INTERNATIONALIZATION, ITS IMPACT AND IMPLICATIONS ON ORGANIZATIONAL STRUCTURE: The Case of Oxiteno.

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ABSTRACT

This work aims to analyze changes in organizational structure to support an internationalization process. The intensification in the internationalization of companies, as well as the complexity in the current competitive scenario, makes this subject a contemporary and strategic one. To support the study, the literature review focused on aspects of internationalization, its drivers and strategies, on the organizational structure with its classifications and basic elements, and on the alignment between strategy and structure. Oxiteno was the subject of the case study. It is a Brazilian chemical company that has undergone a process of internationalization over the last ten years. With strategies focused on localities and in their integration, Oxiteno chose internalization as a means to develop its organizational model. The transnational model chosen is still in a process of implementation due to its complexity. Both the impacts of Oxiteno's choice and organizational learning are present in this analysis. Future studies with organizations within the same industry from other nations, which have also gone through an internationalization process, are suggested in order to identify patterns, favorable and unfavorable aspects, especially regarding organizational structure implementation.

Keywords: *Internationalization, Organizational Structure, Strategy and Structure Alignment*

1. INTRODUCTION

Internationalization is not a recent phenomenon. Companies have been undergoing this process since the nineteenth century. The biggest change in the current scenario is its intensity and complexity. The increase in competitiveness demands from organizations the adoption of more differentiated approaches. Strategy definition and implementation in a global scenario face issues like cultural differences, activity coordination, proximity to customers and markets, and productivity gains, among others. Defining and adopting an organizational model is of fundamental importance because, on the one hand, this will direct the way people act and perform their jobs and, on the other hand, it may hinder business performance.

This context motivated this work, whose main objective was to analyze changes in the organizational structure as a support to the internationalization process. The main objective was broken down into four secondary ones: understanding the strategic motivators and the internationalization process of the company; analyzing the changes made in the organizational structure along the internationalization process; understanding and analyzing those changes as promoters or barriers to strategy implementation; and analyzing opportunities to improve organizational structure and their possible impact on the business.

To support the study, the literature overview emphasized the evolution of internationalization processes, their drivers and strategies; the basic elements and the classification of organizational structures; international companies' organizational structures; and the relationship between strategy and structure.

We chose to conduct a descriptive, explanatory case study. Oxiteno was chosen due to its strategic situation and the researcher's access to the organization to conduct the study.

This organization started an irreversible internationalization process due to limited growth possibilities in its domestic market. The company's strategies can be analyzed both in terms of localities and their integration. Along this process, the organization deliberately decided to improve its organizational model. Reflections upon implications, required changes and implementation of the defined model demonstrate the impact of organizational structure on strategy implementation and the internationalization process.

The observed phenomenon probably occurs in other organizations facing internationalization. Analyses of other foreign enterprises in the same industry that have followed the path of internationalization may help to identify favorable and unfavorable aspects and action patterns, especially in terms of the organizational structure as a fundamental aspect in the evolution of organizations.

Competitiveness and business growth are closely related to the internalization process. This challenge is what makes studying this subject so timely and important.

2. LITERATURE OVERVIEW

The literature review addresses the internationalization process, its strategies, the organizational structure, and the relationship between them.

2.1 A Historical Perspective on the Internationalization Process

Companies becoming internationalized is not a recent process. Nevertheless, during its evolution it has gone through some stages brought about by economic or political forces. Today, internationalization is considered as an advanced stage in a country's industrialization process; it refers to the fact that a company has manufacturing facilities outside its own home country (Fleury, Khauaya, Dreon, Minello et al., 2008). Hedlicka, Vasconcellos, Schmidt and Rodrigues (2008) broaden this definition to any activity performed by a company that expands its operations beyond the country of origin.

The history of the internationalization process may be broken down into phases. From its beginning until the Second World War, European companies first established in neighboring countries to meet regional needs; then came American companies seeking to replicate their concepts in foreign countries. In the following thirty years or so, American companies opened subsidiaries in other countries to avoid potential technological imitation. From this stage on, productive globalization was more focused on the multiplication of learning processes, risk sharing and more favorable negotiations. The emphasis is on global competitiveness and local response (Fleury & Fleury, 2008).

Throughout the evolution of the internationalization process, two approaches can be noticed: more control from the home country and greater decentralization. As the economic and political conditions were different along the way and at different stages, both approaches are present, apparently as a result of internationalization drivers and strategies.

What leads a company to initiate an internationalization process? Experts point to some economic and organizational drivers that support or direct this business decision. Some of them are: saturation or shrinking of the domestic market; internationalization of local competitors; development of emerging markets; comparative advantages found in other locations; governmental incentives; efficiency gains; easier commercialization processes; availability of scarce resources (natural or otherwise) in the home country; and local market attractiveness (Fleury & Fleury, 2008; Fleury, Khauaya, Dreon, Minello et al., 2008; Oliveira & Vasconcellos, 2008; Hedlicka, Vasconcellos, Schmidt & Rodrigues, 2008).

The decision to internationalize may take into consideration one of those drivers, or a combination of them, and may be influenced by the competitive scenario and the specific business situation.

2.2 Internationalization Strategies

It is noteworthy that internationalization strategies only recently have been the focus of studies from diverse theoretical streams. Vasconcelos (2007) developed a classification considering strategy theories:

- ***Intentional Dimension*** (strategy as a deliberate, intentional and rational action plan): the key concepts in those theories are planning, analysis and control. They use frameworks that simulate logic constructions for interpreting reality. Some of the key authors are Fayol (1916), Ansoff (1965), Porter (1980, 1985), and Ghemawat (2000);
- ***Innovation Dimension*** (strategy as an interactive search for innovation, creation and originality): the key concepts are vision, innovation, change, courage, and learning. It emphasizes acting and interactive learning over logic frameworks. Some important authors are Schumpeter (1950), March and Simom (1958), Tversky (1980), Hamel and Prahalad (1990);
- ***Institutional Dimension*** (strategy as a process of adaption to human, social and contextual factors): the key concepts are balance, culture and power. The strategy process occurs as reactive adaptation, in search of coherence among demands from individuals, the organization and the context. Some of the key authors are Weber (1904), Barnard (1938), Pfeffer and Salancick (1978), and Schein (1984).

Apparently, those dimensions are mutually exclusive. However, the decision to internationalize can be taken based on a deliberate action plan (intentional dimension) or on a search for innovation (innovation dimension). Also, the maintenance of this process may be done by adapting to human, social or contextual factors (institutional dimension).

Another approach in the study of strategy articulates the planning and learning schools, thus creating a complexity theory (Pina and Cunha & Cunha (2006)). It suggests that organizations are live organisms, whose behavior is a result of the structured interaction of multiple agents. They are sensitive and respond to the environment by evolving and regulating themselves.

Based on the intentional dimension, or the planning school, Rue and Holand (1989), as well as Porter (1999), argue that the basic unity of analysis for decisions on international strategy is the industry and its competitive advantages. Thus, multinational companies with operations and marketing initiatives outside their national bases can be divided into multi-domestic companies (present in more than one country, competing in each market with some autonomy, except for the availability of financial resources) and global enterprises (their competitive position in one country is significantly affected by their competitive position in another country).

A multi-domestic company may use the principle of portfolio planning to formulate its strategy. In this case, some issues are analyzed in a structured way: Which are the most profitable countries and how to manage the business there?; Where to go?; Which countries offer new opportunities?; Where are there political or economic risks?; How high is the required investment in a specific country and how does it impact the others?.

In global enterprises, portfolio-based management will minimize its ability to sustain a competitive advantage. In this case, less conventional strategies are required, such as investment projects with a zero or negative return, a wide variety of financial performance targets among subsidiaries, product lines with sophisticated design or very low prices for certain markets, an interdependent view on profitability, and the establishment of un-standardized production units, as suggested by Porter (1999). Interdependence demands from global competitors a focus on the ability to leverage market positions in a country in comparison to rivals from other markets or countries.

The migration from a multi-domestic to a global strategy may be done, as long as the whole is bigger than the sum of its parts. In a global strategy, the value chain (the sequence of all activities) should be the main focus. There must be freedom to distribute activities among the countries. The decision on where to locate an activity (configuration) depends on issues such as comparative advantages (lower-cost factors) or competitive advantages (increased productivity or capacity for innovation).

Bartlet and Ghoshal (2002a) defined a slightly more comprehensive typology to analyze companies that extend operations in more than one country; such typology reflects both the strategic focus and implementation. A multinational company has decentralized, self-sufficient operations to exploit local opportunities. A global company performs in a centralized fashion on a global scale and the international units implement the strategies defined by the headquarters. For an international enterprise, the source of its core competences is in the parent company; those competencies are locally adapted and implemented by the subsidiaries. A transnational company acts interdependently, taking contributions from different nations and integrating them into the global operation. For the authors, knowledge and how it is developed and maintained is what differentiates the models. Clearly, the authors theorize along the innovation dimension. The same emphasis on knowledge is found with Doz, Santos and Williamson (2001), who call meta-national enterprises what Bartlet and Ghoshal call transnational.

Another way to deal with international strategy is in terms of culture. In this case, discussions are based on the institutional dimension, or complexity theory. Perhaps the organization does not elaborate on this issue, as it does with the business strategy. Its positioning may be a consequence of its history, but it may positively or negatively affect business strategy implementation. Aidar, Brisola, Prestes Motta and Wood Jr (2004) posit three possible positioning: ethnocentric (the country of origin is assumed as better and local differences are ignored); polycentric (all differences are valued, in such a way that country of origin identity and values may even be lost); and geocentric (home country basic values and principles are kept, but local differences are accommodated, in search of cultural convergence).

Oliveira and Vasconcellos (2008) partially use Dunning's eclectic paradigm (1980) to justify the internationalization process. According to the authors, a company must have certain advantages over its competitors to justify direct investments overseas. These "ownership advantages" include brands, technological capabilities, and qualified labor; they help the business to profit from location advantages offered by the new countries.

A company has some entry options in a new location, depending on the intended level of commitment to the country. According to both Rue and Holland (1989) and Hedlicka, Vasconcellos, Schmidt and Rodrigues

(2008), there are four options. Firstly, a dump strategy, when a company sells, at a low price, its excess capacity in order to stabilize production and reduce inventory costs. Secondly, an exploration strategy, when a limited amount is invested in the form of agreements and licensing to acquire knowledge and a contact network, so that the enterprise may increase its commitment to that location in the future. A skin strategy, in which products are exported or licensed with low investments and big returns. And finally a penetration strategy, in which there is a long-term commitment to the new country market, be it in the form of joint ventures, acquisitions, or the establishment of sales offices or production plants in the new locations. Based on the Uppsala model, Borini, Fleury and Oliveira (2008) argue that the phases from exploration to penetration represent an evolutionary process, in which the company increases its commitment of resources and risk levels, according to the gains from experiential learning.

Some experts posit that devising a strategic formulation or positioning is always the easiest part; the real challenge for the organization is strategy implementation. In this sense, Hrebiniak (2006) discusses issues such as business culture, control mechanisms, and incentives. But, above all is the organizational structure as a conditioning factor, which may facilitate or inhibit strategic implementation. In situations of geographical dispersion, as is the case with internationalized companies, this issue deserves special attention.

2.3 Organizational Structure: definitions, concepts and implications.
What is organizational strategy? Depending on their approach, each scholar brings out different nuances. Henry Mintzberg (*apud* Rue and Holland (1989)) and Robbins (2002) stress process sharing and coordination. Nadler and Tushman (1997) utilize the example of the bureaucratic machine, with compartmentalized and controlled functions. Wagner III and Hollenbeck (2004) emphasize the interdependence network between people and tasks. Fritz (2006) sees the structure as an important organizational influence, and Oliveira (2006) analyzes organizational structure as a managerial instrument. As can be seen, some definitions are oriented toward a more mechanistic view, whereas others are more organic, even though the studies are recent.

Robbins (2002) defines six basic elements to be considered in a discussion of organizational structure: job specialization, departmentalization, chain of command, span of control, centralization/decentralization and formalization.

Job specialization reflects the degree to which the functions are divided into separated tasks. On the one hand, specialization may yield increased productivity, but, if taken to a very high limit, it may frustrate the performer and cause the opposite effect: human diseconomy. Departmentalization is the basis for task grouping and should take into consideration functions, products, geography, processes or customers. Any decision is a choice process, since each combination presents a series of advantages and disadvantages. One combination's advantage may be another's disadvantage, so that an alignment with business challenges should be sought. The chain of command represents a single line of authority from top to bottom. Authority is defined as the inherent right of a managerial position to give orders and expect responses. Span of control represents the number of employees that a manager is able to lead efficiently and effectively. Centralization is related to how concentrated the decision process is on a single point in the organizational chart. Conversely, in decentralization the decision-making process is extended to lower-levels employees. Centralization may promote faster decisions and actions, while decentralization may include more knowledge and personnel engagement in the processes. Finally, formalization is the degree to which tasks are standardized.

Defining organizational structure does not require that each one of those elements are used in the same way or with the same criteria, that is, one can find in a specific organizational structure functional departmentalization coexisting with product departmentalization. Or, in some cases, different degrees of formalization and span of control, as well as diverse decision-making processes may coexist. It is important to consider all the six elements during the organizational structure design phase, remembering that each choice also represents a loss. Thus, organizational culture, as well as business strategies and expectations, should be the key drivers to guide and support decisions regarding the organizational structure design.

The classification of organizational models varies according to the focus of each academic. Wagner III and Hollenbeck (2004) align the models to the development of business administration theory. A simple structure (low departmentalization, large span of control, centralized authority and low formalization) is associated to the pre-bureaucratic phase. Functional and divisional structures (guidelines, specialization, defined chain of command and departmentalization) and matrix structures (double line of command) are associated to the bureaucratic theory. Post-bureaucracy is related to business units (multiple structures inside a bigger one). In the last model, management complexity, flexibility and decision-making processes are the key themes.

In a slightly more organic perspective, one can find work cells - multi-skill, multi-task teams. The biggest difference here is the basic coordination and decision-making process. In this kind of structure, decision-making is decentralized and the team is self-managed.

Since the definition of the organizational structure involves choices, other mechanisms can be added to the basic elements and models to facilitate or support work performance. Advisory positions could be used, particularly for high-ranking positions, in order to give support on technical aspects and to help with time administration. Committees (multi-skill or single-skill teams of professionals) may be created to provide opinions on previously defined topics through a series of organized discussions, as suggested by Oliveira (2006).

Some conditions must be considered when elaborating a specific organizational model. Robbins (2002) and Vasconcelos (2007) deepen the discussion on some of them. The first one is size: the bigger the organization, the stronger the tendency to specialization, departmentalization, increased vertical levels, policies, and procedures as a way to improve job performance. Technology, defined as the way in which a company transforms inputs into outputs, determines the degree of routine for the activities. The more routine the activities, the more vertical and departmentalized the structure tends to be.

The business environment may potentially affect organizational performance. The more uncertain the environment, the greater the adjustments that must be made in the organizational structure. An organization in a high-growth industry could make more mistakes than another, which operates in scenarios with scarce resources. Very dynamic environments impact organizational decision-making. Complex, heterogeneous business environments force companies to continuously keep a focus on the competition.

Finally, employee behavior is affected by the chosen organizational design. Some individuals prefer to work with more autonomy, others with less. So, the degree of job commitment and satisfaction of those professionals will be affected by centralization or decentralization decisions. Note that such issues are very complex, as they transform the organization into a live organism.

According to Fleury and Fleury (2008), international companies can be structured in different ways, considering the positioning of the subsidiary: as an operating branch, as a relatively autonomous unit, or as a competency-development center. Bartllet and Ghoshal (2002a) relate a specific organizational model to each internationalization approach, as defined by them. A multinational enterprise has relatively autonomous subsidiaries that operate under financial control. An international company operates in a more coordinated way than multinationals; control is exerted on further resources. A global company is centralized and its control is even stricter. Finally, a transnational organization operates as a network of resources and capabilities, managed through a complex coordination process.

In this sense, Guislanzoni, Penttinen and Turnbull (2008) argue that companies are learning to adapt their organizational design to capture synergies among locations and to protect local sources of profitability. Thinking about organizational structure, analyzing all the possibilities, and implementing models capable of yielding the expected results are further challenges for multi-location businesses.

In considering the organizational structure, two perspectives may be taken, according to Nadler and Tushmann (1997). From the perspective of strategy and performance, the structure must support organizational strategy implementation, enable task performance, allow for effective management control, and produce well defined and measurable work positions and scopes. The social and cultural perspective is concerned with the employee's alignment with the job description, the ways they will be affected by power relations, how aligned they are with company values and beliefs, and how the structural design affects managerial style. The authors argue, however, that the best option is to define a congruent model combining the two perspectives.

We must stress that there will always be structural conflicts, which businesses will have to analyze, such as limited resources to cope with growth opportunities, the stability of the structure, or the implications of decentralized or centralized decisions (Fritz, 2006).

2.4 Fit between Strategy and Organizational Structure

The relationship between strategy and structure has been well debated by various scholars, from a variety of schools. The notion that strategy affects the choice of structure, and that the latter impacts strategy implementation is one approach. Another is that the interface strategy-structure significantly impacts bottom-line (Engdahl, 2005; Geiger, Ritchie & Marlin, 2006; Hrebiniak, 2006).

Maybe in a simplistic way, Robbins (2002) and Hrebiniak (2006) typify the relationship between strategy and structure. For a low-cost strategy, the structure should be centralized, with strict controls, high specialization and functional departmentalization. For innovation, differentiation and segmentation, the structure must prioritize decentralization, with lower specialization and formalization. Work cells and teams create a matrix process with double command lines. If the strategy is imitation (products or markets), the structure should follow a mixed model of rigidity (existing activities) and informality (new activities).

A study by Plehkso and Nickerson (2008) tried to obtain a correlation between the four types of strategic orientation by Miles and Snow (1978) (namely, prospectors, analyzers, defenders and reactors) and the structural variables of formalization, centralization, integration and complexity. However, the authors could not reach conclusive results.

With a more slightly dynamic approach, Pimentel and Vasconcellos (2008), based on the theory by Chandler (1962) argue that, at the time of establishing a new strategy, the organizational structure may not be fully appropriate; and an adaptive process must then take place. This process normally follows some steps: definition of the new strategy, occurrence of management problems, reduction in organizational efficiency, definition of a new organizational structure, and improvement in company performance. This cycle may be repeated several times.

When addressing international companies, the typology defined by Bartlet and Ghoshal may still be valid, but issues such as location, culture and the competitive environment certainly bring new perspectives to the debate.

3. RESEARCH METHOD

This study aims to analyze changes in the organizational structure to support the internationalization process of Oxiteno. In order to help the research process, the main objective was divided into four secondary objectives. First, understanding the strategic drivers and the company's internalization process. Second, analyzing the changes made in the organizational structure during the internationalization process (considering the defined strategy). Third, understanding and analyzing these changes as promoters or barriers to strategy implementation. And fourth, analyzing opportunities for improvement of the organizational structure and their possible impacts on the business.

We chose a qualitative research paradigm (Creswell, 1994). The research problem is context-dependent and there are theories developed on the subject. The research process was inductive and interpretative, supported by a specific context. The set of theories helped in supporting all the analyses and understanding the phenomenon.

The chosen research method was a case study, to understand the existing dynamics in a unique environment, in which boundaries between the phenomenon and the context are not clearly defined (Eisenhardt (1989); Yin (2005)).

The case in point was selected because of its business situation at the moment and due to the researcher's access to the organization. Oxiteno has been going through an internationalization process over the last 25 years (considering all the phases).

During the research a case study protocol was used (Yin, 2005). Data collection included in-depth, semi-structured interviews (Oxiteno's CEO, the General Manager of Mexico Business Unit - one of the foreign locations- and Oxiteno's former CEO, who devised and implemented the initial internationalization process) and document analysis (internal and external data). During the study, the researcher was authorized to observe an internal meeting on internationalization initiatives specifically addressing sales, internal communication, institutional image and research & development. Participants from Argentina, Belgium, Brazil, Mexico, United States and Venezuela attended the meeting. The study formally began in 2010, and to the present the researcher continues to observe and analyze the case.

Data reliability is represented by consistency, defined as invariability of the results (Martins, 2006). Thus, the case study protocol, the triangulation of data, the thread of evidences and application of the defined procedures is what will ensure reliability (Yin (2005); Martins (2006)). This study has a fundamental limitation related to its method (case study), so the findings cannot be generalized (Yin, 2005).

As stated by Robson (1993 *apud* Collis & Hussey, 2005): "…There is not a clear and accepted set of conventions to analyze qualitative data when compared to the set used for quantitative data". In this paper we chose the theoretical proposition to answer the research question by reflecting on the literature review (Yin, 2005).

4. THE CASE

Oxiteno is a leading supplier of ethylene oxide and its byproducts in Latin America; it also supplies chemical specialties and is the only producer of fatty alcohols and their co-products in the region. Oxiteno has eleven industrial sites in Brazil, the United States, Uruguay, Mexico and Venezuela, as well as sales offices in Argentina, Belgium, China and Colombia. The products are used in many industries, such as cosmetics, pesticides, polyester, packaging, oil and paints and varnishes (Ultra, 2014).

Research & development has always been the source of new product development and process improvement. The company invests more than 3 percent of annual revenues in this activity, which, besides new product development, devises customized, integrated solutions for customers, in addition to training and technical support for the consumer market. In 2004, the company created a Development Center together with international partners; today it has 120 dedicated professionals.

The organization has defined its mission and values and a management system to support priorities like: market quality standards, focus on all the different stakeholders, focus on speed, corporate identity, operational excellence, safety and ethical behavior. Currently, sustainability is an important demand for all the links in the supply chain and has become a priority for the company (Oxiteno, 2009).

4.1 The Competitive Environment and Oxiteno Strategies

The competitive scenario in which Oxiteno operated in the beginning of the formal internationalization process was characterized by two phenomena: globalization and economic pressure.

According to the CEO, globalization had a twofold effect. On the one hand, to strengthen its global position, Oxiteno acquired operations in Mexico and Venezuela, and opened sales offices in Argentina, Belgium, China, and the United States. The decision to operate internationally demanded some adaptations in the management model, migration of talents and resources, and the development of multicultural competencies to increase results. On the other hand, even if manufacture did not expand internationally, Oxiteno sells for global and international clients, competing with producers who use basic chemicals manufactured in Asia (Asian suppliers are expanding their facilities to the Middle and Far East, with increasingly lower costs). Thus, commercial globalization clearly raises competitiveness challenges.

The other phenomenon, economic pressure, is mainly characterized by the currency fluctuation between the dollar (US$) and the real (R$). As the international market sets prices in US dollars, so there is pressure to lower gross margins (in US$), but with increased fixed internal costs (R$ appreciation and inflationary adjustments).

In order to position itself and face those demands, Oxiteno defined and acted upon some strategic objectives: (i) to consolidate its leading position in the Brazilian chemical specialties market, (ii) to establish a leadership in the ethoxylates market in the Americas and (iii) to gain operational excellence.

According to Porter (1985), Oxiteno's positioning is cost leadership (focus on operational excellence). As per Rue and Holland's (1989) concepts, the focus should be on growth. Perhaps it would be more interesting to use both concepts together: consider growth as a positioning, according to Rue and Holland (1989), and regard operational excellence as a value discipline, following Treacy and Wiersema (1998).

Today, ten years after the internationalization process began, Oxiteno operates with the following strategic objectives: (i) to expand manufacture capacity in Brazil; (ii) to expand manufacture of higher value-added products; and (iii) to continue the internationalization process (Oxiteno, 2014). In this stage, the focus on growth is explicit and, maybe, operational excellence has already been incorporated into the company's core competencies.

4.2 The Internationalization Process

Oxiteno has been exporting products since 1990. This process began with sales representatives in destination countries and an exports area at headquarters. The internationalization process began in 2003, with the acquisition of Canamex Químicos, in Mexico.

When discussing the drivers for internationalization, the company's key executives immediately bring up the fact that Oxiteno already held a strong position in Mercosur, with limited growth possibilities in Brazil (Oxiteno's market share in Brazil was around 70 percent). A second, less important driver was the possibility of getting access to more sophisticated and demanding markets, which would promote faster corporate learning.

The two drivers are aligned to the findings of Fleury and Fleury (2008); Fleury, Khauaya, Dreon, Minello et al., (2008); Oliveira and Vasconcellos (2008), and Hedlicka, Vasconcellos, Schmidt and Rodrigues (2008).

To answer the questions of where to go and how, the company, in a not very structured way, outlined some guidelines for the internationalization process. The CEO at the time states that his strategic thinking was to deal with only one out of three variables: geography, product/technology and market. Mexico represented the same product and the same market, with only a change in geography. Besides, it appeared easier to expand in Latin America, where a smaller cultural distance was expected, and with the same time zone, a less mature market than the European one, and an increased possibility of exporting from Mexico to the US, a large potential market.

Canamex was a well-known company in the local market, with a similar technology, and whose products and customers were also known. Mexico also presented a comparative advantage in the large volumes of ethylene oxide production - a basic raw material for the production process.

Oxiteno's positioning at that time was: (i) to structure the Mexican subsidiary under the command of a local executive; (ii) with a high degree of local independence; (iii) financials goals agreed upon with headquarters; (iv) control on critical factors only: financial resources (including an expatriate Brazilian financial executive), brand reputation, ethics and safety; and (v) a board of directors made up of local and Brazilian executives. In the very beginning, the Mexican operation accounted for 3 percent of the Brazilian operation.

Apparently, Oxiteno decided for a penetration strategy (Rue & Holland, 1989; Hedlicka, Vasconcellos, Schmidt & Rodrigues, 2008) with a multi-domestic approach (Porter, 1999). In terms of typology, the company should be defined as multinational (Bartllet & Ghoshal, 2002a; Oliveira & Vasconcellos, 2008) and, even if not explicitly, they adopted a more polycentric model (Aidar, 2004).

In 2004, Oxiteno acquired assets from Rhodia Vera Cruz. Then, an effort for technological integration started, including the expatriation of a Brazilian executive to Mexico in order to discuss best practices and disseminate standards for project execution and industrial safety.

In the commercial area, besides a lateral move among Mexican and Brazilian professionals, there was an effort to map and split the Americas market. With this process, each market segment was assigned to a sales manager and, if necessary, one of their peers could be invited to discuss service and sales policies for global customers. The regions defined were: USA, Mexico, Andean Region, Mercosur and Brazil.

At this stage, the first consequences of the adopted model began to appear. First, the commercial integration did not happen as planned, apparently due to cultural differences. Next, Mexican executives had difficulty with a more participative management model, in which solutions for critical issues were discussed and agreed upon. Some decisions were implemented: (i) the Mexican general manager was replaced; (ii) a sales office was opened in Argentina in order to improve technical support for customers and expand sales; and (iii) the "Internationalization Project" was started, in an attempt to formalize and structure the process.

Both because of and adding to this need for definitions, in 2007 two more acquisitions were made in Mexico, and a sales office was opened in the US, aiming to increase the presence of the Mexican subsidiary in the American market.Arch Chemical was acquired, in Venezuela.

After that, in 2008 a sales office was opened in Belgium, in 2010 a sales office in Colombia, and in 2012 one in Shanghai. The same year, Pasadena Property in Texas, US, and the American Chemical company in Uruguay were acquired.

Finally, it is possible to say that the key driver of the internationalization process was limited local growth at first and, secondly, the possibility of reducing international competition for domestic competitors. The adopted strategy was penetration with a multi-domestic or multinational approach.

4.3 The Organizational Structure

The "Internationalization Project" was designed to support a more structured reflection on the company's operational model, even so because the acquisition processes would continue to happen with a peculiar pattern: small businesses. The initial model was adequate as long as acquisitions were few, small and almost unique. Issues such as customer focus and service, as well as competitive advantages due to operation excellence had to be addressed in order to support growth.

After much reflection, Oxiteno defined some key topics. The management model was to be integrated, that is to say, a joint management of businesses in different countries. They named it a transnational model, with a global coordination process.

The typology used by the organization tends to reflect the definition by Bartlet and Ghoshal (2002a). Note that some demands for exchanging experiences were not being contemplated in the adopted model so far. In terms of the basic elements suggested by Robbins (2002), global coordination means small centralization, some formalization and a lot of conjoint work among professionals. This conjoint work was defined as teamwork to study issues, benchmark processes or make integration decisions.

Translating this model into organizational structure meant putting the customer first. The regional model was chosen over the product line model. Four regions were defined: NAFTA/Caribbean, South America, Europe/ME/Africa and Asia/Oceania. These regions would be the platform for company expansion and were considered business units, with a manager responsible for the bottom line (EBITDA and EVA). The business unit would ensure consistency in customer service across the region. To be considered inside a region, production plants would have to produce mostly for selling in that same region. Corporate departments (who define guidelines and polices and follow performance of the diverse regions) and centralized departments (for economies of scale and/or specific knowledge) were established to ensure synergies. The corporate departments were Safety & Environment, Information Technology, Human Resources, Legal and Financial Planning. The centralized departments were Engineering, R&D and Marketing. It seems that the defined model comprises several of the organizational structure elements described in this study. It is unclear, however, whether there are matrix relationships between the corporate and centralized departments and the other areas. The position of Internationalization Manager was created, whose main responsibilities would be to facilitate the creation of the work teams, to design the mutual adjustments processes and to discuss critical issues.

In 2007, Oxiteno's organizational structure was a combination of theoretical organizational models, such as those discussed by Wagner III and Holenbeck (2004) and Robbins (2002): a bureaucratic structure with three functional areas - administrative and finance, commercial and industrial. These functional areas, originally Brazilian, worked on a matrix basis (double line of authority, combining functional departmentalization with product line departmentalization) with the other countries that, in turn, represented a divisional departmentalization. Span of control, especially at the most strategic level of the structure, is very large. The three senior area directors, besides managing ten direct reports, were responsible for a group of very different but complimentary areas, what created some difficulties in succession planning. Apparently, there is decentralization, as the chain of command has a maximum of six hierarchical levels. The level of formalization in the Brazilian structure is high; policies, management models, goal monitoring, and EVA indicators are released in the intranet. Several departments besides the Brazilian plants operated with the functional cell model. There were also managerial cells at the factories, made up of the main representatives in each functional cell. Also noteworthy is the fact that Oxiteno is controlled by a holding called Grupo Ultra, reporting to a centralized financial area. If it were a purely domestic enterprise, its structure would suit innovation and cost control, as discussed by Robbins (2002) and Hrebiniak (2006).

In the following years, a process of transformation could be observed. The South America region has not been set up yet. Brazil and Uruguay are in charge of the Mercosur market, while Venezuela and Colombia serve the Andean region. The NAFTA region is structured, the European region is still represented by the sales office in Belgium, and the Asian region by the Shanghai office; both report to Brazil.

The NAFTA and Andean regions represent the model discussed by Bartlett and Ghoshal (2002a) and Fleury and Fleury (2008): the subsidiaries had duplicates of all the functions in the headquarters (including corporate and centralized areas), with a lot of autonomy.
When we compare the conceptual model and the organizational structure, we can see that not all the concepts have been equally implemented.

Centralization is really low. Marketing and R&D are developing global processes, searching for synergies (standardizing product development policies and processes, integrating research centers, and creating internal benchmark indicators); on the other hand, they are developing a global brand and company image. An important asset for R&D efforts is the transference of employees to other countries. However, the functions of Safety & Environment, Human Resources, Legal and Financial Planning still do not fully act as defined.

Global coordination is based on a mutual adjustment – work teams in search for synergy or who decide for decentralization. There are efforts regarding product planning, service for global customers and synergy in strategic procurement. Each process has a person in charge, who coordinates working teams comprised of employees from all the locations. These teams work remotely and meet personally twice a year. The required effort to achieve this integration is enormous, since people have to manage their day-to-day activities alongside the project's initiatives. Cultural issues are evidenced in team dynamics and personal relationships are critical for a successful work. In some situations, individual and team performance indicators do not reflect the multiplicity of roles played.

Oxiteno's organizational structure is still more a multi-domestic model than a transnational one. The main issues to keep the transition going are: effectively using the subsidiaries as a source of knowledge exchange and development of critical activities; and consolidating the coordination process.

It is important to consider the senior managers' perceptions of the above analysis. For the CEO, changing from a very decentralized initial model to a more coordinated one was not easy, since it entailed a loss of autonomy in some areas of the organizational structure. The lack of a single or integrated information system is also an impediment to the alignment process. At present, a lack of formal policies is also felt, as these would greatly help model development and implementation.

The head of the NAFTA region until 2010 recognized that, on the one hand, the regions were highly autonomous, but, on the other hand, the lack of formal policies resulted in slow decision making. The NAFTA region managed to absorb technology from Brazil, which contributed for its growth and increase in market-share; however, little was transferred to the headquarters or other subsidiaries. The Andean case was very peculiar. Due to the acquisition strategy, the Brazilian top executives reported to a Venezuelan. Today, after five years and some new acquisitions, Brazilian executives hold the key positions in the NAFTA, Andean, Uruguay, Shanghai and Belgium areas, in an attempt to streamline the process of integration.

4.4 Strategy and Structure Fit

The fit between strategy and structure may be analyzed from different perspectives. The first one is related to growth, the main strategy behind the internationalization process. The international operations have grown and today they represent more than 20 percent of Oxiteno's global revenues. They now require more attention from headquarters, including the attempts to evolve to the transnational model.

Another way to verify this fit is through the specific strategies. Expanding manufacture of more value-added products depends heavily on a mutual adjustment process, that is, work teams that discuss and implement efforts in planning, selling and consolidating product lines. Operational excellence as a competitive advantage (Ultra, 2013) is supported by the strategic procurement teams and by the processes being integrated, such as research and development.

We can also analyze the implemented structure in its fit with the defined model. In this case, issues like knowledge transfer, definition of competence centers, and the coordination process may be revisited.

The company's senior executives analyze this process qualitatively. On the one hand, issues like multicultural experience and exposure, a more definitive presence in the most sophisticated markets, and proximity to potential global suppliers, reinforce brand positioning and employee motivation, mostly for the Brazilian. Some positive surprises popped up in the internationalization process, such as how easy technological transference was. On the other hand, the feeling that cultural differences would not be an important issue was shown to be incorrect.

Thus, there is still room for alignment, especially in the evolution of the defined organizational model.

4.5 The Future of the Organization

Oxiteno is definitively in an internationalization process and this is irreversible. With this strategy, the definitive implementation of the transnational model can be analyzed in terms of the theoretical foundations discussed in this study.

The transnational model, as defined by Bartlet and Ghoshal (2002a), and Oliveira and Vasconcellos (2008), is characterized by responsiveness to the local market, search for economic efficiency, and flexibility to transfer experiences. The first two items, apparently, are treated in the model and organizational structure adopted by the company. A question arises considering the transfer of experience, as reinforced by Bartlet and Ghoshal (2002b) when discussing real competitive advantages in an internationalization process. The teamwork model can be improved when more people exchange locations and functions, and with team coordination led by employees from various locations, not only Brazil. Khavul, Bruton, Zheng and Wood (2007) state that companies from emerging economies should even be able to develop a local relationship network in the new countries were they operate.

The transnational model also reflects a more complex internationalization strategy. In this case, the institutional strategy pointed out by Vasconcelos (2007) would be the most appropriate. The demands posed by the context clearly appear in corporate strategy, but the choice of a transnational model requires rethinking of the cultural implications and human needs. The work teams are basically a process to align organizational and human values. It is vital to monitor and support these teams through mechanisms such as goal definition and communication processes.

In terms of the basic elements suggested by Robbins (2002) for the development of organizational structure, formalization is the main issue. For corporate functions, the definition of policies should be intensified, with subsequent setting of goals and indicators to be met by the other areas. For areas defined as centralized, the dual-command line relationship between headquarters and subsidiaries should be clearly stated. In the short term, this could be felt by some as a loss, but there is a gain in the long run. In this case, the background is the coordination model defined and implemented by the corporate and centralized areas.

The cultural issue or approach, as proposed by Aidar, Brisola, Prestes Motta and Wood Jr. (2004), becomes key in discussing transnational structure. The transfer of experiences and competencies is fundamental and it essentially surpasses the cultural issue. A geocentric approach would be the most appropriate.

Designing and defining organizational structure is a result of the proposed discussion. Most likely, its graphic representation would only be slightly different from the current model, as some of the corporate and centralized functions would be represented with different lines of command. But the transnational model goes beyond the formal organization chart; it is really represented and measured by goals and results.

5. FINAL CONSIDERATIONS

The internationalization process is not a recent phenomenon, although its development is happening in increasingly complex forms. Motivators, strategies and approaches can be adopted and pursued. Two points emerge in this process: choice and learning.

Choice is reflected on what the organization decides to do. The adoption of a certain strategy or structure tends to drive the desired results and possible losses. Learning is a result of the choice process. Any intention or model is not perfect and ideal. The experience in implementing these models and their contingent adaptations are definitely organizational learning processes.

The case study reflects this very well. From one standpoint, the strategic drivers and options seem to be clearly defined and are continually pursued. As for the organizational model, chosen after incurring some losses, it continues to evolve. The transnational model, which both prioritizes the market and the customer and promotes organizational integration, is complex to implement, as it depends on efforts and focus on all the basic elements needed in designing the organizational structure. Today, the organization is in a learning phase to fine-tune the formalization process, team coordination and cultural integration.

The observed phenomenon is probably also present in other organizations that carry out an internationalization process. An analysis of other companies in the same industry, from other nations, may be undertaken in order to identify patterns of action, as well as favorable and unfavorable aspects, that may affect the implementation of organizational structure as a fundamental step in the evolution of organizations.

As suggested by Amann (2007), achieving global competitiveness and becoming a global player is in itself a major strategic guideline for emerging multinational companies from developing countries. Internationalization may seem like the path to the promised land, but on a day-to-day basis it has been shown to be an intricate, complex and challenging journey.

REFERENCES

Aidar, M. M; Brisola, A. B.; Prestes Motta, F. C.; & Wood Jr. T. (2008) Cultura Organizacional Brasileira. In: Wood Jr, T. (coord.). **Mudança Organizacional**. São Paulo: Atlas.

Amann W. (2007) The Price Tag of Ignoring Complexity in the Globalization Process. In: Steger, U.; Amann, W. Maznevski (editors) Managing Complexity in Global Organizations. Chichester: John Wily & Sons Ltd.

Bartllet, C. A.; Ghoshal, S. (2002a) **Managing across Borders**: the transnational solution. Boston: Harvard Business School Press.

_______ (July, 2002b) Strategic Advantage. **Executive Excellence** 19; 7.

Borini, F. M; Fleury, M. T. L.; & Oliveira Jr; M. M. de (2008) Gestão de Competências em Negócios Internacionais, In: Dutra, J. S.; Fleury, M. T. L.; & Ruas, R. (coords.) **Competências**: conceitos, métodos e experiências. São Paulo: Atlas.

Collis, J.; & Hussey, R. (2005) **Pesquisa em Administração**. São Paulo: Bookman.

Creswell, J. W. (1994) **Research Design**. Qualitative & Quantitative Approaches. London. Thousand Oaks: Sage Publications.

Doz, Y.; Santos, J.; Willianson, P. (2001) **From Global to Metanational**. Boston: Harvard Business School Press.

Eisenhardt, K. M. (1989) Building Theories from Case Study Research. **Academy of Management Review.** 14; 4; 532-550.

Engdahl; R. A. (Summer, 2005) Organization Evolution: the natural change model for organizational structure in changing times. **Organization Development Journal.** 23; 2; ;50.

Fleury, A.; & Fleury, M. T. L. (2008) **Estratégias Empresariais e Formação de Competências:** um quebra-cabeça caleidoscópico da indústria brasileira. São Paulo: Atlas.

Fleury, M. T. L.; Khauaya, D. M. R; Dreon, F.; Minello, I. F.; & Sun, V. (2008) Cultura e Internacionalização de Empresas – o caso da Azaléia na China. In: Vasconcellos, E. (coord.) **Internacionalização, Estratégia e Estrutura**. São Paulo: Atlas.

Fritz, R. (2006) **Estrutura e Comportamento Organizacional.** São Paulo: Pioneira Thomson Learning.

Geiger, S. W.; Ritchie, W. J.; & Marlin, D. (summer, 2006) Strategy/Structure Fit and Firm Performance. **Organization Development Journal.** 24; 2; 10.

Ghislanzoni, G.; Penttinen, R.; Turnbull, D. (2008) The Multilocal Challenge: managing cross-border functions. **The McKinsey Quarterly.** 2; pg. 71.

Hedlicka, H.; Vasconcellos, E.; Schmidt, M.; & Rodrigues, D.L. (2008) Internacionalização de uma Empresa Familiar na área de Eletromedicina: Fanem. In: Vasconcellos, E. (coord.) **Internacionalização, Estratégia e Estrutura**. São Paulo: Atlas.

Hrebiniak, L. G. (2006) **Fazendo a Estratégia Funcionar:** o caminho para uma execução bem sucedida. Porto Alegre: Bookman.

Khavul, S.; Bruton, G. D.; Zheng, C.; Wood, E. (2007) Learning during and after Internationalization by Entrepreneurial firms from Emerging Economies. ACAD MANAGE PROC August 2007 (meeting abstract supplement) 1-6

Martins, G. de A. (2006) **Estudo de Caso**: uma estratégia de pesquisa. São Paulo: Atlas.

Nadler, D. A.; & Tushman, M. L. (1997) **Competing by Design:** the power of organizational architecture. New York: Oxford University Press.

Oliveira, D. de P. R. de (2006) **Estrutura Organizacional:** uma abordagem para resultados e competitividade. São Paulo: Atlas.

Oliveira, M. A.; & Vasconcellos, E. (2008) Internacionalização e Incorporação: o caso CSN LLC (subsidiária da CSN nos Estados Unidos). In: Vasconcellos, E. (coord.) **Internacionalização Competitiva.** São Paulo: Atlas.

Oxiteno**.** Disponível em: http://www.oxiteno.com.br. Acesso em: 03/07/2014.

_______ . Disponível em: http://intranet.oxiteno.com.br/intranet/ixge001c.asp Acesso em 20/05/2009.

Pimentel, J. E. A.; & Vasconcellos, E. (2008) Internacionalização e o Binômio Estratégia-Estrutura: o caso da Companhia de Concessões Rodoviárias. In: Vasconcellos, E. (coord.) **Internacionalização Competitiva.** São Paulo: Atlas.

Pina e Cunha, M.; & Cunha, J. V. da (2006) Towards a complexity theory of strategy. **Management Decision**. London. 44; 7; pg. 839.

Pleshko, L.; & Nickerson, I. (2008) Strategic Orientation, Organizational Structure, and the Associates Effects on Performance in Industrial Firms. **Academy of Strategic Management Journal.** 7, pg 95.

Porter, M. E. (1985) **Competitive Advantage:** Creating and sustaining superior performance. New York: Free Press.

Porter, M. E. (1999) **Competição:** Estratégias Competitivas Essenciais. Rio de Janeiro: Campus.

Robbins, S. P. (2002) **Comportamento Organizacional**. São Paulo: Prentice Hall.

Rue, L. W.; & Holland, P. G. (1989) **Strategic Management:** concepts and experiences. Singapore: McGraw-Hill.

Treacy, M.; & Wieserma, F. (1998) **A Disciplina dos Líderes de Mercado:** escolha seus clientes, direcione seu foco, domine seu mercado. Rio de Janeiro: Rocco.

Ultra. Disponível em: http://www.ultra.com.br. Acesso em: 03/07/2014

_______ . **Relatório Anual.** São Paulo: 2013.

Vasconcellos, F. C. de (2007) **Dinâmica Organizacional e Estratégia**: imagens e conceitos. São Paulo: Thomson Learning.

Wagner III, J. A.; & Hollenbeck, J. R. (2004) **Comportamento Organizacional:** criando vantagem competitiva. São Paulo: Saraiva.

Yin, R. K. (2005) **Estudo de Caso**: planejamento e métodos. Porto Alegre: Bookman.