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"STRATEGY AND INNOVATION IN ORDER TO BE COMPETITIVE IN A GLOBALIZED WORLD; an evolutionary analysis of the emerging wine sector pole of São Francisco Valley (Brazil)"

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STRATEGY AND INNOVATION IN ORDER TO BE COMPETITIVE IN A GLOBALIZED WORLD; an evolutionary analysis of the emerging wine sector pole of São Francisco Valley (Brazil).

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ABSTRACT

Globalized and fragmented, the wine production sector reconfigures itself. The New World Wine Producers innovate in wine sector management by means of industrial production logics. Brazil faces the challenge of reaching a wider global insertion. The emerging pole of Vale do São Francisco, through a comparative and exploratory multiple case study (2006 to 2010), shows an evolutionary phenomenology with some innovative features. The objective is to analyze the regional innovative strategic positioning and to present proposals to accrued innovative competitiveness.

KEYWORDS: Strategy; Innovation; Competitiveness; São Francisco Valley; Wines.

1. INTRODUCTION

The emerging pole of São Francisco Valley (Brazil), located in the states of Pernambuco and Bahia, is the largest producer in the semi-arid tropical area, being responsible for almost 23% of Brazilian fine wine production. The production of high quality wines in semi-arid conditions was unthinkable for a long time. However, the pioneering and innovative spirit of some entrepreneurs enabled such wine production in the 8th South parallel, moving from the traditional grape wine production, the 40th parallel from the South and North hemispheres. The search for a new terroir increased the wine sector of São Francisco Valley, initially favored by the comparative advantages of the region¹, and recently, by a strategic innovative and differentiated (in value) attitude of local entrepreneurs searching for a greater competitiveness at national and global levels. The main objectives of this research are (a) to analyze the regional strategic-innovative evolutionary positioning process in the period from 2006 to 2010; and (b) to present proposals for a greater competitiveness. The study has as empirical base the collected data from two researches that studied the strategic and innovation processes in a set of wine producers of the emerging pole of São Francisco Valley. The methodology has a mainly qualitative and exploratory character using as technical procedure of data analysis the approach of multiple case studies in a comparative perspective. The results suggest a medium/low attractiveness of the sector with possibilities of improvement in the medium and long term. From the innovation point of view, a major preference was perceived concerning the diversification of the product-market matrix.

2. THEORETICAL FRAMEWORK

The growing competitiveness observed in the business world has its principal origin in the phenomena produced and increased by post-industrial society, namely what is concerned with the increased process of globalization and integration of economies, in the evolution of the information and communication technology, of the production mechanisms and in the considerable increase of productivity. These aspects are reflecting the changes through history in the economic, social political, cultural and technological contexts in which the firms are framed. Innovation is one of the main variables driving these phenomena and power force of the change process nowadays, promoting constant and continuous changes in the market and within the firms, in particular, with greater speed in the last 50 years (Ramos and Sousa, 2010).

As a consequence of that new scenery, the firms must be more pro-active and innovation based, if they want to survive in even more competitive, dynamic and complex markets. The capacity to innovation has direct consequences and effects in the competing capacity of firms at the local, regional, national and international level. Values created through innovation are often presented as new forms of production or in new products and processes which contribute directly to add value to the client and richness for the stockholders. The absence of innovation can represent death; means to be subjugated by the main competitors and threw to lower positions and markets (Dantas and Moreira, 2011). According to Freire (2000) the firms that are unable to innovate risk losing their clients (as they don't introduce new products or services), of reducing business profitability (by not introducing new processes, with greater efficiency and productivity) or even quit the business facing the incapacity of renewing their products or satisfying their clients needs. Drucker (1985) defends that innovation is a specific

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¹ More than 300 days of sunshine *per year*, up to 2.5 crops / year, average high temperature and good thermal amplitude (33°C to 17 °C), decreasing rainfall, controlled irrigation and called "continuous cycle" – with the possibility of producing grapes and therefore wines for all months year (EMBRAPA, 2009).

instrument of the manager activity and is characterized as a strategic action endowing the firm with new enabling profits capacities.

Hamel (2000) refers that the central question of post-industrial society is "(...) who will create new wealth and who will exhaust the old one?", that is to say that the continuous process of society evolution and its needs requires a more creative behavior concerning firms and nations, based upon the incorporation and development of new products/services, processes and/or production technologies, new forms of doing business where the destruction of the "old" and the creation of the "new" represent the main component of business competitiveness and sustainability. According to Michael Porter (1985): "(...) nation competitiveness depends on its industrial capacity to innovation and improvement". According to Freire (2000) the importance of innovation in every sector has grown (1) reduction of the life cycle of products (2) excessive installed capacity (3) individualization of the offer (4) growing of competitive intensity (5) client demand for sophistication (6) speeding of technological evolution (7) economy globalization (8) scarcity of resources (9) financial markets expectations; and (10) deregulation (Freire, 2000:20). Thus, the denial of innovation contribution may represent firms' lack of competitiveness and the distancing from one of the main foundations concerning the building of competitive advantages in the future.

Schumpeter (1934), on defending the main role of innovation in the capitalist system, points out the fundamental importance of this variable to the system as a whole. Innovation represents "(...) the fundamental impulse that initializes and maintains the capitalist machine moving" (Schumpeter, 1934:112). Through it, come the insertion of new goods, new methods of production, new markets and new forms of industrial organization. According to Schumpeter (1934) such "process of creative destruction is the essential fact about capitalism... and it is there that all the capitalist firms must live" (Schumpeter, 1984:112).

3. METHODOLOGY

The present study has as its global field of research the emerging wine sector industry of São Francisco Valley, in the perspective of strategic management, an approach concerning the period from 2006 to 2010, during which the evolution of wine sector enterprises is analyzed according to innovation and competitiveness. The research uses the multiple case study method from a comparative perspective. The methodological positioning adopted in this study is essentially empirical. Through the use of primary data (in-depth interviews) and secondary data (documental) concerning the enterprises of industrial winegrowing from the Submedium region of São Francisco Valley as the main sources of information. From the spatial point of view, it is carried out an analysis on the external surroundings of the firms. That fact implies its enlargement towards national and global spaces. However, it is convenient to refer that the case study method doesn't pretend to generalize their findings to the universe. The only type of generalization admitted is the analytical, that is, the one occurring from the confrontation of the results of our cases with the established theory according to a process that Yin (1994) refers as "analytic generalization".

4. GLOBALIZATION, INNOVATION, COMPETITIVENESS AND BRAZILIAN WINE SECTOR

The globalized world, more and more economically integrated, has demanded a great creative and innovative effort from enterprises. These ones have undergone deep transformations from "fordism" based upon mass production to the so called knowledge was grounded on the

globalized information and communication technologies (at a decreasing cost) conducting to profound changes in the institutional and enterprises environment. The structural surplus of the offer, the changes in the preferences and behavior of the consumers and the adoption of industrial production logics by the producers of "new world wine" (New Producer Countries – NPC: EUA, Argentina, Chile, South Africa, Australia and New Zealand) are in the origin of many of those changes. That context led to the strategic focus of the industry, through fusions, acquisitions and disinvestments, resulting in the formation of concentrated and differentiated oligopolies (Ramalho, 2006; Ramalho and Sousa, 2011). According to Montaigne (2005) the world wine sector industry restructuration reflects the phenomenon of "international competition" through the increasing market globalization.

In such competitive frame, the catalyst role of innovation means destruction of the old and creation of the new (Ramos and Sousa, 2010). Innovation assumes, thus, a preponderant and strategic role, representing the impulse to face a restrictive context. Drucker (1985) considers the growing of the environmental complexity and instability, the adoption of new practices, centered in efficiency and productivity improvement, as restrictive to the business sustainability. The enterprise must be in permanent mutation, moved by environmental influences and, at the same time, being capable of changing it, or creating it, based on innovation (institutional schumpeterian vision). According to Dosi (2006), the strategic approach of innovation is based in the "network integrated model" (non-linear) characterized by key trends, for example: i) the increasing number of national and international strategic alliances and related I&D; ii) supply chain management; iii) SME links between large and small enterprises. Dantas and Moreira (2011) add other key factors: integration, flexibility, network possibility and real-time information sharing.

Brazilian wine sector industry presents a model in "counter cycle trend" with European traditional countries (Gérard Desplobins, 2006) whose development logics are based upon the concept of "terroir", as well as in relation to the so called "new producers" that act according to the models of industrial production of large volumes and specialized differentiation. Brazilian wine growing adopts an industrial production model conferring great management stability, mainly in the production of undifferentiated wines of low quality, produced from American and hybrid vine varieties. Meanwhile, some important advances have been achieved in the last fifteen years concerning the quality of fine and sparkling wines. But there are also some difficulties in the internal and external performance due to low consume per capita, intense competitiveness of imported wines, structural surplus of the world industry, of low brand value in the internal and external markets, the demands of economies of scope necessary to the confronting of global oligopolies and an international commerce still restricted, as well as difficulties concerning the internationalization of its operations.

5. THE EMERGING POLE OF SÃO FRANCISCO VALLEY: a perspective from strategic management and innovation

The changes experienced by world economy, induced by market globalization, fast technological and communication advances confronted the agricultural sector with demands of greater technical and economic efficiency in the conduction of explorations and the situation would be no different in the case of the emerging pole of São Francisco Valley. Within this scenario, it is worth underlining the advances in wine production in the region of São Francisco Valley that already represents a significant economic and social activity, responsible for almost 23% of Brazilian fine wines production at the moment (EMBRAPA, 2009). It is the only wine pole in the world located in a semi-arid tropical climate. The wine

pole of the Submedium region of São Francisco Valley is composed by 07^2 wineries, overall cultivate an area larger than 500 ha of wine grapes and annually bottle about six millions of fine wines and sparkling wines and eight million liters of table wines and grape distillates for the production of juices, carbonated soft drinks, vinegar, sweets, and so on (EMBRAPA, 2009).

From the point of view of sectorial attractiveness related to São Francisco Valley, it is important to refer that the evaluation of the initial productive potential concerning the wine pole has involved investments of around US\$ 4,9 million and the production of 08 million liters of wine per year at a total cost (wine activities and liter bottle market included) of US\$ 0,81 per bottle. Such figures provide a net value (NPV) of US\$ 6,7 million (using a discount rate of 8%) and internal rate of return (IRR) of 14,3% (Ramalho, 2006). Therefore, it presents a good level of profitability. However, the pure and simple application of capital investment theory (CIT) doesn't provide decision-making and management flexibility considering uncertainty and sectorial risks at a global scale. For that reason and on account of the wine industry dynamics, the option was the qualitative evaluation of profit potential and the use for that reason of the logics concerning the study of Porter's five forces theory (cf. Annex A1). In conclusion, considering that particular scenario, the attractiveness of wine sector of São Francisco Valley is medium/low, with possibility of significant improvement on a long-term basis considering the ability of finding a singular and defensible position in national and international markets. For the exploratory evolutionary analysis, multiple and comparative, at the level of innovation process, the approach is supported by the product-market matrix where the following vectors are considered: i) expansion or reduction (increase or decrease in the set of products or segments served); and ii) generalization or specialization (offer of new products or penetration in new market segments).

From the product-market matrix approach and in relation to the wine enterprises of São Francisco Valley, we can conclude that in the period 2006-2010 the firms, as a whole, presented an expansion and diversification of the range of products of the type "fine wines" (differentiated). However, only 40% of the selected sample focuses their production activity in the fine wines segment (firms 01 e 03)³. In all other cases, wines are mostly undifferentiated, an important aspect and in line with the most part of Brazilian wine sector. In the *market vector*, the scenario demonstrates that in the period from 2006 to 2010 and concerning the participation in the national market, the situation remains unchanged (when analyzed as a whole). Most enterprises are focused in the internal market (100% of the cases), with sales volume rate above 90%. In what concerns to the external market actuation, it was observed, in the same period, a rate contraction corresponding to about 5%. The most serious case concerns the firm 01 which presented a fall of 50% in the volume of income from external market. In other words, the firms of the wine sector of São Francisco Valley have strongly invested in the internal market and had presented a low level of internationalization.

It was also observed in this period (2006-2010) a general effort from wine producers in order to develop strategic innovative actions, at technical and organizational levels, including the adoption of new technologies and new production processes, as well as new policies of brand marketing/development and renewed business conceptions. However, the efforts are distributed in two opposite groups: one group of firms that invested in programming greater changes in business and management activities (firms 01 and 03), and other group that

² However, two wineries didn't participate due to the standstill of their activities in 2010.

³ The option was to use the nomenclature firm instead of the name of the wine producer to preserve the anonymity of the study participants.

invested in technical changes and in productive features (firms 02, 04 and 05). As a rule, the wine producers of São Francisco Valley are aligned according to the "institutional-schumpeterian" vision. Although the firms of the sector adopt a strategic innovative approach, their strategic innovative actions are not totally aligned with the "network integrated model" and, in consequence, with the key trends (greater integration, flexibility, possibility of network and real-time information sharing, etc.) of the innovation process and with the demand of the actual surrounding environment. In fact, the wine producers of the region act assuming a counterpoint attitude, the *strategic-innovative* development of the firms of the pole São Francisco Valley is the result of an individual effort of each firm, of an endogenous innovative development, based in a *closed innovation process* parameter.

6. FINAL CONSIDERATIONS

Based on the acquired knowledge in the diagnosis (internal and external), and in order to improve the performance of the enterprises, is recommended that the strategic innovative positioning of the wine producers of São Francisco Valley must concentrate their actions in the differentiation of the product, assuming the identity reinforcement of the fine wines region – investing in the most important characteristics – according to the brand image and "designation of origin". It is also essential to align the strategic innovative positioning with the key trends, reinforcing the number of strategic alliances (at the national and international level); articulating the development of I&D with partner institutions (universities, search institutes, among enterprises, etc.); and through flexibility of networking and information sharing (open innovation).

In conclusion, the strategic choices must assume two possible guidelines, alternative or complementary: the classic one, anchored on bi-dimensional strategic logic, centered in the creation and retention of accrued value, and the guideline that converges in a multidimensional strategic space, where to create and retain value, as well as to develop competencies, it is fundamental the establishment of strategic alliances (strategic relational aspect). Finally, it is important to point out the limitations of the assumed attitude in the study (comparative and exploratory character). Therefore, there are subjects superficially approached, being necessary complementary investigation and a wider scope. Such aspect constitutes the major restriction of the study. It is also suggested that future investigation must be inserted in the designed group for empirical and formal studies with the utilization of either transversal or longitudinal cuts.

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ANNEX A1.

Application of the five forces model to the wine sector of São Francisco Valley

Barrier to the entry of new competitors	The barriers are high, due to the demand of brand identity, of capital, access to distribution, advantage of absolute costs, learning curve and expected retaliation. This diagnosis considers the application of the model of diversified industrial production already implemented in São Francisco Valley. Concerning the related factors, we point out accrued difficulties to the entry of small wine producers. Those already present use niche strategies. Anyway, the effort required to the new entrants is proportionally high. In conclusion, the barrier to new competitors is <u>low</u> .
Power of negotiation of suppliers	Suppliers power of negotiation is relatively high , mainly concerning the high cost of importing grape varieties of European <i>vitis viníferas</i> (US\$2 <i>per unit</i>), to the implantation of new areas, as well as to consider future expansions and reconversions, due to eventual changes and adapting necessities of consumer demands and also great part of the productive inputs, such as grapes, bottles, corks, etc. Due to the high integration of local industry upstream and downstream, there are difficulties to the small and medium wine producers, due to a certain concentration of suppliers and also the importance they (the suppliers) assign to the high volumes of buying <i>inputs</i> . Concerning the main raw material (grapes), the majority of the enterprises have its own vineyard.
Power of negotiation of buyers	It is <u>high</u> , concerning the substitutes (beer mainly), excess of offer of national and imported fine wines, predominating foreign wines according to the preferences of internal consumers. Such fact determines the buying behavior and the development of high sensibility to price and demand concerning the quality of products. Sparkling wines show a superior performance and superior perspective in relation to consumer trends comparing with the other categories of fine wines. From the point of view of intermediation/commercialization, the pressure tends to grow if there are entrants in the distribution industry, according to forecasts of Coelho e Rastoin (2005, p.94). It is important to refer, also, the high power of negotiation of Brazilian retail, namely from supermarket chains and cooperatives of small sector enterprises.
Barrier of substitute products	This force has great importance, due to the preference of Brazilian consumer in relation to beer. Considering the medium and small consumption and taking into account the great offer of undifferentiated wines of relative high and growing consumption, allied to the cost of change, fine wines are strongly threatened (in the internal market!) exception to national sparkling wines with high volume of sales in spite of the high seasonality. It is important to refer the consumer preference towards substitution.
Rivalry among the existing enterprises	Due to the maturity, world wine sector industry – typical of the sectors that have reached such stage of its life cycle – do not present high rates of demand, situation accrued by the chronic excess of capacity In the international scenario, rivalry is intense mainly among the oligopoly enterprises. Considering also historical difficulties to slow down the low consumption of wines in Brazil, mainly fine wines as well as the dominance of foreign imported wines, the rivalry in Brazilian market has been intense . In the long term, it is not expected significant changes, exception to the offer that reaches a differentiation positioning.

Source: Ramalho (2006).