Collaborative Relationship in a Healthcare Network

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Abstract

From seminal studies on competitiveness based on core competence (Bowen, 1994; Stalk, Evans and Schulman, 1992; Prahalad and Hamel, 1990) it is possible to exploit the issue of structuring networks with a focus on cooperation. The theme of the structure of supply networks, on the light of cooperation between enterprises, has the assumption that a network of companies will have more chances to assume a more competitive position within a new business environment, given the complexity and fast changes. This paper presents a study of collaborative relationships in a healthcare network. The case of UNIMED of Brazil - the largest cooperative experience in health care across the world and also the largest network of health care in Brazil - is explored.
1. Introduction

The subjects of production and operation management have already been amply discussed in the literature such as The Theory of SCM – Supply Chain Management, and The Theory of Networks. However, within this theoretical framework, there are still points to be explored, especially when considering the application of these theories for the operations of services, particularly for health services.

According to Fugate, Sahin and Mentzer (2006) there is still much to be done in developing good direction for the management of supplies based on the theory of networks and existing research. It must not only amplify (enlarge) the contribution in this area between the exploration of the subject and the area of management of service networks – as is the case of UNIMED – but also to plan on opening new possibilities of encountering new horizons of exploration of the subject from this work.

The delimitation of the subject, necessary in order to give focus to the research, was guided in this text and the questions explored from the subject of the structuring of supply chains.

The supply networks are considered, for purposes of this study, as a type of inter-organizational relationships, or the way in which companies are linked together (Barringer and Harrison, 2000). Mentzer et al. (2001) add to this view by describing the relationship as the main dimension in the formation and structure of networks and integrated supply chains.

The theme of supply networks, observed in the light of the cooperation between enterprises, has the assumption that companies participating in a supply
network will have more chances to gain a competitive advantage in this new business environment, characterized by complex and rapid change.

Some authors in the area of SCM and networks argue that many companies have failed to implement a management process in an integrated manner. One of the main reasons for that is that these companies have forgotten that the adoption of this concept requires the establishment of long-term strategic partnerships with suppliers. It also requires the establishment of a common vision among the parties in the chain so that they may align their efforts and their strategies (Ferraz Neto, 2005).

It is then that the following gap is identified in the theory: there are many studies presenting solutions for the competitiveness of chains and that consider, for example, measuring the performance of the chain as a whole, the strategies and structuring of the logistics chain of processes. But how can integrated management be implemented into disarticulated or unorganized networks? In Queiroz (2009), the response addressed the theoretical foundations of the theory of networks: it would take from an identification of how an industry is structured in their relationships.

Considering the problematic proposal, the main objective of this research is to discuss and understand collaborative relationships in a healthcare network from both a theoretical and an empirical perspective.

Considering the little knowledge accumulated and systematized on inter-organizational networks, specifically on the relationships with suppliers in these networks, particularly networks of health services in Brazil, the baseline of this study is based on qualitative research through the case study method (YIN, 1994).
The idea is that the insights from exploratory research will contribute to the development of theory and thus pave the way for future conclusive research (Parasuraman, 1991). This exploratory research is aimed to develop original tracks on the resources (or skills) in order to ensure a competitive advantage for an operator of health services in Brazil.

The empirical research has been carried out in one of the Health Plan Operators of the UNIMED Health Care System. This operator is located in Campo Grande-MS and places among those of the best performances in Brazil. The study is based on secondary data, extracted from the site of UNIMED and primary data based on participant observation as a user of the health plan in the category Business Unimed, Ward Coverage, Regional Modality.

2. Theoretical revision

Currently, the organizational environment presents itself as having a new dynamic, particularly marked by high competition and globalization, provoking change in the current base of competitiveness (Clegg and Hardy, 1998; Berringer and Harrison, 2000). Therefore, the traditional model of managing companies - the rational-bureaucratic model of management - loses its strength, given the complexity of new relationships, and thus yields space for new organizational forms that demand joint and associated performance of the companies. In this scenario of integration between the companies, production becomes a collective effort rather than an individual activity.
Clegg and Hardy (1998) emphasize that this change in the production process occurs like a movement of elimination of borders that limit the organizations, verified in the proportion in which they fuse and re-characterize, forming new arrangements called inter-organizational. Thus, production systems in the new competitive environment tend to shift the focus: the internal efficiency to a collective efficiency. The possession of assets, previously considered as a means of leveraging competitive advantage, is replaced by cooperation and information sharing.

From the premise of cooperation, it is the assumption that investment is crucial in developing models of management capable of ensuring the effectiveness and efficiency of inter-organizational relations. In order to be verified, the scenario of cooperative competition (BRANDENBURG; NALEBUFF, 1997) is faced with a dichotomy of strategic action, also apparent. Thus, it is necessary to consider solutions that address the competitive aspect of this relationship from the collective efforts.

Nohria and Eccles (1992) attribute the increased interest in studies of networks precisely as the success of this new competition, which is no longer just between companies, but between structured sets of them. It can be characterized by the direction of companies, as its internal organization, in the sense of forming new configurations that establish collaborative relationships rather than competitive.

According to Möller and Halinem (1999), performance within networks marks the emergence of an era, one that is rapidly transforming the vision that the company has of itself, being that today not one organization is able to see itself
self-sufficient, and in addition it realizes that its survival depends on the learning developed through relationships with other companies operating in your area, or of a complementary or competing nature.

It is necessary, however, that companies transform their practices in order to adhere to this new form of performance in networks. For Castells (1996), changes that occur in the organizational model of companies cause it to pass through a profound inter-organizational transformation, which is a process that can be analyzed from the operational aspect of technology management and through the process of inter-organizational relationship, especially the new patterns of cooperation and competition between different interconnected parties (Lastres et al, 2002). Contrarily, the possibility is assumed that companies can assume the form of acting in networks, noting how their practices are and from that planning the transformation based on building collaborative relationships in the network.

The solution for projecting the necessary internal transformation in companies and at the same time linking it with the context of integration and collaboration in a more complex set of relationships, can then be the formation of cooperation networks, or networks of learning, where the network is to dominate the processes that are common in business and can act according to their core competencies.

This is an assumption that is the basis of discussions about which factors influence the competitiveness between enterprises (PORTER, 1980; PORTER, 1996; PRAHALAD and HAMEL, 1990; KROGH and ROOS, 1995). Considering that the search for competitiveness is a matter of combining resources and capabilities with the opportunities of the environment (DAY, REIBSTEIN and
GUNTER, 2004), the network in this study is considered as a set of capabilities that belong to the strengthening of the whole.

The main foundations that support this idea are anchored in two approaches: first, the strategic position advocated by Porter (1980 and 1996) and second, vision-based resources, or RBV (Resource Based View of the Firm), influenced by studies from Edith Penrose and supported by Hamel and Prahalad (1990) and Krogh and Roos (1995).

Though distinct, they are approaches that actually converge on a point that relates competitive strategy with organizational skills, combined by means of organizational learning (FLEURY and FLEURY, 2001). In this sense, knowing the resources (or skills) that ensure the competitive advantage in an industry has become predominant in organizations, as it highlights the need to manage the existing relationships in an organizational network in order to seize them and ensure effectiveness and efficiency of the industry.

This is a new concept of competitive advantage - based on core competencies (BOWEN, 1994, STALKER, and EVANS SCHULMAN, 1992; PRAHALAD and HAMEL, 1990) - seen from the positioning of companies that realize the benefits focus on what can do well, which is the factor that may positively differentiate it from its competitors, and at the same time acquire external components and related services to all that is not within its core competence.

In order to direct their strategies to their core competencies, as a result of joint and associated action, the companies will then share the resources, information and knowledge, making a new organizational form, characterized by this group of companies "interdependent" that retain their very specific and
dynamic relations, known generically as "networked organizations" and marked by the complementarities of their capabilities.

Since these seminal studies on competitiveness based on core competencies (BOWEN, 1994, STALKER, EVANS and SCHULMAN, 1992; PRAHALAD and HAMEL, 1990), you can explore the issue of structuring networks with focus on cooperation, based on the assumption that the gains that can be obtained through the optimization of cost and performance in a joint action is more expressive than the sum of the potential gains of each individual participant, when acting separately.

3. Data Presentation and Analysis

The data presented in this item were collected from the site of Unimed do Brasil (www.unimed.com.br), Campo Grande Unimed Web site (www.unimedcg.com.br) and from participating observation as a user of the health plan in category Unimed Business (Company Coverage), Regional Classification, Shared Occupancy Coverage for the period of September/2008 to January/2009.

3.1 Health Care Network in Brazil

The health system in Brazil is formed by various parties from both the public and private sectors (Figure 1). The parties from the public sector are the Ministry of Health, the State and Municipal Secretaries of Health, and the regulatory agencies (National Health Surveillance Agency – "ANVISA" and the National
Agency of Supplemental Health – “ANS”). The private side would be the providers of health care (hospitals, diagnostic centers, clinics and health professionals), health care operators (health plan insurers, medical groups and self-supported), medical service suppliers (materials and medicines, equipment, support services, technical services and materials for consumption), the health plan purchasing companies, and patients (Yukimtsu, 2009).

Within this scenario, the performance of UNIMED stands out with the most cooperative experience in health care throughout the world and also the largest network of health care in Brazil. UNIMED holds 32% of the national market for health plans and is the health plan business Top of Mind, with 66% remembrance among Brazilians. UNIMED is present in almost 80% of the country, with 377 medical cooperatives and over 106,000 doctors, attending approximately fifteen million clients and seventy-three thousand companies in Brazil.

The combined cooperative group reported earnings of around 16.2 billion reais in the year of 2006. In addition to owning its own seventy-nine hospitals, the company works with a network of 3,596 additional accredited hospitals, more than half of the existing hospitals in the country. This is in addition to the numerous emergency care facilities, laboratories, ambulances for providing medical assistance, and diagnostic for its customers. It provides thirty-two thousand direct jobs and around three-hundred thousand indirect jobs.

According to a national survey by the Institute Datafolha, UNIMED has been considered Top Of Mind for the 12th consecutive year when it comes to health plan providers. Also, in accordance with research commissioned by the Confederation of UNIMEDS for the Reputation Institute, a consultant whom specializes in the area
of research in health, UNIMED is the only company in the health sector considered to have a strong and robust reputation. The company evaluated and compared different aspects of UNIMED's reputation with its competitors and other companies of prominence in the country.

Figure 1: The Health Care System Parties of Brazil

Source: Yukimitsu (2009)

The indexes of data obtained in the survey, conducted between August and October of last year, put the system in a position of prominence also to be compared with other large national corporations. Next to the Bank of Brazil, Itaú Bank, Santander Bank, Bradesco Bank, Cemig, Copel, CPFL, Coca-Cola, Light,
Petrobras and Vale, Unimed was placed fourth in the overall reputation index (Unimed, 2008)

In regards to the perception of the dimensions of companies operating in the sector, UNIMED is perceived as the best in all aspects: innovation, work environment, governance, citizenship, leadership, products and services, and financial performance. In addition to the last two aspects, which happen to be more thoroughly evaluated, the quality of products and services and meeting customer needs were also considered as high-points.

In accordance with a report from the Qualification Program of Supplemental Health conducted by ANS, within the companies of the UNIMED System that have at least 100,000 lives (customers) served in its portfolio, seven of them had a level 4 qualification (the second best level), this being the highest achieved score among all companies evaluated in the year 2007. The survey assessed 1,327 companies that serve 97.36% of beneficiaries throughout the country, and can be viewed on the website of ANS (www.ans.gov.br). These results were determined through the analysis of the following factors: economic-financial situation, the health care, structure and operation and satisfaction of beneficiaries of all operators of health plans in Brazil, presenting the Performance Index of Health Supplements (IDSS).

For purposes of this study, we will consider one of the more prominent Health Care Plan Operators of the UNIMED System as the focal company. While the companies are similar in conducting their business, they are autonomous cooperatives in the strategy and structure of operation. Observing a business unit would facilitate our analysis.
3.2 The case study: Unimed Campo Grande.

Following the molds of the Cooperative System UNIMED, which aim to provide high quality medical care, UNIMED Campo Grande was founded as an operator of health care plans thirty-five years ago. It currently has over 1,200 medical associates, approximately one-hundred thousand customers and 160 other accredited facilities within the network, which includes clinics, laboratories and hospitals.

At the time of its foundation, the then President of the State Medical Association found that many doctors did not have enough customers, as most people were being served by welfare institutions, which had its own medical corps. Subsequently, the initiative was met with the first cooperative medical system which began to implement in the same way. Like all pioneering initiatives, the foundation of the 51st UNIMED System was difficult and laborious, as many did not believe that this venture would work out. A membership of 20 cooperative physicians (business owners) was necessary to create the corporation and the first place of operation had only a desk and a phone. In the first five years, the board purchased a piece of land where the first office was founded with fifteen employees thus far. After the following fifteen years, they acquired new land where, after three years, the current headquarters was inaugurated, with the deployment of new services and products.

The company offers its customers a health plan as their main product, presented in various forms, with options of accommodation (apartment or ward),
areas of coverage (regional or national) and several additional or optional services, listed as follows:

- **DSO** (Department of Occupational Health): provides support to partnering companies, seeking to promote health and the prevention of diseases and accidents at work;
- **UNIMED SOS**: Emergency Medical Assistance to residences and 24 Hour Emergency;
- **Aero-Medical Transport**: air transport with medical supervision and material resources required for the treatment of patients (performed by others);
- **Additional UNIMED Insurance**: continuity of care plan, funeral assistance and unemployment assistance;
- **Always** (Office of Preventive Medicine): aims at health promotion and disease prevention through the adoption of healthy habits (courses, lectures, support groups, experimental cooking and guidance in sports public square);
- **Rehabilitation Center**: psychological services, speech therapy, occupational therapy, nutrition and physiotherapy (lymphatic drainage for pregnant women and those who have had mastectomies);
- **UNIMED at Home**: therapeutic health care, preventive, palliative and rehabilitation offered in the home of the patient, performed by team with adequate resources for each need.
In addition to the products and services offered, UNIMED Campo Grande has its own resources. For six years, UNIMED has had a general hospital of average complexity, multidisciplinary, with service and emergency care and emergency mobile ICU. For 10 years, they have maintained a pharmacy that sells about 6,000 items from medicinal and toilet preparations and perfumes, with a focus in promoting health and quality of life of clients.

Currently, UNIMED Campo Grande operates within the requirements of ANS, which includes the development of an electronic communication system that allows the execution of all requests for use of the plan directly in the place of health care, from consultations to exams, special materials, hospitalizations and surgeries. Other systems also enable electronic communication with other suppliers.

After obtaining the plan, a grace period must be fulfilled in order to use the services distinguished in the contract. Within these conditions, the use of the plan for the occurrence of accidents (or need to use the plan) requires authorization by UNIMED, and the routine procedures, such as basic consultations and laboratory examinations can be authorized electronically. For more sophisticated tests and some elective surgeries, the authorization is given only by medical expertise provided by UNIMED.

After being attended, the cooperative doctors and accredited network send a bill for the services received by the customer to UNIMED. Once again, an intervention of medical audit services is performed in order to authorize payments requested.
Some of the services are called "exchange," which implies the care of another customer of UNIMED's National System by the cooperative group in Campo Grande, or the payment of other UNIMED from the National System that has provided services to a client of UNIMED Campo Grande. Also by orders of ANS, the operators of health care plans must allow electronic communication between the companies of the system in order to streamline the service to users of the health plan at a service exchange.

4. Final Considerations

After analysing the data we may draw some preliminary considerations. The network of UNIMED Campo Grande offers a wide variety of relationships. Figure 2 represents the network of health services operated by UNIMED Campo Grande, as suggested by Yukimitsu (2009), where we can observe the distribution of products and services offered to patients using the services in that city.
To offer products and services, UNIMED depends on various partners or suppliers, but also relies on a certain degree of vertical integration. At the first level, where there is direct contact with the customer and the offered services take place, there are the following relationships: doctors and incorporated therapists, accredited hospital networks, additional service providers (clinical analysis laboratories and image diagnostics) and air service.
Also within the first level, it is possible to verify the vertical integration of UNIMED by the service provided directly to customers. For this reason, UNIMED maintains the following: its own hospital and its own pharmacy.

In this study the diverse types of relationships identified were analyzed and classified based on the theory of networks supply. Based on a classification proposed in a literary work that considers the relationships according to the risk of investment and the impact on profits (Queiroz et al, 2008), a classification of the relationships of Unimed Campo Grande was prepared. This classification indicates the level of existing relationships (Figure 3).

Figure 3: Levels of Relationships of UNIMED Campo Grande

<table>
<thead>
<tr>
<th>Impact on Profits</th>
<th>LOW Risk of Delivery</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>Costs and Optimization of the volume of requests</td>
<td>Reliability and Quality Assurance</td>
</tr>
<tr>
<td>HIGH</td>
<td>Selection based by price</td>
<td>Strategical Alliances</td>
</tr>
<tr>
<td>1) Special Products (High Value, but not critical for the final product). Accredited Network</td>
<td>2) Strategical Products(few manufacturers) Special Materials</td>
<td></td>
</tr>
<tr>
<td>3) General Products (of the shelf)</td>
<td>4) Critical Products (low value, but critical for the final product)</td>
<td></td>
</tr>
<tr>
<td>Consumer Materials Materials &amp; Medicines</td>
<td>Support Services Technical Services</td>
<td></td>
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</table>

This classification is useful for indicating possible strategies or actions for each of the relationships:
- Quadrant 1 - Critical Products: to bargain with the cooperatives and accredited networks for the values registered for payment of fees and procedures.
- Quadrant 2 - Strategic Products: negotiate special terms with suppliers for supply, propose exchanges and increase the level of mutual commitment. Offer preference for cooperative physicians with participation in business.
- Quadrant 3 - General products: management of suppliers (ranked, quality management)
- Quadrant 4 - Critical Products: rigorous selection process, with analyses of adherence of the products with procedures of the company.

While this study is still in progress, these findings only represent a portion of the initial results from the first stage. The study is composed of two stages. The second stage will present collected primary data through interviews conducted at UNIMED Campo Grande, and the third stage will be developed by the results of a survey questionnaire presented to all units of UNIMED in Brazil.

In the continuation of this study, primary data will be identified in order to define the degree of relationships of the various suppliers using the model proposed by Speckman (1998) and adapted by Queiroz (2009). The purpose of this analysis will be to identify the types of contracts developed between UNIMED Campo Grande and each supplier.
It is believed that a cooperative medical group, as with the case of UNIMED Campo Grande, can have as a premise of business, a greater degree of collaboration between the parties involved increases the feasibility of exploiting the benefits of a structure of network supply based the principles of collaboration. This premise can be a starting point for proposing a model or methodology for structuring the collaborative relationship network for healthcare in Brazil.

5. Bibliographical References


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