Small-Firm Networks and strategies for consolidation: evidence from the Brazilian context

Douglas Wegner
Unisinos University, Postgraduate Program in Business Management, São Leopoldo, Brazil

Ingridi Vargas Bortolaso
University of Santa Cruz do Sul, Postgraduate Program in Business Management, Santa Cruz do Sul, Brazil

Patrinês Aparecida França Zonatto
University of Vale do Itajaí, Postgraduate Program in Business Management, Biguaçu, Brazil

Abstract

Purpose – This study aimed to analyze the strategies adopted by small-firm networks (SFNs) to achieve consolidation.

Design/methodology/approach – This study was conducted in two stages with a qualitative approach. The first stage aimed to identify consolidated SFNs in the southern region of Brazil. The second stage consisted of analyzing three case studies to investigate which strategies they adopted to reach consolidation.

Findings – The results show four specific strategies implemented by the SFN to expedite their consolidation: adoption of a network administrative organization; hiring of professional managers; a portfolio of services to support network members; and cooperation and merger of SFNs.

Originality/value – The analysis of the three consolidated SFNs provides a better understanding of the network development process and the strategies adopted for their evolution.

Keywords – Interorganizational cooperation; small-firm networks; cooperation; strategy.

Review of Business Management

Douglas Wegner / Ingridi Vargas Bortolaso / Patrinês Aparecida França Zonatto

1 Introduction

Despite academic progress in understanding the reasons which lead firms into establishing interorganizational networks and achievable benefits through such a strategy (Borgatti & Foster, 2003; Brass, Galaskiewicz, Greve, & Tsai, 2004), there is still a limited number of studies addressing the network as a unit of analysis (Brass, 2007; Provan, Fish, & Sydow, 2007; Zaheer, Gözübüyük, & Milanov, 2010). Analyzing the whole network is important to understand the network's development, governance and how collective outcomes are reached. Provan, Fish and Sydow (2007) propose a redirection in the focus of analysis on the structures and processes of the whole network rather than on the firms that compose it.

An interorganizational network is a collaborative agreement amongst firms which identify common goals and work in partnership to share knowledge and improve competitiveness (Dean, Holmes, & Smith, 1997). Collaboration tends to be more important and even crucial for the survival of smaller firms due to their lack of resources and legitimacy (Moreira, 2013). Despite a broad typology of network models (e.g. Grandori & Soda, 1995; Todeva, 2006), the networks we focus on throughout this paper consist of cooperative relationships among small firms, called small-firm networks-SFN (Jarillo, 1988). They are formally established, governed and goal-oriented (Kilduff & Tsai, 2003). Relationships among SFN members are primarily non-hierarchical, and participants often have substantial operating autonomy and may ask to leave the network once it is perceived as most convenient. Through cooperation, the firm may obtain benefits such as access to services, risk sharing, legitimacy and status (Podolny & Page, 1998; Lotia & Hardy, 2008), access to new knowledge (Dagnino, Levanti, Minà, & Picone, 2015), learning (Powell 1990; Knight & Pye, 2005) and social capital development (Inkpen & Tsang, 2005). Knowledge exchange among network members minimizes uncertainty and the risk of opportunistic behaviors (Pereira, Brito, & Mariotto, 2013).

Considering that SFNs focus on widening competiveness of its members and seeking market consolidation, this study aimed to analyze the strategies adopted by SFNs to reach consolidation. From a theoretical point of view, the study is justified due to a lack of research addressing the dynamics of collaboration or looking into the strategies that lead to SFNs consolidation, as pointed out by Doz (1996), Oelsnitz and Tiberius (2007) and Tiberius (2008). From a managerial perspective, this study is justified because it describes the strategies SFNs may adopt to reach consolidation. To accomplish such goal, interviews with 28 SFNs members from southern Brazil were recorded and case studies involving three consolidated SFNs were analyzed.

The paper is organized as follows: the first section presents a discussion on the dynamics of SFN development and the factors that may contribute to its consolidation. The methodological procedures are presented in the second section, followed by the empirical study in the third section. The results of this study are described in the fourth section, in addition to research implications. The last section comprises final remarks and directions for future studies.

2 The development of Small-Firm Networks

Although SFNs are usually described as static entities, they are characterized by their various stages of initiation and development (Ceglie & Dini, 1999; Child, 2001; Oelsnitz & Tiberius, 2007; Tiberius, 2008), as structures of dynamic nature which undergo modifications over time. SFNs face dynamic evolution because members may change their goals during their participation, leading to internal adjustments or the rupture of previously established relationships (Ebers & Grandori, 1999).

A scarce number of authors have analyzed the dynamics of cooperation. Some follow

the logic of a product life cycle with stages of initiation, development and decline (Dwyer, Schurr & Oh, 1987; D'Aunno & Zuckerman, 1987). Others establish analogies comparing the life cycle stages as if they were a personal relationship (Ahlström-Söderling, 2003; Zineldin, 2002). Thus, each author uses different names and adds new stages to their models. Ring and Van de Ven's (1994) model stands out with a proposal considering the cyclical character in the evolution of interorganizational relationships. There is also a lack of empirical studies exemplifying how the life cycle model applies to interorganizational relationships. Ahlström-Söderling (2003) is the only one who has applied the model in a case study of a business network in the furniture segment. Due to the lack of models that analyze the pattern of the development of SFNs, Wegner, Alievi and Begnis (2015) proposed a model which specifically considers the characteristics of this interorganizational network model.

2.1 Developmental stages of SFNs

Based on existing studies for the analysis of interorganizational network dynamics (Ring & Van de Ven, 1994; D'aunno & Zuckerman, 1987), and taking into consideration the fact that existing models lie on strategic alliances or partnerships, Wegner et al. (2015) proposed a life cycle model for SFNs. The model describes six stages that characterize the dynamics of SFNs development. Network conception takes place in the first stage. Entrepreneurs meet to gain understanding of the logic of cooperation and discuss any possibilities of joint actions. Great levels of participation and commitment are perceived in this stage, although there is little exchange of strategic information due to a low level of interpersonal trust. The second stage consists of the network's birth and formalization. A board of directors is elected and management support teams are established. The primary collective goals and the network's strategic planning are prepared. The process of defining goals and strategic planning may not only contribute for the desertion of entrepreneurs

generating a natural selection, but also for an improvement in the level of trust among the remaining network members.

At the development stage, an SFN has its management structure set and governance rules improved. Opportunities to exchange information and experience stimulate strong social interaction. The SFN already has a strategic alignment and offers a service portfolio that generates benefits for members. However, efforts to accomplish goals may lead the network to critical crossroads demanding new efforts for consolidation or lead to a process of decline. In the stages of consolidation and maturity, an SFN reaches the highest level in the life cycle. The SFN puts in place a professional management structure and hires managers to carry out activities. Governance tends to move towards a network administrative organization (NAO). The service portfolio offered by the SFN to the members is wide and qualified.

However, a lack of adjustments and improvements in the network structure, process and governance may lead it to decline, another SFN life cycle stage. Entrepreneurs focus on individual actions as their priorities instead of collective goals and actions. A break in trust among entrepreneurs and network managers may occur. Conflicts rule over and some participants leave the network at this stage. Unless the SFN performs the necessary changes and improvements, it becomes impossible to revert the decline and the SFN will end up at the dissolution stage. In this stage there is no longer a structured management or even services provided by the network. Governance rules are not followed and participation and engagement among entrepreneurs is almost inexistent.

The model also indicates a period of restructuring which was previously pointed by Ahlström-Söderling (2003). Restructuring is not a stage in the life cycle, but an adjustment for SFNs to remain in existence along time. Even consolidated SFNs must go through transformations to avoid decline and dissolution. According to Ahlström-Söderling (2003), a justification for that lies on changes in resources,

527

information and partner's expectations, whose interests are always focused on getting more advantages out of the network.

2.2 SFNs consolidation drivers

The authors who propose theoretical models for an analysis of the dynamics of interorganizational networks (Dwyer et al., 1987; D'Aunno and Zuckerman, 1987; Ahlström-Söderling, 2003; Zineldin, 2002) also suggest factors that may be used to analyze the network life cycle. The quality of interpersonal relationships and participants' level of motivation are considered key factors to support cooperation (Spekman, Forbes, Isabella & Macavoy, 1998; Ring and Van de Ven, 1994; Zineldin, 2002). Adopting standards and rules for cooperation (Dwyer et al., 1987) and placing collective interests above individual ones (Dwyer et al., 1987) are also cited. Another key factor for developing cooperation is the need to make strategic and cultural adjustments amongst participants (Dwyer et al., 1987). The model proposed by Wegner et al. (2015) presents six factors for analysis divided into two categories: i) network organization and management; ii) relationships and exchanges between members. Such factors may influence network development and therefore should be considered in developing strategies for network consolidation. These factors are discussed in the following two sections.

2.2.1 *Network's organization and management*

One critical factor of interorganizational cooperation relies on the definition of the network governance. It refers to the design of the structure and mechanisms of SFNs internal coordination (Provan & Kenis, 2007; Albers, 2005; Theurl, 2005). Governance rules aim to balance conflicting interests between entrepreneurs to ensure the SFN's long term viability, especially when members have diverging interests and information asymmetry (Theurl, 2005). The typology proposed by Provan and

Kenis (2007) suggests three distinct modes of network governance. In the shared governance mode, members are in charge of making decisions and performing the activities of the SFN. This mode tends to enhance internal legitimacy, but it may also become inefficient as the network grows and demands more dedication and engagement from its members (Provan & Kenis, 2007). In the governance mode with a leading organization, there is a member with more legitimacy to take over the role of leader, common in the case of strategic networks organized by a large company (Jarillo, 1988; 1995). A third form of network governance is the network administrative organization (NAO) model. The assumption is that a separate administrative entity is created specifically to govern the network and offer support for operating activities (Provan & Kenis, 2007).

Different from governance, network management refers to a number of processes and practices carried out by a group of individuals focused both on the direction to be taken by an interorganizational entity and on the allocation and implementation of resources to reach such goals (Hibbert, Huxham & Smith Ring, 2008). The management of a network consists of constant negotiations between a group of autonomous organizations (Sydow, 2006; Järvensivu & Möller, 2009), which demands special skills from leaders (Provan & Lemaire, 2012). Sydow (2006) complements that the management of an interorganizational network comprises significant changes in management practices and roles in comparison with the ones used by hierarchical organizations. The third factor for the analysis of the organization and management of SFNs relies on the services portfolio offered by the SFN to participating firms. Several studies investigated the role of SFNs in the implementation of services put together by participating firms (Graddy & Chen, 2006; Isett, Mergel, Leroux, Mischen & Rethemeyer, 2011; Mays & Scutchfield, 2010; McGuire, 2006; Milward & Provan, 2006). Furthermore, the NAO can offer services

focused on improving members' competitiveness by providing solutions that individual firms would not be able to develop themselves (Best, 1990, Bazzoli et al., 2003; Shortell, Zukoski & Alexander, 2002). For instance, Ahlert, Backhaus, Bovensiepen and Ewig (2006) reported that major SFNs in Germany offer a wide set of services to members, such as negotiation, collective purchase, marketing strategies, human resource development, financial services, quality control and market research.

2.2.2 *Relationships and exchanges*

Relationships and exchanges amongst participants are also important factors for network development. The role of trust in cooperation has been widely addressed by scholars (e.g. Sydow, 1998; Bachman, 2001; Krishnan, Martin & Noorderhaven, 2006). Studies point out that a successful interorganizational relationship is based on trust between members. When a lack of trust and a high risk of opportunism is noticed by network members, the cost of managing the cooperation through contracts and safeguards may become infeasible (Sydow, 1998). Trust works as a complement for formal governance and is called relational governance (Zaheer & Venkatraman, 1995; Poppo & Zenger, 2002; Yu, Liao & Lin, 2006).

The existence of interpersonal trust also stimulates information exchange and influences network members to share knowledge (Inkpen & Tsang, 2005). A trusting environment enhances an exchange of information not available for those outside the circle of trust (Leana & Pil, 2006). Strong ties are a crucial factor to enhance knowledge exchange. Kale, Singh and Perlmutter (2000) indicate a positive relationship between the tie strength and the level of learning in an SFN.

Finally, SFN members' interest and motivation can be measured by their active participation and commitment towards performing collective activities. "A critical issue to the longer-term effectiveness of a network, whether emergent or mandated, formal or informal, appears to be allowing time for trust and commitment to be built" (Popp, Mackean, Casebeer, Milward & Lindstrom, 2013, p. 28). Therefore, monitoring and guaranteeing participation and commitment through management practices is a task for SFN leaders (Sydow, 2006). Hendry, Brown, Defillippi and Hassink (1999) highlight that a key group of organizations and their leaders often play a central role in the network as the main carriers of rules and practices. The level of commitment is a measure of the benefits generated by an SFN as well as participant satisfaction with the management style being performed and the governance rules established by the network.

Obviously mutual influence may take place among these six factors. The governance mode adopted by the network may impact the level of participation by the entrepreneurs. A high level of participation is essential for the network functioning in a shared governance mode (Provan & Kenis, 2007). However, it may become inefficient as the network grows (Gomes-Casseres, 2003). NAO governance mode may lead to a lower participation of entrepreneurs once managers in charge of network activities are in place (Provan & Kenis, 2007). Likewise, the SFN may adopt managerial practices to boost participation, development of trust and exchange of information. A service portfolio that is designed around the interests of participants to make them more competitive tends to favor commitment towards collective actions. The option of a network for a certain mode of organization and management of activities should take into consideration any possible impact towards interpersonal relationships and a trusting environment.

3 Method

This study was carried out with a qualitative approach in two stages: i) an exploratory phase aimed to identify consolidated SFNs in Southern Brazil; ii) multiple case studies to analyze in depth the consolidated SFNs and investigate which

Douglas Wegner / Ingridi Vargas Bortolaso / Patrinês Aparecida França Zonatto

strategies they adopted to reach consolidation. The qualitative approach was chosen because it enables the identification of SFNs which were able to consolidate in the market as well as investigating in depth these networks to understand their developed strategies to reach consolidation.

3.1 Exploratory research

The exploratory stage was performed between August and October 2012. It consisted of mapping all SFNs created since 2000 in central Rio Grande do Sul, a state located in Southern Brazil. We identified twenty-eight SFNs in manufacturing, retail, services and agribusiness segments and performed interviews with all 28 SFNs' presidents in order to identify consolidated SFNs. The research protocol was based on the six factors described in the literature review and the information taken from the interviews was confronted with the stages of the life cycle model proposed by Wegner et al. (2015). This procedure allowed for the classification of each SFN and aimed to identify consolidated SFNs to be studied thoroughly in the second stage of the research. Two researchers analyzed each SFN separately and, if any conflicting data emerged, a third researcher was called in for further analysis. Flick (2008) suggests that a triangulation from different researchers improves quality and lowers the risk of bias assessments. Only three out of the 28 SFNs were considered as consolidated and, therefore,

selected for the case studies. These networks presented high development levels concerning the majority of organization and management factors, as well as relationship and exchange ones.

3.2 Case studies

The second stage consisted of case studies with the three consolidated networks. For confidentiality reasons, the real name of each network has been preserved and a fictitious name was used throughout the data analysis. The first network is part of the building materials segment. It was created in 2003 by four hardware stores and, in ten years, it reached a number of 145 members. The second case study consists of a network of drugstores created in 2005 by 11 members and, in 2013, it was formed by 35 members. The third network is made of paint shops and it was created in 2008, having 40 members in 2013.

Interviews with three members of each SFN were carried out for data collection: the president and two participant members selected by convenience. The choice for interviewing the president is due to their knowledge of the SFN history and development. The completion of two other interviews with member firms aimed to reduce any possible biased information provided by the president. Table 1 presents a summary of information on such SFNs indicating the business segment, founding year, initial number of members, and total participating firms at the time of data collection in 2013.

Table 1
Researched SFNs

SFN	Segment	Year	Members	Interviewees
The Hardware Store Network (HN)	Building materials	2003 *	4	Network President (HN-NP) Member 1 (HN-M1) – member since 2004
		2013	145	Member 2 (HN-M2) – member since 2009
The Drugstore Network (DN)	Drugstores	2005*	11	Network President (DN-NP) Member 1 (DN-M1) – member since 2008
		2013	35	Member 2 (DN-M2) – member since 2010
The Paint Shop Network (PN)	Paint Shops	2008 *	14	Network President (PN-NP) Member 1 (PN-M1) – member since 2008
		2013	40	Member 2 (PN-M2) – member since 2008

Note: Year of network foundation.

Data collection procedures followed the dimensions suggested by Wegner et al. (2015) and that were presented in the literature review: (a) network governance (Provan & Kenis, 2007), (b) network management (Hibbert et al., 2008; Järvensivu & Möller, 2009) and (c) service portfolio provided by the network (Best, 1990). We also analyzed (d) member participation (Sydow, 2006), (e) information exchange (Leana & Pil, 2006) and (f) trust (Poppo & Zenger, 2002). The interviewed network members were inquired about the SFN's current status in relation to the appointed dimensions, as well as any changes occurred over time within each dimension. This approach allowed us to identify the strategies adopted by the SFNs to reach consolidation.

The interviews took place at the firms' headquarters between February and March 2013 and they lasted from 30 to 45 minutes each. They were all recorded, and the interviewees identified as the network president (NP) and network members (NM1 and NM2). After this initial phase, the research team performed a content analysis of the collected data of each network's current situation and cross-analyzed the data with the description of each phase of the life cycle model of Wegner et al. (2015). This procedure was followed in order to confirm whether they refer to consolidated SFNs.

We then analyzed the questions in which the interviewees described the changes which occurred in their corresponding SFN for each of the analysis dimensions and the strategies adopted by the network. This analysis allowed us to identify the strategies implemented by each SFN to reach consolidation. Empirical evidence from each case was cross-analyzed with the theory regarding the factors of the literature review. Then the cases were compared to identify similarities and differences that allowed us to achieve our research goals regarding strategies for the consolidation of SFNs.

4 Results

The three SFNs selected for the case studies are based in central Rio Grande do Sul, a state in Southern Brazil. These SFNs were formed by or received support from a public program that was in place for almost a decade in partnership with the state government and regional universities. Followed by the introduction of the three SFNs, a cross-case analysis was performed.

4.1 The hardware store network (HN)

The Hardware Store Network was formed in 2003 by four hardware stores in the construction segment located in the same geographic area. The first strategic action after network creation was to search for new members to increase its bargaining power. After 10 years in the market it went from 4 to 145 members, spread over a large geographic area. It is currently recognized as one of the biggest SFNs in the hardware segment in southern Brazil in terms of number of participants. Due to its growth, the network has participants with various profiles and plans to develop actions to qualify its retailers' management skills. According to the president "the idea is not to further grow but yet to improve participants' competencies" (HN-NP). Such action is necessary as many members are small firms with a poor management system in place and therefore cannot follow the SFN's strategies, thus jeopardizing the network's development and consolidation.

4.1.1 Network's management and organization

An elected board of members manages the network for a two-year term. Governance is regulated by formal contracts such as bylaws, code of ethics and internal rules. These legal terms set forth standards and rules for the network's functionalities and member behavior, including sanctions for those who disrespect rules. "We have set rules, for instance, on default [members over suppliers]. (…) Some participants were notified of the problem, which standard was neglected

and the reason for their exclusion or suspension" (HN-NM2). Specific situations not anticipated in existing documents are submitted to a general members' meeting where any decision is supreme. Decisions are made by vote in the meeting and each participating firm has the right for a vote and the final decision is made by the majority.

Apart from the board of directors, the SFN currently has a management team in charge of organizing operating activities and setting meetings for strategic decisions. According to the HN-NP "we started with one employee in the administrative department and another one in the commercial area. Later on, we hired a supervisor, another secretary and so on" (HN-NP). The SFN also currently relies on a hired consultant and employees to do the operating activities in the network's headquarters. Although the network began by following a shared governance mode, it later opted for a NAO model to offer support towards growth and development strategies. In the governance mode adopted, the SFN's executives propose and conduct strategic projects. The board comprising network members meets once a month and the members' general meeting takes place quarterly demonstrating that the NAO has the autonomy to make decisions.

Services for participating firms mainly consist of group purchases and marketing actions based on the network's brand name. One of the most important projects developed by the network since its foundation was the creation of a logistic and distribution center to generate scale gains. This logistic center provided SFN members with a higher level of competitiveness because it allowed for better negotiation with suppliers. However, the structure began to generate problems due to high storage costs. According to HN-NM1, "the network lost a little control, lost focus (…) There was a high turnover [of products in the logistic center] and small profit." It was necessary to change the project for the logistics center and restructure the SFN to avoid financial loss which could destabilize the group and lead it to its decline.

4.1.2 *Relationships and exchanges*

The relational environment within the network is considered positive according to the three interviewees. HN-NM2 reports that "we feel at home in meetings." A justification for this environment free of conflicts may rely on the fact that the firms "are from different cities. There is no competition, we are all partners" (HN-NM1). To maintain a positive environment, a rule was placed in the contract determining that new members cannot be direct competitors.

Because of the fast growth and geographical extension of the SFN, there was a reduction in members' participation in meetings and activities which required their presence. The network president reported that only about 40% of members attend meetings due to the distance and travel time to and from the headquarter. To settle such an issue, the network opted for setting regional meetings so that members from distant cities could take part in discussions and increase the number of entrepreneurs participating in the network activities.

Even though the exchange of information among members is considered important and beneficial according to the interviewees, lesser interpersonal contact and exchanges were noticed as the network grew. According to the HN-NP: "I think the exchange of information still occurs, but we noticed a decline in friendship. Because of its growth, people distanced themselves. However, in the regional network groups we see that news coming in is shared by calling one another. This still happens." HN-M2, whose store is around 100km from the headquarter adds that "we can't manage to [exchange information], it's too far, so everyone takes care of their own businesses and there is no time left, unless [it is] for meetings, that's when we get together." Communication and exchange of information have reduced over time and it currently seems to be more noticeable between headquarter and members rather than amongst participants themselves.

4.2 The drugstore network (DN)

The SFN was founded in 2005 by eleven members. Soon after activities began, there was a quick process to attract new members with a similar strategy used by the building network, since gaining scale was noticeably necessary to obtain benefits. The drugstore segment is one that concentrates the highest number of SFNs in Brazil (Sebrae, 2012). In 2012, the SFN decided to establish a cooperative relationship with two other SFNs that operate in the same segment to expand operations. According to the network president, "what happened in this year…had always been a dream of mine, to unite three networks. Then we negotiate as a group, and we have about 150 stores" (DN-NP). This alliance has a positive impact on the network's service portfolio and also on negotiating with suppliers, due to an increase in the number of members.

4.2.1 *Network's organization and management*

During the first years in operation, the SFN was managed by the entrepreneurs themselves in a shared governance mode, but this became unviable with growth. According to the NP, the first governance mode adopted demanded a high level of member engagement. "I just about left my drugstore, which I ran by myself, for two years to take care of the network, and as the president I don't get paid… it's complicated, that's why we opted for hiring people to work on the network's expansion and structure the network management in a better way.(…) We have three people working in the office today" (DN-NP). Hence, the network hired a consultant "who is advising the members and also structuring our office. This meant a big step forward for the network and more people working in our office" (DN-NP). The managers hired are in charge of maintaining the contact with all firms, informing about merchandising orders, marketing actions and operation deadlines.

With a change in governance mode, strategic decisions were made by the board of directors with support from managers and the hired consultant. Another change introduced in this network is holding meetings without involving all participants. The SFN used to make general meetings with all members' participation in the past. According to the president, "there were meetings with everybody together but they didn't flow very well. …too many people to make decisions. It didn't work out, I think it's much better this way now" (DN-NP). The option for centralizing decisions on the board of directors and less involvement of members accelerated the decision-making process and allowed the SFN to be more pro-active. However, it seems to have disadvantages, as DN-M1 pointed out: "we used to participate more before and now we just get notified [of decisions]. (…) As I used to actively participate before, I miss the integration nowadays and to be more in tune with everything that is happening [in the network]." From this statement it seems clear that this change in management style has negative consequences for the SFN in terms of participation and entrepreneurs' satisfaction.

4.2.2 *Relationships and exchanges*

The governance mode based on a NAO has implications that inflict on interpersonal relationships, the level of participation and exchange of information within the SFN. On one hand, the president affirms that the SFN is characterized by little conflict: "We are like a family, very united" (DN-NP). On the other hand, with the change in the network governance there was a reduction in meetings and in on-site events. According to DN-M1, "when I disagree with something, my only alternative is to complain by email." This denotes a change provoked by the management style and makes the network less cooperative. DN-M2 reports a difference in relationship amongst founders and more recent members. "They have a much stronger link than us [recent members]. They started the network and therefore, were together since the idea [of cooperation] came along" (DN-M2). The changes in management style and coordination of activities do not seem to favor integration in the network.

molding them to reach an appropriate standard procedure" (PN-M1). With the adoption of an NAO the network modified the way of conducting business. In the past "everything was brought up [all matters and whatever needed to be resolved] to the group meeting; it didn't work out. So changes were made. We gain time by doing so, too" (PN-M1), referring to the alterations to the SFN governance mode which provided more autonomy to the managers and the board of directors.

Concerning the services portfolio offered to its members, the SFN aims to gain better prices and conditions with suppliers, "seeking new partners and discounts to be passed onto consumers; or to increase the firms' markup" (PN-NP). Moreover, seminars and training sessions to improve participating firms' customer service are in place as confirmed by the PN-M2: "the network itself is covering these costs and this is an ongoing operation; some shops are already making use of the services."

4.3.2 *Relationships and exchanges*

The three members consider the internal environment to be highly positive. As for the president, the relationship among members throughout time favored close relationships and reliability: "besides handling business matters, we created a circle of friends" (PN-NP). There is no conflict amongst members, and according to the president the rules stated in the bylaws and internal standards are clear and favor a transparent environment for members to perform their business. It does not mean that arguments and controversies that cause resistance from some members do not exist, but they are manageable in reason of the favorable environment.

A strategic action adopted by the SFN to improve member interaction and encourage closer ties was the realization of roving meetings in each shop. "Every month, meeting takes place in a different store. (…) the members visit the shop, get to know the products, ask about this and that…" (PN-NP). As for the number of members

participating in activities, the president states that "around 50% [of members] are in virtually all meetings.(…) There are always some in the background and whatever happens is okay for them" (PN-NP). But PN-M2 says that the level of participation is very high and the entrepreneurs "became more connected over time" (PN-M2), with more participation than in the past.

The exchange of information among members is seen as a significant gain by all interviewees. Business meetings represent opportunities for social integration: "there is always an agenda to be discussed, which is strictly followed; and the reading of the minute of the day and everything else within legal procedures is done; but before that, there is always an informal chat. (…) It's the off-the-record conversation" (PN-NP). Such interaction was built step by step, revealing that time and practices adopted by the network to integrate members favored cooperation and exchange of information. As reported by PN-M1, "today we have an open conversation...as if we were pals, partners. At that time [beginning of the network], it was complicated to even make a decision (…) because of long-term cases of competition between some network members" (PN-M1).

4.4 Comparative analysis

The researched SFNs hold similar organization and management characteristics. The three networks initially adopted a shared governance mode. With the development and increase in the number of participants, they opted for a new governance mode based on an NAO, considered by Provan and Kenis (2007) as more efficient once the number of participants increases. In general, a network managed by an NAO combines all the decision-making process regarding strategic aspects and the operationalized execution of hired professionals. In the case of the networks analyzed in this paper, the Building and Paint Shop networks delegate to their hired managers not only the autonomy to make decisions but also to perform activities.

Douglas Wegner / Ingridi Vargas Bortolaso / Patrinês Aparecida França Zonatto

The adoption of the NAO may be perceived as positive aspect since it provided them with higher competitiveness and a wider service portfolio, in addition to access to new suppliers. Furthermore, hiring experienced professionals to manage the network also contributed to the fact that the members did not need to leave their businesses to manage the network itself.

The evidence shows that, over time, members learn how to cooperate and interact among themselves (Knight & Pye, 2005; Albers, 2010). Such a learning process allows the SFNs to reorganize its operation and adopt a governance which is less dependent on the constant managers' participation. For each case, specific rules were developed for decision-making, sanctions and governance standards effectively applied to ensure its functioning, as indicated by Grandori and Soda (1995). All management activities were transferred to the elected board, which received more autonomy over decisions (Drugstore Network) and to the hired executives (Hardware Store Network and Paint Shop Network). In the case of the Building Network, members have little involvement in management, which is a task assigned to the executives with more autonomy.

However, it also became evident that the governance mode adopted can generate tensions and negative consequences, as highlighted by Dhanaraj and Arvind (2006) and Paquin and Howard-Grenville (2013). These authors suggest that the network should be orchestrated rather than traditionally managed: neither so focused on hierarchy that hinders members' participation, nor so flexible to the point of not being able to carry out activities due to a lack of standards and guidelines.

On the one hand, cases show that SFNs need to centralize decisions and give more autonomy to the executives in order to maintain efficiency and agility (Provan and Kenis, 2007). However, it was observed that such a management style disregards a factor considered paramount by Sydow (2006) and Järvensivu and Möller

(2009) in cooperative networks: the need for constant negotiation over activities and decisions with members. This is evident in the observations made by the members who reported few opportunities for participation in decisions (Drugstore Network) and more autonomy of network managers over them (Building Network). This governance mode tends to create a high external legitimacy in the relationship with other stakeholders (Provan & Kenis, 2007), but it may break internal cooperative agreements if members do not feel represented or the process does not reach enough legitimacy. Among the three SFNs, the Paint Shop Network seems to have found the right balance in management delegating to NAO the performance of operating activities, although relying on the members for strategic decisions. Even though the strategy development may be coordinated by a board, the participation of network members plays a vital role in the process of strategic decision-making (Klaas-Wissing & Albers, 2010).

All three SFNs provide services and solutions to the participants who, individually, would not be able to perform on their own (Best, 1990) and, therefore, positively impact their competitiveness. Such services represent a strong factor to attract new members for the SFN, as the fast growth in numbers of participants in the three SFNs reveals. Even so, there is an opportunity to improve the portfolio of services if compared with the services provided by German SFNs to their members (Ahlert, Backhaus, Bovensiepen & Ewig, 2006).

The relational environment of the three SFNs was considered by the interviewees as positive to cooperate since its formation, with trusting relationships and few conflicts among members. As the three cases refer to consolidated SFNs, it confirms the arguments of Sydow (1998), Bachman (2001) and Krishnan, Martin and Noorderhaven (2006) on the importance of trust for the development and maintenance of cooperation. Low trust levels would lead to the

need for safeguards and monitoring mechanisms which could derail cooperation (Sydow, 1998). Nevertheless, it also became evident that the networks' growth and the centralizing role performed by the executive managers and the board of directors changes the meaning of trust within the network. Trust among members is still very important, but it is crucial that members trust the board of directors and network managers, as they have the attribution to make decisions that may affect the participating firms. Maintenance of the network's stability relies on the trust members pass on to network managers, as the members hold little power over the decision-making process. If there is a break in trust, it can lead to a fast degradation in the internal environment and the exit of members, leading the network into decline and even dissolution (Wegner, Alievi & Begnis, 2015).

The exchange of information was highly emphasized by the Paint Shop Network members and is mentioned by Human and Provan (1997) as a transformational gain because it generates changes in the way to conduct the business as well as in the way of thinking and acting. Some specific strategies adopted by this SFN such as roving meetings at members' stores strengthens interpersonal ties and incentive trust and information exchange, as argued by Kale et al. (2000).

In the other two SFNs there was a reduction in information exchange amongst members along time due to the influence of governance mode and management style. Such a change also reduces the opportunities for personal contacts where the exchange of strategic information and learning takes place. This way, the SFNs fail to promote spaces for the exchange of information, considered by Balestrin, Vargas and Fayard (2008) as essential for the growth of a network. This is the second negative consequence of an NAO governance mode and a centralizing management style adopted by the Drugstore and the Hardware Store Networks. The exchange of information

within these networks occurs mainly between the SFN administrative headquarter and members. However, they may miss opportunities to boost learning through entrepreneurs' interaction and their idiosyncratic knowledge.

Lastly, as the SFNs advanced in their life cycles, the level of member participation in the activities reduced, confirming Wegner et al. (2015)'s proposition. The president of the Hardware Store Network seems to be aware of the growth effects. The presence of all members in general meetings is impaired by the geographical distance between firms and the headquarters. Given this fact, he started to conduct regional meetings following Sydow's (2006) orientation that says managers must encourage member participation. As for the Drugstore Network, the founding firms led the development and consolidation processes, as foreseen by Hendry et al. (1999), even though they also created a logic that seems to separate members between the founding group and the recent ones, as pointed in DN-NM2 interview. The low participation level leaves the SFN at a thin line between the cooperative model and the franchise model, but yet, without the safeguards from this latter. An SFN remains consolidated while providing enough benefits, but it may decline if dissatisfaction from members with little participation opportunity arises.

Table 2 summarizes the strategies adopted by the SFNs to reach consolidation and its consequences for network functioning.

The evidence confirms that the three SFNs are at the consolidation stage in the life cycle of Wegner et al. (2015), having overcome the conception, formalization and development stages. Each SFN developed specific strategies to reach consolidation. The Hardware Store Network opted for a fast growth achieved through attractive services for small firms (creation of a logistics center and marketing actions for members) around a wide spread geographical area. However, after taking in over a hundred members, it needed

537

to restructure itself to regain the consolidation process. A new restructuring is in the agenda to better qualify members. Although it may lead to some smaller firms or ones unable to follow the process to exit, this is a required move to avoid the SFN's decline. As for the Drugstore network, consolidation was reached through cooperation with two other SFNs in the segment. The process is continuous and should generate synergy and a new standard of benefits to all firms. The Paint Shop Network, however, underwent restructuring by merging with another SFN during the time both SFNs were still at the development stage, creating a strong group with more power to generate competitive advantages to members.

Table 2
Strategies and consequences

Strategy	SFNs that adopted	Positive aspects	Negative aspects	Evidence
Governance through an NAO, which becomes responsible for network management, with less involvement by its members.	HN DN PN	Improvement in the decision-making process and agility in performance of activities.	The decision-making process occurs without the participation of all members, which may cause a reduction in the internal legitimacy of the network.	"There were meetings with everybody together but it didn't flow very well. …too many people to make decisions. It didn't work out, I think it's much better this way now." (DN-NP)
Hiring professional managers who operationalize the strategies defined by network members.	HN DN PN	Network management becomes more specialized, resulting in higher efficiency and legitimacy towards its stakeholders.	Members' expectations may not always be met. Limitation in knowledge and information exchange.	The network hired a consultant "who is advising the members and also structuring our office. This meant a big step forward for the network and more people working in our office " (DN-NP) "One of the crucial points for us to reach success is the hiring of a manager to help us with daily administrative tasks ." (PN-NP)
Extension of service portfolio by the network to its members	HN DN PN	Qualification of the participating companies and access to new markets	Not all members are benefited from portfolio extension.	"Seeking new partners and discounts to be passed onto consumers; or to increase the firm's markup." (PN-NP) "The network itself is covering these costs [of seminars and trainings] and this is an ongoing operation; some shops are already making use of the services." (PN-M2)
Alliances and mergers between networks	DN PN	Increase in scale gains and cost reduction with an NAO management structure.	Not reported.	"…we are negotiating as a group, and we have around 150 points of sales considering the three networks together." (DN-NP) "We count on an executive…there was one here [in his network group], there was another one there [in the partner network] and the objectives of both networks were actually the same, right?" (PN-M2)

5 Research implications and final remarks

The analysis of three consolidated SFNs allowed for a better understanding of the development process and adopted strategies to reach such a stage. Yet, some negative consequences were identified in the strategy choices, which may serve as a warning to SFNs at the formation and development stages.

One point revealed throughout the study is that the adoption of the NAO governance mode became fundamental for the three SFNs to organize a large number of members and work effectively. Shared governance mode, despite efficient in the case of small SFNs, demands great involvement and dedication from their members. For a network to grow and develop, it needs a hired management team with reasonable autonomy to make decisions. Evidence confirms the arguments of Provan and Kenis (2007) on network governance, but at the same time, it indicates that leaders need to maintain cooperative management practices to guarantee members' participation and foster collaboration. One alternative is to leave strategic decisions up to members, stimulating their participation either by being present at meetings or via virtual spaces, to maintain communication and decision making. By doing so, it is possible to avoid a rupture in the SFN stability and be at risk of initiating a process of decline due to the low involvement of members in strategic decision making.

The adoption of strategies to stimulate participation is also fundamental to create opportunities for interaction, where interpersonal trust can be built amongst members, as well as for information exchange and collective knowledge creation. Roving meetings and regional gatherings are examples of strategies that contribute to this objective. Even though general meetings are less frequent, they are also important to gather the highest possible number of members and approximate entrepreneurs once cooperation implies interdependence relationships. The cases reveal that, apart from the importance of interpersonal trust for cooperation (Sydow, 1998; Bachman, 2001; Krishnan et al., 2006), with the SFNs' growth and the adoption of an NAO, it also becomes relevant to instill trust amongst members and NAO managers, as they are responsible for conducting strategies and the communication flow occurs mainly between managers and members. Low interaction and little opportunity for participation in decisions allied to distrust can ruin the network development and lead it to dissolution.

Taking into consideration the large number of existing SFNs in Brazil, its primarily regional scope (Sebrae, 2012) and the importance of scale gain to obtain competitive advantages in a variety of business segments, cooperation among SFNs or even a merger between them are strategies that should be analyzed. Such strategies could accelerate consolidation and avoid decline. Larger SFNs also have better conditions to maintain an NAO, by hiring executive managers and offering a wider service portfolio to firms. This is a strategy that needs to be perfected to reach the results seen in SFNs in other countries (Ahlert et al., 2006).

From a theoretical standpoint, this article contributed to the study of whole networks, considered by Provan et al. (2007) as a significant gap in the field of interorganizational relationships. Furthermore, the analysis went from the static characteristics of interorganizational relationships to the dynamics of development, addressing another issue highlighted as a gap by Provan et al. (2007). It was noticed that changes in governance mode are necessary for the development of SFNs, however, the adoption of an NAO generates negative consequences, such as a reduction in member participation and also a decrease in information exchange which must be resolved by the managers to avoid destabilization and decline of the SFN. The three cases analyzed also bring managerial contributions as they indicate strategies SFN managers may adopt to accelerate consolidation.

Considering the fact that this research focused on cases of SFNs in Southern Brazil, it is suggested to perform such study with a greater number of SFNs from other segments and contexts. Further studies on the subject may contribute to a better understanding of the dynamics of SFNs' development and strategies to be adopted to reach consolidation.

References

Ahlert, D., Backhaus, C., Bovensiepen, G., & Ewig, H. (2006). *Unternehmenskooperation: Auslauf-oder Zukunftsmodell?* Düsseldorf: Price Waterhouse Coopers.

Ahlström-Söderling, R. (2003). SME strategic business networks seen as learning organizations. *Journal of Small Business and Enterprise Development, 10*(4), 444-454.

Albers, S. (2005). *The design of alliance governance systems.* Köln: Kölner Wissenschaftsverlag.

Albers, S. (2010). Configurations of alliance governance systems. *Schmalenbach Business Review, 62*(3), 204-233.

Bachmann, R. (2001). Trust, power and control in trans-organizational relations. *Organization Studies, 22*(2), 337-365.

Balestrin, A., Vargas, L. M., & Fayard, P. (2008). Knowledge creation in small-firm network. *Journal of Knowledge Management, 12*(2), 94-106.

Bazzoli, G. J., Casey, E., Alexandre, J. A., Conrad, D. A., Shortell, S. M., Sofaer, S.,… Zukoski, A. P. (2003). Collaborative initiatives: Where the rubber meets the road in community partnerships. *Medical Care Research and Review, 60*(4), 63–94.

Best, M. H. (1990). *The new competition: Institutions of industrial restructuring.* Cambridge: Polity.

Borgatti, S. P., & Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of Management, 29*(6), 991-1013.

Brass, D., Galaskiewicz, J., Greve, H., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal, 47*(6), 795-817.

Ceglie, G., & Dini, M. (1999). SME cluster and network development in developing countries: The experience of UNIDO. *United Nations Industrial Development Organization (UNIDO).* Retrieved from www.unido.org/fileadmin/import/userfiles/russof/giopaper.pdf

Child, J. (2001). Learning through strategic alliances. In M. Dierkes, A. B. Antal, J. Child, & I. Nonaka (Eds.), *Organizational learning and knowledge* (part VI, pp. 657-680). Oxford: Oxford University Press.

D'Aunno, T. A., & Zuckerman, H. S. (1987). A life-cycle model of organizational federations: The case of hospitals. *Academy of Management Review, 12*(3), 534-45.

Dagnino, G. D., Levanti, G., Minà, A., & Picone P. M. (2015). Interorganizational network and innovation: A bibliometric study and proposed research agenda. *Journal of Business & Industrial Marketing, 30*(3/4), 354–377.

Dean, J., Holmes, S., & Smith, S. (1997). Understanding business networks: Evidence from the manufacturing and service sectors in Australia. *Journal of Small Business Management, 18*(1), 78-84.

Dhanaraj, C., & Arvind, P. (2006). Orchestrating innovation networks. *Academy of Management Review, 31*(3), 659-669.

Doz, Y. (1996). The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal, 17*(1), 55–83.

Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing, 51*(4), 11–27.

Ebers, M., & Grandori, A. (1999). The forms, costs, and development dynamics of inter-organizational networking. In: M. Ebers. *The formation of inter-organizational networks* (pp. 265-286). New York: Oxford University Press.

Flick, U. (2008) *Managing quality in qualitative research*. London: Sage Publications.

Gomes-Casseres, B. (2003). Competitive advantage in alliance constellations. *Strategic Organization*, *1*(3), 327-335.

Graddy, E. A., & Chen, B. (2006). Influences on size and scope of networks for social service deliver. *Journal of Public Administration Research and Theory, 16*(4), 533-552.

Grandori, A., & Soda, G. (1995). Inter-firm networks: Antecedents, mechanisms and forms. *Organization Studies*, *16*(2), 183-214.

Hendry, C., Brown, J., Defillippi, R., & Hassink, R. (1999). Industry clusters: Opto-electronics in 6 regions in UK, USA and Germany. In: A. Grandori (Ed.), *Interfirm networks: Organization and industrial competitiveness* (pp. 151-184). London: Routledge.

Hibbert, P., Huxham, C., & Smith Ring, P. (2008). Managing collaborative inter-organizational relations. In: S. Cropper, M. Ebers, C. Huxham, P. S. Ring (Eds.), *The Oxford Handbook of Inter-organizational relations* (pp. 02-25). Oxford: Oxford University Press.

Human, S. E., & Provan, K. G. (1997). An emergent theory of structure and outcomes in small- firm strategic manufacturing network. *Academy of Management Journal*, *40*(2), 368-403.

Inkpen, A. C., & Tsang, E. W. K. (2005). Social capital, networks, and knowledge transfer. *Academy of Management Review*, *30*(1), 146-165.

Isett, K. R., Mergel, I. A., Leroux, K., Mischen, P. A., & Rethemeyer, R. K. (2011). Networks in public administration scholarship: Understanding where we are and where we need to go. *Journal of Public Administration Research and Theory, 21*(1), 157-173.

Jarillo, J. C. (1995). *Strategic networks:* Creating the borderless organization. Oxford: Butterworth Heinemann.

Jarillo, J. C. (1988). On strategic networks. *Strategic Management Journal, 9*(1), 31-41.

Järvensivu, T., & Möller, K. (2009). Metatheory of network management: A contingency perspective. *Industrial Marketing Management*, *38*(6), 654–661.

Kale, P., Singh, H., & Perlmutter, H. (2000). Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management Journal*, *21*(3), 217-237.

Kilduff, M., & Tsai, W. 2003. *Social networks and organizations*. Thousand Oaks, CA: Sag.

Klaas-Wissing, T., & Albers, S. (2010). Cooperative versus corporate governance of LTL networks. *International Journal of Logistics: Research and Applications*, *13*(6), 493-506.

Knight, L., & Pye, A. (2005). Network learning: An empirically-derived model of learning by groups of organizations. *Human Relations*, *58*(3), 369-392.

Krishnan, R., Martin, X., & Noorderhaven, N. G. (2006). When does trust matter to alliance performance? *Academy of Management Journal, 49*(5), 894–917.

Lazzarini, S. G. (2007). Mudar tudo para não mudar nada: Análise da dinâmica de redes de proprietários no Brasil como "mundos pequenos." *Revista de Administração Eletrônica*, *6*(1), 1–24. Retrieved from http://rae.fgv.br/rae-eletronica/vol6-num1-2007/mudar-tudo-para-nao-mudar-nada-analise-dinamica-redes-proprietarios-no

Leana, C. R., & Pil, F. K. (2006). Social capital and organizational performance: Evidence from urban public schools. *Organization Science*, *17*(3), 353-366.

Lotia, N., & Hardy, C. (2008). Critical perspectives on collaboration. In S. Cropper, M. Ebers, C. Huxham, & P. S. Ring (Eds.), *The*

Oxford handbook of inter-organizational relations (pp. 366–389). Oxford: Oxford University Press.

Mays, G. P., & Scutchfield, F. D. (2010). Improving public health system performance through multiorganizational partnerships. *Preventing Chronic Disease, 7*(6), 1-8.

Mcguire, M. (2006). Collaborative public management: Assessing what we know and how we know it. *Public Administration Review, 66*(1), 33-43.

Milward, H. B., & Provan, K. G. (2006). *A manager's guide to choosing and using collaborative networks.* Washington: IBM Center for the Business of Government.

Moreira, A. C., Moutinho, V. F., & Pereira, J. C. (2013). Avaliação de uma estratégia colaborativa: Um estudo de caso no setor do vinho do Porto. *Revista Brasileira de Gestão de Negócios, 15*(47), 221–240.

Oelsnitz, D., & Tiberius, V. A. (2007). Zur Dynamisierung interorganisationaler Lernstrategien: Pfade zwischen Kooperation und Wettbewerb. In G. Schreyögg, & J. Sydow (Eds.). *Kooperation und Konkurrenz* (pp. 121-159). Wiesbaden, Deutschland: Gabler Edition.

Paquin, R. L., & Howard-Grenville, J. (2013). Blind dates and arranged marriages: Longitudinal processes of network orchestration. *Organizational Studies, 34*(11), 1623-1653.

Pereira, E., Brito, Z., & Mariotto, G. (2013). Benefícios da cooperação entre compradores e fornecedores: Um estudo no setor de tecnologia de informação e comunicação. *Revista Brasileira de Gestão de Negócios, 15*(47), 241–261.

Podolny, J., & Page, K. (1998). Networks forms of organization. *Annual Reviews Sociological, 24*, 57-76.

Popp, J., Mackean, G., Casebeer, A., Milward, H. B., & Lindstrom, R. (2013). Inter-organizational networks: A critical review of the literature to inform practice [Working paper IBM Center for the Business of the Government]. *University of Calgary,* Arizona, AZ.

Poppo, L., & Zenger, T. (2002). Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal, 23*(8), 707–725.

Provan, K. G., Fish, A., & Sydow, J. (2007). Interorganizational networks at the network level: A review of the empirical literature on whole networks. *Journal of Management, 33*(3), 479-516.

Provan, K., & Kenis, P. (2007). Modes of network governance: Structure, management and effectiveness. *Journal of Public Administration Research and Theory*, 18(2), 229-252.

Provan, K. G., & Lemaire, R. H. (2012). Core concepts and key ideas for understanding public sector organizational networks: Using research to inform scholarship and practice. *Public Administration Review, 72*(5), 638-648.

Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior, 12*, 295–336.

Ring, P. S., & Van de Ven, A. H. (1994). Developmental processes of cooperative interorganizational relationship. *Academy of Management Review*, 19(1), 90-118.

Serviço Brasileiro de Apoio às Micro e Pequenas Empresas - Sebrae (2012). *Mapeamento das centrais e redes de negócio.* Retrieved from http://www.sebrae.com.br/customizado/acesso-a-mercados/sebrae-mercado/centrais-de-negocios

Shortell, S. M., Zukoski, A. P., & Alexander, J. A. (2002). Evaluating partnership for community health improvement: Tracking the footprints. *Journal of Health Politics, Policy and Law*, 27(1), 49–91.

Spekman, R. E., Forbes, T. M., Isabella, L. A., & Macavoy, T. C. (1998). Alliance management: A view from the past and a look to the future. *Journal of Management Studies*, *35*(6), 747-772.

Sydow, J. (1998). Understanding the constitution of interorganizational trust. In C. Lane, & R. Bachmann (Eds.). *Trust within and between organizations: Conceptual issues and empirical applications* (pp. 31-63). Oxford: Oxford University Press.

Sydow, J. (2006). Management von Netzwerkorganisationen: Zum stand der forschung. In J. Sydow (Org.) *Management von Netzwerkorganisationen* (pp. 387-472). Wiesbaden: Gabler.

Theurl, T. (2005) From corporate to cooperative governance. In T. Theurl. *Economics of interfirm networks* (pp. 149-192). Tubingen: Mohr Siebeck.

Tiberius, V. (2008). *Prozesse und dynamik des netzwerkwandels.* Wiesbaden, Deutschland: Gabler Edition Wissenschaft.

Todeva, E. (2006). *Business networks:* Strategy and structure. London: Toutledge.

Wegner, D., Alievi, R. M., & Begnis, H. S. M. (2015). The life cycle of small-firm networks: An evaluation of brazilian business networks. *BAR-Brazilian Administration Review*, *12*(1), 39-62.

Yu, C. M. J., Liao, T. J., & Lin, Z. D. (2006). Formal governance mechanisms, relational governance mechanisms, and transaction-specific investments in supplier–manufacturer relationships. *Industrial Marketing Management*, *35*, 128–139.

Zaheer, A., Gözübüyük, R., & Milanov, H. (2010). It's the connections: The network perspective in interorganizational research. *Academy of Management Perspectives*, *24*(1), 62-77.

Zaheer, A., & Venkatraman, N. (1995). Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange. *Strategic Management Journal*, *16*(5), 373-392.

Zineldin, M. (2002). Developing and managing a romantic business relationship: Life cycle and strategies. *Managerial Auditing Journal*, *17*(9), 546-558.

About the authors:
1. Douglas Wegner, Doctor in Business Management (UFRGS), Professor in the postgraduate program in Business Management at Unisinos University – Unisinos, Brazil. E-mail: dwegner@unisinos.br.
2. Ingridi Vargas Bortolaso, Doctor in Business Management (UNISINOS), Professor in the postgraduate program in Business Management at University of Santa Cruz do Sul – Unisc, Brazil. E-mail: ingridibortolaso@unisc.br.
3. Patrinês Aparecida França Zonatto, Master in Business Management (UNISC), PhD Student in the postgraduate program in Business Management at University of Vale do Itajaí - Univale, Brazil. E-mail: patrineszonatto@gmail.com.

Contribution of each author:

Contribution	Douglas Wegner	Ingridi Bortolaso	Patrinês Zonatto
1. Definition of research problem	√		
2. Development of hypotheses or research questions (empirical studies)	√		
3. Development of theoretical propositions (theoretical Work)			
4. Theoretical foundation/ Literature review	√	√	
5. Definition of methodological procedures	√	√	√
6. Data collection	√		√
7. Statistical analysis			
8. Analysis and interpretation of data	√	√	√
9. Critical revision of the manuscript	√	√	
10. Manuscript Writing	√	√	