

Collaborative Networks: An Innovative Approach to Enhance Competitiveness of Small Firms in Brazil

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Abstract

Several SME's of the *Serra Gaúcha*, a prosperous region in the Northeast of the state of Rio Grande do Sul (Brazil), have noted lately that they were becoming less competitive. The solution they found to increase competitiveness was to establish a conducive environment for cooperation among them, a process fostered by the Collaborative Networks Program of the state government. Eight out of 25 networks were investigated under the perspective of strategies for change, the learning process, and competitive positioning. Despite some weaknesses, several benefits have been obtained by the networks investigated, including increase in negotiation bargaining, cooperation, leadership development, experience sharing, logistics improvement, management development, packaging standardization, and paradigms changing.

Keywords

Collaborative network, competitiveness, small firm

1 Introduction

Competition and cooperation represent essential forms of social life. Competition and cooperation are the main ways of conflict management, and both represent the basic forms of business strategy and of economic activity in general. In this view a business company represents internal cooperation in order to compete more effectively in the competitive environment. Yet within the firm, competition is also virulent while on the other hand cooperation usually extends beyond an individual company when businesses of the same kind form associations. When it comes to hybrid organizations or what is often called nowadays “collaborative networks”, the cooperative side of business gets extended in a more formal way beyond the individual firm in order to include several companies in the formation of a cooperative network based on common interests [Ménard 2004].

Traditionally, economic theory has paid little attention to cooperation and directed its focus almost exclusively on competition [Porter 1980; Williamson 1975, 1981, 1985]. It is only recently that research on cooperative networks has found a renewed interest, due to the emergence of new forms of hybrid organizations among business companies which make use of modern communication technology [Brandenburger, Nalebuff 1997; Koppell 2003; Levy 2004; Moe, Kosar 2005; Ruys, Bruil 2005]. Historically, the existence of cooperative networks reaches back many centuries. The idea of cooperative business forms experienced a strong impetus in the 19th century, yet it is only more recently that a new wave of cooperative business forms can be observed [Galbraith, Galbraith 2004].

Nowadays, cooperative business forms experience increased attention, particularly in the study of small and medium sized companies that use innovative forms of virtual cooperation, particularly when it comes to communication. To put it simply, modern communication

technologies make it easier to enter into a system of delocalized forms of shared interests and activities.

Collaborative networks are not only relevant in organizing a group of small and medium businesses, the new forms of business network are also very important for large companies. Many multinational companies depend on a network of small and medium sized companies, and an important part of the degree of international competitiveness depends on the strength and effectiveness of these collaborative networks that exist around the core company.

In this paper, the term collaborative network refers to *redes de cooperação* as they exist in the North-Eastern region of the State of *Rio Grande do Sul* in Brazil [Simon 2004]. These collaborative networks that have been studied are comprised of small enterprises with the focus of the study directed at researching the strategies of change, learning, and competitive positioning of the member companies.

The kinds of collaborative networks that exist in this region of Brazil have risen out of the need to maintain competitiveness in terms of economies of scale, particularly referring to information, while being able to maintain the flexibility and rapid adaptability which characterizes small companies.

Our empirical research supports the thesis that the main use of cooperative networks exists in providing information that otherwise would be too costly to obtain as an individual company. In addition to that, economies of scale can be achieved if the cooperative network extends to common policies as it is the case, for example, with the formation of a purchasing cooperative. Furthermore, our findings show that with the exchange of information among the members of the network, significant learning effects occur that lead to strategic changes. While collaborative networks exist in many forms, it emerges as one of their common feature that with this kind of business organization major learning effects become possible due to the exchange of information and plans. These learning effects are closely related to the business strategy or to the business model in use and prove highly valuable as an impulse to initiate and implement processes of change.

2 Collaborative Networks in the State of Rio Grande do Sul

Rio Grande do Sul, the southernmost state in Brazil, bordering with Argentina and Uruguay, has an important economic region, known as *Serra Gaúcha*, where consolidated industrial axes can be identified such as the one formed by the counties of Caxias do Sul, Farroupilha and Bento Gonçalves and another one including Nova Petrópolis, Gramado, Canela and São Francisco de Paula. Both axes are located in the area where the University of Caxias do Sul is present with several campuses. This region represents more than 11% of the state gross domestic product.

In the *Serra Gaúcha* the largest metal mechanical automotive cluster of the state and other industries such as furniture, plastics, textile, clothing, transportation equipment, food and beverages are located. This industrial complex includes approximately 4,500 manufacturing plants that employ more than 100,000 workers, representing about 70% of the region economy. Some companies are classified as large, but most of them are small and medium enterprises. Lately, many companies have managed to reach a required technological level to compete in the national and international arena.

The state of Rio Grande do Sul is pinpointed as a leader in business networks and part of this is due to the Collaborative Networks Program, a public initiative established by a state decree [Rio Grande do Sul 2004] to encourage cooperation among companies, to create a conducive environment for entrepreneurship, and to offer technical support for the networks establishment, development and consolidation [Simon 2004].

The Collaborative Networks Program has been conceived by the Development and International Affairs State Office (SEDAI) focusing on industry, commerce, and service entrepreneurs,

allowing them better conditions to face competition nowadays. After analyzing several forms of alliances among companies, SEDAI decided for networking as the best option to formalize the relationship among companies of the same industry [Timm, Silva 2004].

Today the state supports 220 collaborative networks, encompassing approximately 4,600 companies which employ around 46,000 workers. The program is run as a partnership between the state government and universities, which deploy a group of consultants that help companies by using a methodology developed by SEDAI. The program is structured on three axes: the methodology for creation, consolidation, and expansion of the network; the group of consultants of the University; and the coordination done by SEDAI [Verschoore Filho, et al. 2004].

3 The Study

This study is limited to the collaborative networks located in the *Serra Gaúcha* region which integrate the Collaborative Networks Program developed by SEDAI and put into action by the University of Caxias do Sul. Top management job holders from member companies were interviewed, in loco.

The sample was selected according to the following criteria:

- To limit the survey to collaborative networks which integrate the Collaborative Networks Program;
- To be located (the head office of the interviewed collaborative network) in the area reached by UCS (total of 25 networks);
- To include collaborative networks which represent the segments of manufacturing (four networks), commerce (two networks), and service (two networks), with a greater participation of manufacturing due to the *Serra Gaúcha* region being a pole of industrial predominance;
- To include collaborative networks with different time spans of existence.

For Neves [1996], the qualitative survey is a set of different interpretative techniques that aims at describing and decoding the components of a complex system of meanings. Bardin [2004] approaches the speech analysis technique as a form of symbolic representation of power relations among groups.

The data were obtained from a set of interviews guided by a pre-defined questionnaire.

4 Data Analysis

From the respondents' answers several relevant topics were identified, which are:

4.1 Leadership

Even though the networks companies try to make decisions together, one company may arise as a leader and exert certain amount of influence over the other companies. Sometimes, the reason for this to happen is that the leader company presents more knowledge in terms of management and technology. However, this phenomenon is seen as a negative point for it can cause internal competition among the companies.

In order to avoid this potential risk, when companies meet they choose as the coordinator of the meeting the person who is more knowledgeable in the subject being discussed, in such a way that all members have the opportunity to lead once in a while.

4.2 Task team

The methodology of the Program recommends the formation of four task groups: negotiation, marketing, expansion, and innovation. The negotiation group usually becomes more visible than the others because it deals with cost reduction when negotiating for the whole network.

4.3 Procurement Negotiation

The network benefits from the negotiating process in several ways: better bargaining conditions; purchasing price reduction; better attention from the supplier; adaptation of the supplier to the needs of the network; single supplier for all companies of the network; information and experience sharing among companies; trust building; and know-how enhancement.

One important paradigm that has changed is that companies started sharing information about prices they used to pay for the goods they buy. On the other hand, some suppliers became reluctant to accept this practice because they felt companies of the network would increase their bargaining power, while others saw this as an opportunity for doing better business.

4.4 Partnership

Companies in the network see themselves as partners, trying to complement each other in their operations. This fosters a relationship of trust and partnership.

4.5 Competitiveness

Companies in the network feel they become more competitive due to: experience sharing; larger mix of products; logistic improvement; management improvement; participation in events (e.g., fairs, courses); agreements with customers and their employees; packaging standardization; increasing contacts with other networks, nationally and internationally, for technology interchange. To a certain extent, companies feel like they are working as business units of a holding.

4.6 Innovation

Motivation for innovation may come from several factors, such as: to become a national reference in the field; to take part in fairs and events; to receive funds from governmental and private organizations; to interact with universities; to share information among networked companies; to offer new perspectives for usually family-owned small companies.

4.7 Main Network Weaknesses

Some company areas still need a further development such as sales, marketing, and logistics. There are member organizations which do not believe in networking. It is also observed that in some networks it is not possible to do business together since many companies prefer to negotiate individually with their own suppliers.

4.8 Main Network Strengths

The more robust aspects identified are: joint negotiation, shared information, data base with useful information available at the network headquarters, cooperative training and education of employees, as well as machine load sharing.

5 Attributes and Components

Content analysis was applied to the collected data, resulting in the following attributes and their components:

- Leadership: three types of exerted leadership in the networks were identified: a) by one company of the network; b) by a group task; and c) informal leadership in the network.

- Management strategies: innovation, motivation, conflict solving, and network management.
- Trust: significance of establishing and maintaining trust among participants of the network.
- Perceived value of being part of a network.
- Organizational change: significance of culture in managing organizational change.
- Learning: importance of information and knowledge sharing.
- Organizational commitment to the network.

A future research to quantitatively investigate the above attributes in all settled networks in the *Serra Gaúcha* is intended by the authors of this study.

6 FINAL COMMENTS

It has been observed that when trust is present, a larger number of initiatives was carried out together by members of the network, once this relationship enhances information exchange which, in turn, is crucial for the network decision making process. There exist indicators that trust builds cooperation, stimulating network members to think and act as a group. On the other hand, the study revealed that the number of initiatives carried out together is not proportional to the life time of the network. Instead, they depend on leadership, trust, willingness to participate, and also qualification of top management of networked companies.

This research identified aspects that interfere in the development of the networks, jeopardizing goals and results to the extent that sometimes they lead to the end of the network due to the differences of organizational cultures of the companies in the network, and because of conflicts when defining the objectives of the network, including eagerness to obtain results quickly.

Relationship difficulties have been found among people from different companies of the network. However, these were considered normal challenges to be faced by those who decided to work together.

Finally, it has been observed that most of the companies face the conflict of deciding whether to use their own logo or the network logo instead, or both.

This study has investigated issues related to leadership, change, and the learning process, among others, in collaborative networks from three segments. It was possible to show that this type of initiative is important for the socioeconomic development of the *Serra Gaúcha* region. The main conclusion is that the organizational form of collaborative networks is a competitive alternative for small and midsize companies. Due to its importance for regional development, collaborative networks represent a fertile ground for further academic studies and deserve full government support.

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