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Conditioning factors of consolidation phase in the cooperation networks: a case study of Brazilian Wine Industry

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ABSTRACT: This paper describes the conditioning factors in the process of consolidation of Associação dos Produtores de Vinhos Finos do Vale dos Vinhedos (APROVALE). The theoretical basis used organizational approaches that define the concept of cooperation network as a coordination strategy of inter-organizational resources oriented around shared goals. The research comprises two studies: documentary analysis and interviews. The conclusions indicated that achieving economies of scale and enhanced competitiveness were the main conditioning factors in this network consolidation process. Further studies are recommended analyzing the evolution of cooperation networks in others Brazilian industries as well as the study of conditioning factors present in different analysis levels such personal and organizational.

Keywords: inter-organizational cooperation networks; Brazilian Wine Industry; Innovation networks.

1. INTRODUCTION

Evolutionary relational aspects evolving around the concept of inter-organizational cooperation networks give considerable importance to organizational studies. Especially, when the dynamic of relationships presenting some strategic possibilities for accessing new markets or consumers. In other cases, the means constitute the maintenance of current markets. Thus, the study of the evolutionary process of cooperative networks has become a recurring theme among organizational scholars. It results in the proliferation of theoretical propositions that analyze the different stages of management cooperation networks life cycle.

Important studies such Müller-Seitz (2011), Lee and Monge (2011), Sirmon and colleagues (2010), Atouba and Schumate (2010), Turrini and colleagues (2009), Poletto and colleagues (2011), Kunzler and Bulgacov (2011), Balestrin and colleagues (2010), Zancan and colleagues (2013) demonstrate the importance of cooperation networks as relational strategies to provide the generation of results that transcend the simple sum of individual organizational resources. In addition, the sharing of resources and risks, the synergy resulting from the interaction, and organizational structure of network relationships, provide a configuration of elements that may result increasing competitiveness for organizations that establish cooperation networks as an alternative development.

In this way, the theoretical basis reported here included studies that aim to understand the relational dynamics of strategic constraints that are triggered after the time of formation of networks, aiming consolidation of this inter-organizational structure, as well as the development of new activities shared among the organizations of the cooperative process. However the importance in the literature for the structure called inter-organizational cooperation networks is highlighted there are still doubts about the real reasons about why some of these networks survive and prosper while others do not.

Then, the objective of this study was describe the conditioning factors in the process of consolidation of Associação dos Produtores de Vinhos Finos do Vale dos Vinhedos (APROVALE) to demonstrate how some characteristics make possible the consolidating process to happen. In this case, conditioning factors comprised external and internal influences of context that networks are inserted, such company size, innovation strategy, familiar structure, technol-

ogy, cultural patterns, business sector, market, competition, and others. The practical discussion about the patterns of this conditioning factors can be considerate how a great contribution of this paper.

The object of study was a productive network that was founded in Brazilian scenario in 1995's. This network emerged as a trade association formed by a small group of producers located in the region of Bento Gonçalves, in the state of Rio Grande do Sul. The appearance of this association occurred due difficulties in generating individual value in national consumer market for fine wines. The strategy of network structure was introduced in the management perspectives of these members in this time. Initially, note that the members were characterized as small businesses, with a process of familiar management, low technological expertise, low production capacity, and low financial resources. These changes resulted in the end of 2010's in a cooperative network structure with a great featured in national and international market of fine wines.

To show this process of consolidation, this article is structured with five sections besides the first, which is the introduction. In the second section is presented the theoretical framework. Especially the evolution of cooperation networks concept. The third section deals with the structure constraints consolidation of these networks. Fourth section is intended to detail the method used in the research. In the fifth, the analysis of the data is presented. Finally, the sixth section is intended to closing remarks and suggestions for future studies.

2. COOPERATION NETWORKS

The intensification of industrial cooperation has stimulated research into the factors that affect the magnitude and complexity of interdependencies between organizations. Particularly, it is result in the use of an analytical approach based on the concept of cooperation networks. Martes and colleagues (2006:21) argue that "the concept of networks of cooperation emerged in the late of 1970 years, when authors such as Aldrich and Williamson began to use the form of inter-organizational relationships as focus of analysis."

According to Brass and colleagues (2004) the influence of this perspective has made the issue networks, in the beginning, was perceived from different perspectives. The first approach considered the cooperation networks as a new arrangement aimed

at improving organizational performance. The second approach was focused on the process of formation and structure of cooperative arrangements. Finally, the third approach the cooperative inter-organizational relationships were understood from a temporal perspective more broadly.

From these three approaches the concept of cooperation networks has been developed from different perspectives in the literature. For example, in the late of 1990's the publications on Strategic Management Journal began to be structured by specific groups of approaches: in a first group was works whose central theme considers the analysis of the performance of organizations involved in some sort of inter-organizational cooperation as well as research on the competitive advantages of cooperation strategies. The second group was composed of studies that deal with reasons and conditions necessary for organizations to take cooperative action, gathering around it the largest number of publications. In the third group were gathered articles that have proposed and tested theoretical models considering external and internal influences on the context of networks.

Also in the late of 1990's the Academy of Management Journal presented empirical evidences that addressed the importance of the formation of alliances and networks in cooperative inter-organizational context. Among the articles published in this journal gained prominence the work of Park and Ungson (1997) and Steensma and colleagues (2000). Those studies emphasized the learning obtained through inter-organizational relationships as one of the main reasons why organizations adopt cooperative strategies. Specifically, in 2004, on a special edition, the Academy of Management Journal showed aspects of the development of structures of cooperation networks as frameworks of organizational evolution. A well characterized example of this emphasis was the work of Brass and colleagues (2004) addressed antecedents and consequences of cooperation networks at various analysis levels.

Balestrin and colleagues (2010) also presented evidence for the study of cooperation networks: a) 15th edition of the International Association of Strategic Management, held in 2006, which adopted as its central theme the inter-organizational relations, b) congress of Academy of International business (AIB), which occurred in 2008, in Milan. It has presented as a general theme the development of knowledge networks in international business, c) 15th edition of Multi-Organizational Partnerships, Alliances and,

Networks (Mopan), conducted in 2008, in Boston. These scientific events showed, for these authors, the outstanding interest in the study of networks of cooperation in the international context.

In development countries, such Brazil, it was also found interest in the study of cooperation networks. However this process is more recent when compared with the international academy. The interest in applying the network perspective in the context of organizational studies in Brazil had a substantial increase in the quantity and quality of research produced since the middle of 2000 years. Among other evidences there are the 46 volume of the Journal of Business Administration (RAE) in 2006, as well as 43 volume of the Journal of Public Administration (RAP) in 2009. Both cited journals adopted the thematic networks as the main axis of their publications. In addition, events produced under the auspices of the National Association of Graduate Studies and Research in Administration (ANPAD) started to count on this area in six of its divisions from 2011: Information Management, Public Administration, Organizational Studies, Strategy organizations, Management Science, Technology and Innovation Management, and Logistics Operations. This focus of study has contributed to consolidate the significant growth of interest in the subject field of Administration in Brazil.

The results of research conducted in Brazil on the thematic cooperation networks can be perceived in two groups. In the first group of results, the networks are investigated as alternative strategies for survival organizational that revealing results like with innovative types of alliances between organizations (or group of organizations) in the management of inter-organizational relationships developed. In the second group of results, the networks are studied with the objective of applying the techniques of Social Network Analysis (ARS). In this second way, the results reveal structural patterns of inter-organizational relationships established in a network.

In the last years, a lot of theoretical contributions can be observed in the literature, such Stacey (2014), Bowen and colleagues (2014), Basuony and colleagues (2014), Fransoo and colleagues (2014), Zaggi (2014), among others. These studies proposed theoretical evolutionary network models considering external and internal influences on the context of networks, especially about the role and importance of public agencies for the success of cooperation between private organizations. The study on public actors and their in-

fluence about success of cooperation networks looks being the tendency of this issue in currently days.

Despite this heavy volume of studies on cooperation networks in different knowledge fields, one conclusion about cooperation networks can be identified: it appears as strategic alternative for business survival. In this sense, cooperation networks consist of a format that configures a distinct inter-organizational structure that gained notoriety for combining effectiveness, informality, and flexibility, breaking with orthodox models of organization. According to Ring and Van de Ven (1994) cooperation networks are originated from inter-organizational relationships. These inter-organizational architectures express the degree of maturity of the relational actors that comprise apart from institutions around it. Then, the relationships formed are dynamic and complex in the same time.

In this article, the cooperation networks concept is understood how a horizontal structure that its result from inter-organizational relationships with emphasis on collective approach. It has reconfiguring the organizational borders permanently, enabling better adaptation resources on strategic objectives shared among the organizations that form the network. Thus, cooperation networks can be considered complex entities called as a unique arrangement. The evolution of cooperation networks depends on one hand, of ability to facilitate communication between its components, and another hand, on the consistency between their goals with their components.

This view on cooperation networks suggests that this inter-organizational structure is a kind of structure capable of overcoming limits during its evolutionary trajectory through the coordination of shared resources that enable the development of innovative activities and promote their consolidation. This indicates that for the inter-organizational development occurs satisfactorily there is need a set of favorable conditions to the consolidation of networks from their external environment of insertion, beyond those found in the local context. With prior knowledge of these conditioning factors is possible to understand and manage its dynamic of configuration creating an environment able to consolidate the structures of networks and prosper.

3. CONDITIONING FACTORS OF CONSOLIDATION OF COOPERATION NETWORKS

In this paper the consolidation phase is explored on evolutionary trajectory of cooperation networks. For

here, the consolidation networks phase occurs when the initial formed goals of cooperation networks are achieved. Operationally, the consolidation phase can be observed in real contexts when some conditioning factors obtain critical relevance in the process of cooperation. In this topic, the theoretical discussion illustrated the types of this conditioning factors and how it appears in the literature about consolidation networks.

Considering the consolidation phase of cooperation networks - focus of this article - it is noticed in the literature that the theoretical approaches that analyze the consolidation phase of cooperation networks have shown that it is basing on descriptive models (Criado and Criado, 1996, Murray, 1995). These models analyzing the characteristics and objectives of cooperation networks to verify their consolidation, addressing the content of cooperation (area, orientation and types of transactions), contract particulars (shape and duration) and about organization (degree of formalization, number organizations involved, and geography).

Another approaches make the achievement of strategic objectives in consolidating organizational cooperation have examined the conditioning factors based on different perspectives, including: shared risks (Poletto and colleagues, 2011; Mowery and colleagues, 1996; Sachwald, 1998), rationalization of production and economies of scale (Posch, 2010; Glaister and Buckley, 1996; Kent, 1994), international expansion (Chen, 2010; Hausman and colleagues, 2010; Merchant and Schendel, 2000), transfer of technology (Saeed and colleagues, 2011; Ricks, 1994), and complementarity of resources (Kunzler and Bulgacov, 2011; Lee and Monge, 2011).

These approaches allude to some of this conditioning factors can be responsible for the consolidation of cooperation in a network context. Also, others conditioning factors may be considered to justify the consolidation of cooperation networks. For example, according to Franco (2007) the cooperative networks can be achieved with competitive advantages in terms of differentiation and costs.

Glaister and Bluckey (1996) say that the cooperative relationships allow diversifying attractive areas of the business. The share of fixed costs is another conditioning factor that has allowed the consolidation of cooperation networks between business organizations (Ohmae, 1994). From another perspective, Poletto and colleagues (2011) emphasize the importance of verification of conditioning factors related

to knowledge creation and technological innovations, especially, when the knowledge is associated with technological innovations to obtain sustainable advantage in the market.

However, despite the existence of certain consensus among scholars about the importance of these conditioning factors as essential elements to the consolidation of cooperation networks their relational dynamic does not appear in detail in the literature. In fact, there are many reasons that allow the consolidation of cooperation networks happen, but the available studies produced little indication of what is expected to achieve in terms of relative importance of the set of causes. This oc-

curs because when a cooperation network is established many conditioning factors may be present, not just one.

So, this article suggests and specifies a set of conditioning factors that can contribute to achieve the evolutionary trajectory of networks in the consolidation phase. The conditioning factors are been observed in studies discussed in this theoretical references included: Poletto and colleagues (2011), Glaister and Bluckey (1996), Saeed and colleagues (2011), Stacey (2014), Bowen and colleagues (2014), Basuony and colleagues (2014), Fransoo and colleagues (2014), Zaggl (2014), and others. The Chart 1 resumed the conditioning factors suggest here:

Chart 1 - Conditioning factors for consolidation of cooperation networks

Conditioning factors	Operational means	Related Authors
Skills and learning	Learning skills means organizational capable to find solutions on problems offered in a specific field which requires some kind of sound decision making.	Poletto and colleagues (2011), Saeed and colleagues (2011)
Creating competitive advantages	Creating competitive advantages means the process of create value for the market in a different way of others companies.	Sirmon and colleagues (2010), Glaister and Buckley (1996)
Sharing fixed costs	Sharing fixed costs means share a kind of cost that does not change with an increase or decrease in the amount of goods or services produced.	Bleeke and Ernst (1994), Ohmae (1994)
Sharing operational risks	Sharing operational risks means share a kind of risk originated of internal factors of business.	Mowery and colleagues (1996), Sachwald (1998)
Rationalization of production	Rationalization of production means methods of social production in order to improve production efficiency.	Posch (2010), Glaister and Buckley (1996)
Economies of scale	Economies of scale means that how greater amount is produced the production the cost is lowest.	Posch (2010), Glaister and Buckley (1996), Perrow (1994)
International expansion	International expansion means the planned expansion of cooperation network activities into countries in several regions throughout the world.	Chen (2010), Hausman and colleagues (2010), Merchant and Schender (2000)
Technology transfers	Technology transfer means the process of converting scientific technological advances into marketable goods or services.	Saeed and colleagues (2011), Sachwald (1998), Ricks (1994)
Complementarity of resources	Complementarity of resources means that two or more resources that can substitute for one another and, when taken together, increase one another.	Kunzler and Bulgacov (2011), Lee and Monge (2011), Müller-Seitz (2011)
Trust	Trust means the trait of believing in the honesty and reliability of others partners of relationships.	Thorgren and Wincent (2010), Perrow (1994)
Enhancement of competitive and productive capacity	Enhancement of competitive and productive capacity mean when the partner of cooperation network has success with use of inter-organizational structure.	Sirmon and colleagues (2010), Mowery and colleagues (1996), Sachwald (1998)

Source: Review of literature

The Chart 1 also allows the conditioning factors that can be amenable to theoretical investigation of the network environment. Therefore, the importance that each one assumes in the consolidation phase of cooperation networks needs more attention in the literature. For do that, the operational view has suggesting to shown the differences between conditioning factors in the cooperation networks and another concepts in the organizational literature. Then, in this paper, the means of demonstrated conditioning factors are considerate singular because their represent technical features of cooperation network environment.

4. METHOD

To meet the main goal here proposed – to describe the conditioning factors in the process of consolidation of Associação dos Produtores de Vinhos Finos do Vale dos Vinhedos (APROVALE) - were used two studies: documentary research and interviews. Then, it was classified as a descriptive-comparative study. The level of analysis was the study of network, as well, the analysis units were cooperative relationships established between the organizations involved in the history network under study and representative organizations of Brazilian wine industry during the time of achievement of the objectives established in the process of formation of this network. Specifically, the time period studied comprised between 1995 and 2010.

The elaboration process of this research adopted three moments. At first moment it was investigating information on “Conditioning factors and consolidation” identified by research conducted in the databases Business ABI/Inform Global and Business Source Complete, using the terms: inter-organizational cooperation and network, social network and cooperation network, cooperation and collaborative network, and; innovation and cooperation network. These terms should be present in titles, keywords or abstracts of full articles with empirical data, publishing in academic journals in the period from January

1994 to March 2014. Using the same criteria with key words in Portuguese, it was held search in major Brazilian journals of Administration (RAE RAE-Electronics, RAC, RAP, RAUSP, O & S and Read). As a result of this step, we constructed the theoretical categories used in this study showed in charts one and two.

In the second part, it was examined the electronic sites of Instituto Brasileiro do Vinho, Associação de Produtores de Vinhos Finos do Vale dos Vinhedos, and Embrapa Uva e Vinho, with the goal of finding relevant aspects involving the analyzed context. For the data analysis obtained in the phase of documental research, after an analytic review of the documents found, the informations were grouped and summarized into three categories: wine culture on the national scenario, wine culture in the state of Rio Grande do Sul, and wine culture in the Vale dos Vinhedos. For illustrate the insertion context of cooperation network analyzed, this article presents the results in the third category: wine culture of Vale dos Vinhedos, with specificity in Aprovale history. The complete informations about three categories mentioned can be found in Zancan (2014).

It was conduced the interviews in 2011’s in the third moment. This process was made with nine wineries managers associated in the network studied and three representatives from public organizations directly involved in the evolutionary trajectory of this network. Note that this cooperation network appears in Brazilian industry in begin of 1995’s and its consolidation phase was considered in this research only after 1995’s because their initial goals were affected in this time. In this text the consolidation phase was considerate between 1996 until 2010 years.

The content of the questions used in the interviews was about the evolutionary process of cooperation networks, with emphasis on conditioning factors presented in the chart one and two. The table one listed the organization interviewed, the positions of the respondents, and the duration of the interviews.

Table 1 - Interview data

Organizations	Respondent's Position	Duration of interview
Casa Valduga	Marketing Manager	75 minutes
Chandon do Brasil	General director	91 minutes
Cooperativa e Vinícola Aurora	Marketing Manager	63 minutes
Vinícola Miolo	Marketing Manager	84 minutes
Vallontano Vinhos Nobres	Owner - commercial director	100 minutes
Vinícola Boutique Lídio Carraro	Owner - commercial director	61 minutes
Vinícola Cordelier	Industrial Director	64 minutes
Vinícola Dom Cândido	Owner-Managing Director	68 minutes
Vinícola Marco Luigi	Owner-Managing Director	86 minutes
Ibravin	Marketing Manager	125 minutes
Gerência Executiva Aprovale	Executive Director	112 minutes
Embrapa Uva e Vinho	Principal researcher in Aprovale issues	96 minutes

Source: Authors.

For the treatment of the data obtained in the interviews was used the technique of content analysis with axial codification process. This process consisted in reducing information of documental research and interviews with grounds in codes previously set out in the literature. The codes used in this process were the same as presented in charts one and two.

Using the software Atlas TI, three steps were followed for the processing qualitative data. First, the primary document was created and prepared with a text transcription of the documental research and interviews. In the second step, the conditioning factors (codes) were related to the most important parts of the primary document that were related to the same. This generated a frequency table with the number of times with the conditioning factors was approached from the primary document added stretch of primary document that proved the relationship. As a third step, the conditioning factors were related according to the dynamics of appearance. This procedure generated a network graph of relationships between the conditioning factors adopted in addition to the description of events leading to possible consolidation of the network under study.

These methodological characteristics were used to achieve the main objective of this study. So, in the next session of this text we present the results. Note that this text is derived from a larger study that examined the evolutionary trajectory of Associação dos Produtores de Vinhos Finos do Vale dos Vinhedos

(Aprovale) from a comparative study of the context of production of fine wines in the Brazilian industry (Zancan, 2014). This article presents only some part of the relevant results found in consolidation phase.

5. PRESENTATION AND DISCUSSION OF RESULTS

This topic presents and discusses the results found by applying the research method. Specifically, results are shown as some general characteristics of the Vale dos Vinhedos and cooperation network called here how Aprovale (content and documents from websites mentioned in method). The results involving the conditioning factors responsible for the consolidation process of stabilizing and strengthening of the network analyzed (content of interviews).

5.1. General characteristics of Vale dos Vinhedos and Aprovale

Vale dos Vinhedos is a territory located in Serra Gaúcha, more precisely in the northeast region of state of Rio Grande do Sul. The geographical composition is given by the intersection of the cities of Bento Gonçalves, Garibaldi, and Monte Belo do Sul. It is an area characterized by a basin with several creeks and small rivers that bathe a mountainous area of 81 123 km². The genesis of its population was mainly through Italian colonization around 1875's. Italian immigrants

were mostly from the region of Veneto and Trento.

Based on data obtained in the electronic sites, the total area of Vale dos Vinhedos is divided: 26% are found vineyards, 43% forest, and 31% is destined for planting other crops. Also based on these data, it has to be in relation to land use, 10% can be characterized as typically used in urban rural areas. The Vale dos Vinhedos is located just over 120 km from Porto Alegre, the capital of Rio Grande do Sul state. The region of Vale dos Vinhedos presents temperate climate with four distinct seasons. Its landscape changes according to the seasons. When winters occurs, by Brazilian standards, the tourism industry installed in the vicinity of the valley often explores their presence, attracting tourists and indirectly benefits the dissemination of Vale dos Vinhedos touristic structure.

According to information extracted from the electronic site of Instituto Brasileiro do Vinho (Ibravin), we note that the area of the Vale dos Vinhedos is characterized as a place of family farming. This is characterized by the existence of 375 families registered winemakers in the valley. These families tend to organize in the form of cores. Each producer is associated with a winery, usually one that is closest to his property that provides its production of grapes for the winery partner industrialize.

This features represented the social context that the Aprovale is inserted. However, it is noteworthy that the process of network formation did not arise spontaneously among producers located in this region. One of the factors that led to the emergence of that happened in the 1960's and 1970's, when large multinational liquor entered the Brazilian market, increasing the degree of competitiveness for organizations belonging to the Brazilian wine industry. During this period, wineries located in the Vale dos Vinhedos region were not satisfied with the low performances involving their business and Brazilian wine industry as a whole. It was clear that something needed to be done so that the products from the region earned market and competitiveness. Therefore, a cooperative association represented to be a plausible alternative strategy to reverse the precarious condition that permeated the business of these producers (Fensterseifer, 2007).

Thus, in 1995's, seven wineries founded Aprovale: Vinícola Miolo Ltda., Luiz Valduga & Filhos Ltda., Casa de Bebidas Ltda Ind. Casa Cordelier, Vinhos Don Laurindo Ltda., Adega Cavalleri Ltda., Adega de Vinhos Finos Don Candido Ltda., and Casa do

Vinho Graciema Ltda. From what can be seen on the website of the Aprovale, the main objective of its creation was to set in Brazil the first indication of origin (IP) for fine wines and sparkling wines, as well as transform the region from the Valley of Vineyards in the wine tourism route national.

After a process that lasted about eight years, from the creation of the association on November 22, 2002, the Vale dos Vinhedos became the first region of Brazil to obtain an indication of origin (IP) of fine wines and sparkling recognized by the European Union. Among the institutional organizations involved in the process of recognizing geographic that were responsible for drafting and detailing technical studies are: Embrapa Uva e Vinho, Universidade Federal do Rio Grande do Sul (UFRGS), and Universidade de Caxias do Sul.

The holder of IP Vale dos Vinhedos is Aprovale. In late of 2010 years, it had 31 wineries and 39 members non associated producers (cheese factories, hotels, restaurants, hostels, among others). In 2010's, production data shows that the wineries of the Vale dos Vinhedos produced a volume of 10.1 million bottles of fine wines and sparkling wines. This production volume means around 20% of the production of fine wines and 35% of production of sparkling of the total production from the state of Rio Grande do Sul. It amount is very important because this state represents 95% of total Brazilian production of fine wines and sparkling wines.

Thus, it is based on the economic and social importance that this cooperation network has for the Brazilian productive sector that the dynamic of conditioning factors for its consolidation gained relevance. These results may inspire the definition of strategic objectives that will lead to consolidation of other productive networks in Brazil. In the next section we present the results of the analysis of conditioning factors studied.

5.2. *Conditioning factors in the consolidation of Aprovale*

The findings in the processing covering the dynamic of the conditioning factors responsible for consolidation phase of Aprovale were specified in two main sets of results. The first group is demonstrated from a frequency table the incidences of conditioning factors related to the consolidation phase of the Aprovale. The second group provides the generation of relationships network among the conditioning factors shown on the basis of information obtained through interviews with respondents specified. The analysis of first group of results is related on the Table 2.

Table 2 - Incidence of conditioning factors in the consolidation of APROVALE

Conditioning factors identified in the consolidation of APROVALE	Codes	Total Effect of Conditioning factors	Percentage of Incidence of Conditioning factors
Economies of Scale	Code78	46	12,53%
Creating Competitive Advantage	Code67	41	11,17%
Enhancing Productive Capacity	Code75	39	10,62%
International Expansion	Code70	37	10,08%
Sharing Costs and Risks	Code68	36	9,80%
Strengthening the competitive capacity	Code76	36	9,80%
Complementarity of Resources	Code72	31	8,44%
Technology Transfer	Code71	27	7,35%
Rationalization of Production	Code69	23	6,26%
Learning	Code77	19	5,17%
Skills Development	Code66	14	3,81%
Social welfare	Code74	10	2,72%
Trust	Code73	08	2,17%

Source: Research data.

Based on results of first group, it is clear that the conditioning factors most frequently cited were: economies of scale (46 incidents) and the creation of competitive advantage (41 incidents). Although the main products of Aprovale (fine wines and sparkling) constitute high added value products with symbolic values, there is an clear objective that Aprovale's members sought in the process of consolidation of the network: to obtain economies of scale as a survival strategy to make their business sustainable and after to produce focusing on the differentiation of production as a tool for integration and gain market share.

Since the conditions that had fewer incidences were trust (eight incidents) and social welfare (10 incidents). Both determinants indicated qualitative aspects of relationships during the consolidation phase of the network. According to Atouba and Schumate (2010), the results in the low incidence of these conditioning factors can be explained due the maturity of the network relationships during their consolidation phase. The trust and social welfare represent among members of Aprovale issues not so important because this conditioning factors are not directly related to the production process or the ability to generate financial resources for the process of reinvestment in the network structure. Therefore, although its importance is notice, they are put in the background.

Sirmon and colleagues (2010) discussed the process of coordination of network resources using the Theory of Resource Based View. These authors argues that the definition of the strategic objectives of the networks that promote the creation of competitive advantage is related to the following: scope of strategic planning network resources, stages of the life cycle of networks and integration capacity networks in markets. For these authors, according to the time evolution and the strategic priorities of the networks, the goals may be concentrated in the care of issues of immediate nature.

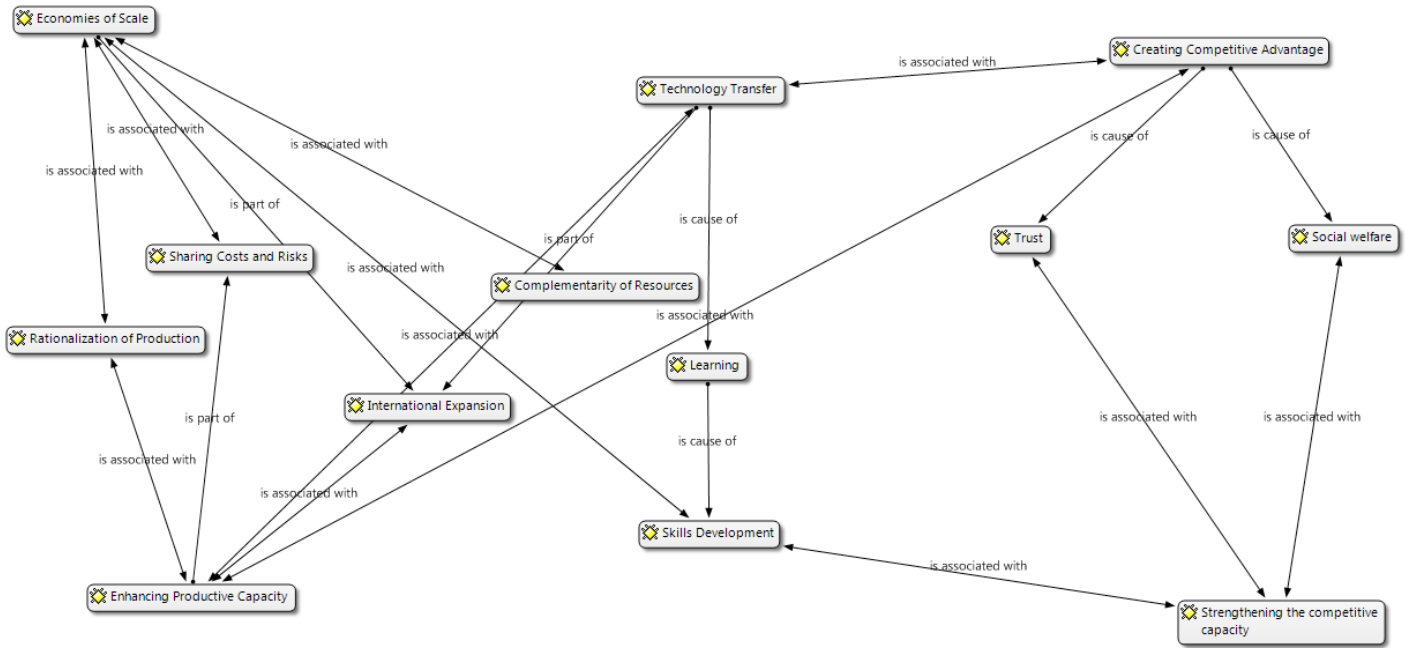
This means that for Aprovale consolidates its main goal: "create the first indication of origin (IP) in Brazil to fine wines and sparkling", was made necessary total emphasis on the orientation of associated strategic resources in productive aspects and differentiation product. Therefore, the orientation of conditioning factors in the consolidation of the network has been more focused on the care of structural issues, such as the ability to generate cash to finance the productive process itself. What explains in this way the importance of the conditioning factors checked in this network.

In the second set of results, we note that the relationships network formed by conditioning factors has been polarized in two points (see Figure 1): the first point, as expected, it shows conditioning factors fo-

cused on the search for economies of scale associated with the creation of competitive advantage. On the second point, in turn, they are allocated to strengthen productive capacity, as well as enhancing the com-

petitive capacity of the wineries involved in the consolidation of the strategic objectives of the network. The entire relationships network on the conditioning factors generated is established in Figure 1.

Figure 1 - Network of Conditioning Factors in the consolidation of APROVALE



Source: Compiled by authors from survey data.

From figure 1, it can be noted that the search of economies of scale was related to several conditioning factors, among them: the rationalization of production, sharing of costs and risks, the complementarity resources, and international expansion. Moreover, the conditioning factors considered in these relations were also directly associated with the strengthening of the productive capacity of the Aprovale’s members, implying interdependence of technical relationships. Technical relationships is understood how the activities associated with shared goals grape cultivation and industrial processing of fine and sparkling wines in Aprovale. These mentioned aspects can be checked on the reports of the study respondents, such as the following:

Here in APROVALE, from 2000’s, there is much talk in spirit of networking, which is sought integration and complementarity of resources among wineries, even when it is discussing ways to access new markets, for ex-

ample, the international. In fact, I consider it is important, but what we really do is work on increasing our production and distribution capacity, thereby achieving lower the fixed costs of production. The Brazilian consumer wine is sensitive a price and taxation. These components are obstacles in the production and trade process. The solution found for the maintenance of our business is the cost dilution with increasing quantity produced and sold (Excerpt from interview with Manufacturing Director for one of the wineries).

In the other direction, creating competitive advantage in the relationships network generated can be characterized as the cause of actions aimed at social welfare and building processes of trust relationships established among members of the network. Since both the trust, such as concern for the welfare in the context of integration of inter-organizational structures, elements are related to increased orga-

nizational competitiveness (Thorgren and Wincent, 2010). It makes interested alternative to the network because it demonstrates an alternative strategic to creation of competitive advantage, surpassing the simple relation activities directly related to the productive aspects.

Kunzler and Bulgacov (2011) checked methodologies for evaluating the performance of the participating associations of farmers in Quatro Pontes (PR). These authors reached similar results those found in Aprovale. It is highlighting the importance of subjective aspects in the performance evaluation of networks. For these authors, members can take advantage of associations as a means of improving competitiveness and achieving complementary skills, access to new markets, opportunities for synergy, and mutual learning. The structure of relationships that involves associations of farmers is used as an instrument of transfer official resources to promote economic, social, and informational associates. What it can enable, maintained, and innovate the productive base.

In the network studied, despite the conditioning factors of qualitative importance in the background of the members, for the reasons already stated in this text, there is a concern of the network strategic direction to emphasize these aspects in the long run. This finding can be seen in the report made by the network manager.

Our concern with the welfare of the community in environmental insertion of wineries and hence the network goes beyond simple concern to meet regulations of environmental legislation. Rather, the main objective of this relationship is to create lasting competitive points in the long run, in which the productive activities developed in the wineries will be considered in the future as a piece of landscape that characterizes the Vale dos Vinhedos because reflect the tradition and culture of the community site (Excerpt from interview with the representative of Aprovale).

It is important to highlight that technology transfer in Aprovale during the consolidation process was associated with the pursuit of economies of scale and the creation of competitive advantages. This association between the conditioning factors can be seen as the process from technology transfer between the partners did not involve only aspects related to the manufacturing process. This practice also encom-

passed elements that comprised the whole dynamic of the business industry of fine wines and sparkling wines, including tourism activities that have been developed under the main business network.

This conditioning factor reinforces the perception that both the search for economies of scale and the creation of competitive advantages were important features related to the process of transfer of knowledge generated by the activity of management of winery members in the network, whether that knowledge has been of nature operational or strategic. By this is meant that the technology transfer in Aprovale can be characterized as an important cause of the learning process between associates. It is clear because specific activities involving associates configured themselves during the consolidation phase of the network, for some, such as news, for others, as essential to maintain market competitiveness. Thus, both situations fostered a process of continuous learning in the network.

The evidences found in these situations are explained from Saeed and colleagues (2011). These authors identifying two trends to explain the increase of technological complexity of the new environment in which associates Aprovale were inserted during the consolidation of the network. The first trend relates the increasing complexity of the production process in terms of the number of inputs required, which led to small associated increase in the use of external resources, including the management area. This trend was reflected in the production process that came to be used because the structure began to have greater complexity.

A second trend concerns the increasing body of knowledge and skills needed to be integrated in order to make feasible the production of standard network products. For instance, the standard of the indication of origin how make possibility of differentiation of these products in the market consumer. Saeed and colleagues (2011) argues that the complexity of integrated technologies and the network level affect the nature of the learning processes generated in network structure because the extent that imposes certain requirements relating to the integration of knowledge and skills.

In Aprovale, it was observed that certain characteristics of the knowledge base needed to generate differences in the products produced during the consolidation phase of the network. It's affected the possibilities of cooperation between members. The

first characteristic involved was tacit knowledge to the production process of fine wines and sparkling wines, mainly those who were engaged in expressive associates that were part of network after its formation. Note that although the network has been composed by small businesses in 1995's, at the time of consolidation of the initial objectives, large groups were part of it, including multinational structure in the area of Research and Development.

Another important feature is related to the complexity of the existing knowledge base in Aprovale, specifically: the diversity of disciplines and technologies that needed to be integrated in order to generate innovations in the common network and a different set of skills related to the process production and product attributes and demand. In this sense, Posch (2010) points out that the more complex the knowledge base, more necessary is the development of specific mechanisms to integrate the various fragments of knowledge generated externally, reinforcing the importance of cooperative links with other organizations, as well as transfer mechanisms that facilitate this integration.

In another perspective, Gottardi and Hens (1996) show that the noncomplex products generated affects the intensity and orientation of innovative efforts undertaken in cooperation networks of agricultural production. In fact, these efforts that took place in the structure of Aprovale assumed an unsystematic characteristic that involved incremental innovations based on learning mechanisms that emerged as products of the production practices and the related practices adopted by different organizations associated with internal or external links with this network.

Thus, it becomes evident that the process of consolidation of Aprovale was necessarily based on a set of systematic learning interactions among different actors present in the context of integration, including: Instituto Brasileiro do Vinho, Universidade de Caxias do Sul, SEBRAE, Ministério da Agricultura e Desenvolvimento, among others. This allowed a standardized formatting of knowledge by demands of the learning process necessary for the consolidation of activities among their members. This inclusion of external organizations in the reality of the network also allowed the complementarity of resources required to achieve the initial goals of Aprovale because before the start of network they do not available internally.

On the other view, in situations where the associated knowledge demanded by more complexity, beyond the common objectives adopted in the network, there is no standardization of information flows and organizational procedures. However, the learning network structure remained in full development, adopting directions common, despite the differences of the associated strategy. For this reason, the process of learning obtained was associated with other conditioning factors, including those related to international expansion as well as the conditions that the complementarity of resources.

In summary, the results obtained by the analysis of conditioning factors identified as responsible for consolidation of Aprovale the economies of scale and the creation of competitive advantage. These two conditioning factors consisted in the start points that involving the dynamic execution of this phase of life cycle of the network analyzed. In this direction, it is salutary to realize that in Aprovale the achievement of economies of scale was related to technical activities (planting and production) and commercial (distribution). Otherwise, relating to the creation of competitive advantage, the conditioning factors were linked of a more qualitative (relational) such the development of processes of trust and social welfare.

We conclude from this that during the consolidation phase of the network the technical and commercial procedures were related to strengthening the capacity of members to establish relationships with organizations external to the network. Thus, the more qualitative conditioning factors were linked with the strengthening of competitiveness. This two directions of development allowed the intention of strengthening competitive more sustainable and durable than those built only in terms of production and short-term concerns.

6. THE FINAL CONSIDERATIONS

This study aimed to describes the conditioning factors in the process of consolidation of Associação dos Produtores de Vinhos Finos do Vale dos Vinhedos (APROVALE). Therefore, based on the concept of networks perceived as cooperative strategies were analyzed perceptions that network managers, and institutions working in the wine industry in Brazil, regarding relationships established in the network that were oriented towards the objectives set out in its training.

General results showed that the consolidation of Aprovale enabled the development of their associates, impacting the way of action of the wineries with the markets insertion regional/national or by innovations in products, processes, and management. Also it causes changes in the relations established between the associates and entities representing of Brazilian wine industry.

In the consolidation of this network, the influence of environment competitive forces, the arrival of multinationals in Serra Gaúcha, and adoption of new technologies winemaking were the landmarks that define the model of the organizational structure required: the Indicação de Origem Vale dos Vinhedos. Therefore, the most prominent conditioning factors were tied in achieving economies of scale and the creation of competitive advantage, consisting of the crucial issues involving the dynamics of achieving this phase in the analyzed network. Conditioning factors of a more qualitative aspect (relational), as the development of processes of trust and social welfare were also present in the consolidation of the network, despite its lower expression in the dynamics perceived. These qualitative conditioning factors involved long-term strategic issues, being fostered by ideals of sustainability and lasting growth of the network.

The studies proposed by Ring and Van de Ven (1994) and Franco (2007) show that the process of overcoming challenges experienced by the networks of cooperation during its evolution causes associated successfully modify the forms of established relationships. In this direction, it was noted in the consolidation of Aprovale that the incorporation of new knowledge through sharing and complementarity of resources managed by external organizations made possible the achievement of the main goal of the network, preserving internal differences of the members and their level of competitiveness. It shows the main empirical contribution of this study to point out that the breakdown of relations between the conditioning factors of consolidation presented, suggesting an alternative way for new researchers and network managers developing more discussion and scientific studies about the dynamic of inter-organizational relationships.

Future studies are suggesting on the analysis of the action of the conditioning factors checked in the process of consolidation of Aprovale in other evolutionary phases, such formation and development phase. In addition, it was recommended checking the ex-

ternal influence that personal relationships being in other contexts and different industries represent in the process of consolidation of cooperation networks. Finally, this text directs the investigation of dynamic differences on conditioning factors in others similar productive context.

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