest care in handling their products, so that the final product is excellent.

The differential in relation to the competition is the quality of the product, delivery and direct contact with the customer, which results in loyalty for the products.

Analyzing the company, another strategic resource that contributes to Deale's competitiveness is the fact that it is organized at hierarchical levels with a distribution of functions. The coordination of the activities is alternated between the Director and the Manager, who organize to follow the processes during the weekdays and also during the weekends and holidays. This positioning offers constant attention to consumers and the demand standards of the target market.

4. 3 Resources Related Variables

RBV is referred to tangible and intangible resources. In this sense, as far as tangible resources are concerned, the industrialization plant supervised by the SIF (Federal Inspection Service), located in the northern region of Rio Grande do Sul, Brazil, is equipped with adequate technology to the manufacture of cheeses and derivatives. Access to the raw material is done through the rural producers, and there is investment in equipment and advanced technology to improve the company's products.

As for intangible resources, the human resources stand out. Deale is aware of the existence of training for employees, since according to Respondent B: “Employee training is required to aggregate knowledge, especially with regard to skills development. The trainings are offered every six months, focusing on specific aspects for each industry process”.

That the training stimulates and perfects the knowledge in a way that broadens the experiences, improves the abilities, besides amplifying and stimulating the better understanding on
the task developed. The development of competences makes the individual have a differential in their performance, as well as attitude, proactivity, the search for solving problems that, above all, add to the individual knowledge base.

According to Respondent A, Deale’s capabilities and capabilities that contribute to the enhancement of its competitive advantages: “The new cutting-edge technologies in the manufacturing process adopted by the industry, as well as in administrative practices, culminate in the expansion of production and product portfolio, with constant concern for product quality, customer service and satisfaction”.

In this vein, the need for innovation and change within Deale is perceived through the daily monitoring of the market, the new trends and opportunities that it offers. These aspects are reflected in the continuous expansion of the portfolio of products in the face of market changes.

4.4 Capabilities Related Variables

Collis (1994) defines dynamic capacity as the ability of the company to innovate faster or better than the competition. According to Wang and Ahmed (2007), it is related to the ability of the employee to recognize new information, to assimilate it and to apply it, followed by the capacity to innovate.

Aspects related to the ability to efficiently apply knowledge aligned with dynamic organizational capacity, which Respondent A reported that: “Dynamic capabilities act in the company’s internal processes, especially in times of meetings with the work team, where each employee has the opportunity to put their points of view as well as assimilate and apply new knowledge in the operational practices of the industry. These initiatives contribute to the alignment of the determined objectives and the achievement of the established goals”.

Another important element that integrates dynamic capabilities is the ability to develop strategies quickly and better than the competitors. At this point, it was noted that Deale has a concern and orientation towards this aspect, which is revealed in the quality of the products it offers to its consumers.

In an environment of constant change, dynamic capabilities mean that the organization has to allocate new resources and seek a constant increase in its product portfolio in order to stay ahead of competitors. In this way, Deale’s approach to competitive advantage is once again supported by product quality, customer service, new product research and development, product portfolio, and the adoption and incorporation of technologies.

4.5 Variables related to Competitive Advantage

Advantage Competitiveness is the ability of the company to formulate and implement competitive strategies that allow it to permanently expand or conserve a sustainable market position (Ferraz; Kupfer; Haguenuer, 1997).

As competitiveness is increasingly intense, dairy companies tend to pursue market differentials. In this way, the data collected in the research revealed that Deale maintains its competitive advantages from the mobilization of its human resources, that is, people are the main part of the process. In this aspect, special emphasis can be given to the knowledge base...
acquired from shared experiences, meetings, training, accumulation of experiences, courses, and the capacity for discernment in relation to different everyday situations.

Given the information, it can be understood that Deale can sustain and achieve competitive advantages in an environment of constant changes, anticipating scenarios through the constant monitoring of its internal and external environment. According to Respondent A, the company's competitive advantages over its rivals can be explained by: “Investment in technology, marketing and expansion of new products, always emphasizing the quality of the final product. Thus, knowledge combined with the resources and competencies of the organization can become competitive advantage in the same segment, becoming a differential, through the knowledge of the management and well-trained employees”.

Another aspect observed in the study is related to the adaptive capacity, which is understood as the company's ability to identify and capitalize on emerging market opportunities. The ability to innovate is the ability of the company to develop new products and markets through the orientation of strategic alignment for innovation behaviors and processes (CAMARGO; MEIRELLES, 2014).

Given the elements of the dynamic capabilities that make Deale reach competitive advantages in the sector in which it operates, the systematization of the elements collected in the research that relate to the resources and competencies of the industry (Figure 1).

![Figure 1 - Resources, capabilities and competencies of Dynamic Capabilities](image)

Source: Elaborated by the authors (2017).

Such elements, in turn, require a proactive behavior of the employees, as well as the direction and monitoring of these aspects by the managers of the organization. In this way, the diverse situations within the organization cause employees to accumulate experiences, stimulating and improving knowledge.

5. FINAL CONSIDERATIONS

The knowledge has been placed as an indispensable resource to obtain competitive advantage and strategic differentiation, since companies need to dare and seek new markets, as well as face the challenges of the knowledge era. In order to transform knowledge in a competitive advantage, one must use the capacity for discernment in relation to different everyday situations that permeate organizational decisions, especially those related to priorities in a strategic dimension.

By strategic choices, managers need the ability to pool resources to efficiently build capabilities, and to better manage learning and feedback processes to constantly update capabilities and, in particular, to fine-tune the portfolio of resources.

Within the dynamic capacities, the ab-
sorptive capacity portrays a relevant capacity, emphasizing that employees are important actors in the elements that contribute to the company's differentials to the competition. Thus, the organization will take a proactive attitude, exploring the various opportunities in the environment and continuously providing the development of its human resources.

Thus, the study contributed to the company's recognition of its competitive advantage in relation to the other competitors in the sector, both in terms of knowledge, resources and competencies of the organization. Finally, as a suggestion of future studies, it is recommended an increase in the number of companies and agents surveyed, and data and analyzes are limited to only one specific company and thus the results cannot be generalized.

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