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Abstract

This paper is aimed to analyze the horizontal and vertical relationships between firms, communities and governments. Also it analyzes the obstacles between these relationships. It is concluded that hybrid forms of cooperation and coordination agreements between firms, communities and governments are the new strategy to absorb uncertainty of economic competition on the international market.

Keywords: Relationships of cooperation, firms, communities, governments.
1. Horizontal and vertical relationships of firms, communities and governments

Macneil (1978, 865) defines the firm to be “in significant ways, nothing more than a very complex bundle of contractual relations”. Klein et al. (1978, 326) also considers the firm as a particular set of interrelated contracts and suggest that these may be used to examine the economic rationale of different kinds of contractual relationships.

Collaboration between firms, social organizations and governments is an important trend of the last 3 decades in order to engage in activities aimed to common goals and to have access resources otherwise could not. There is an increasing recognition of relationships and linkages between firms, networks, business organizations, industrial associations, social and community organizations and governments. There are institutionalized structures and formal - informal relationships of cooperation between firms, national states, communities, international organizations and non-governmental organizations. Public-private partnership (PPP) is a kind of informal cooperation, which takes different forms.

State policy makers call on expertise, political support and manpower, for example, from associations, communities, firms, non-governmental organizations, etc, through a combination of conflict, competition and cooperation.

There are vertical and horizontal relationships with different nature of trade-offs between cooperation/harmony and competition/conflict. Close vertical ties characterized by rich information exchange and long-term commitments lead to greater cooperation and joint activities between the partners and higher levels of asset specific investments, all of which translate into concrete performance benefits for the firms forming such ties (Helper, 1991; Heide and Miner, 1992).

Through the formation of horizontal alliances firms seek to strategically cooperate having resulted in the emergence of new organizational structures in order to manage the relationships of cooperation. The set boundaries of the firms are blurring. A firm can be involved simultaneously in different types of horizontal and vertical relationships to other firms based on the value chain, but involving economic and non-economic exchanges:

Podolny and Page, (1998, p59) define a network form of organization as “any collection of actors (N=2) that pursue repeated, enduring exchange relations with one another and, at the same time, lack a legitimate organizational authority to arbitrate and resolve disputes that may
arise during the exchange. .... This definition … includes a wide array of joint ventures, strategic alliances … franchises … relational contracts, and outsourcing agreements.”

A network is a distinct, highly differentiated, heterogeneous organizational form (Powell, 1990). Networks are associations and the effects of institutions on beliefs and decision making. A network binds relations between complementary resource owners, tied together by personal relationships in order to accomplish a variety of purposes and tasks, allowing them to use each other’s core competencies. Networks bind the independent social and technical entities of two or more organizations by relationships of trust, common culture, interdependence, and complementarily. A network remains more open to admit new participants. Networks evolve into multiple webs of technical, financial and social interactions (Kogut & Zander, 1992; Gulati, 1995).

Cooperation networks as an element of agile organizations (Goldman et al. 1994) increased with the emergence of flexible specialization depending on cultural requirements (Amato Neto, 2003) of the market infrastructure, financial conditions, characteristics of the partners, and so on. Cultural infrastructure is related to cooperation among partners. Goranson (1995) list the requirements in terms of legal infrastructure such as economic agreements, physical infrastructure such as communication technologies and the cultural barriers represented in the lack of trust which facilitates coordination and cooperation forms among inter-firm networks.

Tie modality is the set of institutionalized rules and norms that govern appropriate behavior in the network spelled out in formal contracts or simply understandings that evolve within the dyad and the network (Laumann, Galaskiewicz, & Marsden, 1978). The modality of ties created by firms maintains the relationships characteristics of the network, such as the degree of cooperativeness or opportunistic with implications in the strategic behavior and performance. The relationships in most strategic networks are mixed-motives of partners neither strictly competitive nor cooperative (Gulati, Khanna, and Nohria, 1994). Networks determine the choices available to partners and network structure determine of private and common incentives to compete or cooperate.

Chalmers, Martin and Piester (1997) define associative networks as the 'non-hierarchical structures formed through decisions by multiple actors who come together to shape public policy'. Chandler (1977 emphasized the coordination in hierarchical structures. Within any given network, there may or may not be competition, conflict, inscriptive features, domination and dependency, or cooperation. Strategic networks within the venture capital industry have
significant profit differentials among firms depending on the cliques to which they belong (Piskorski, 1999).

**Figure 1. Organizational forms of co-operative interaction between firms and geographical concentration of firms**

<table>
<thead>
<tr>
<th>Process</th>
<th>Organizational form</th>
<th>Effect</th>
<th>Constraints overcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-operative Interaction</td>
<td>NETWORKS: Strategic co-operation</td>
<td>Dynamic</td>
<td>-uncertainty</td>
</tr>
<tr>
<td>Between firms</td>
<td>between selected firms</td>
<td>efficiency</td>
<td>-asset specificity</td>
</tr>
<tr>
<td></td>
<td>-Within a branch of supply chain, across branches and chains, across sectors</td>
<td>innovation</td>
<td>-lock in (of firms and/or regions</td>
</tr>
<tr>
<td></td>
<td>-Often: regional scale</td>
<td></td>
<td>-Transaction costs</td>
</tr>
</tbody>
</table>

**INDUSTRIAL DISTRICTS**
-division of labor, co-operation, collective, learning

**Geographical concentration of firms**
- subcontracting
- quality management
- Just in time

**AGLOMERATIONS**
- spillovers
- local experience
- services
- infrastructure

Source: Visser, E.J. & R. Boschma (2004),
Networks have two types of change, radical and incremental. Radical change has two levels, the dyad and the network (Knoben and Rutten).

Figure 2. A framework of change in networks and dyads

Source: based on: Halinen et al. 1999.

Four types of horizontal relationships are based on trade-offs between cooperation and competition (Easton and Araujo, 1992; Easton et al., 1993). In a no clear pattern, the content of the relationships can change from competition to cooperation, coexistence or coexistence, steered by the other relationships in the environment.
A. Relationships of competition

The notion of competition derives from the structural equivalence of firms, or the extent to which they share the same resources or customers. Power and dependence are related on the actor’s position and strength. Dependence is more equally distributed but related to the actor’s strength and position in the business network. Conflicts arise frequently due mainly to invisible norms as part of the climate. The goals are object oriented. Proximity of competitors that have common goals is based on psychological and functional factors. Competitive relationships have not been analyzed between vertical actors.

Competition allocate resources by unilateral actions, creates internal and external pressures. Competition is a process of selecting the best practices to innovate as source of profits.

In neoclassical economic theory, competitive relationships take place between different structures. Criticism from industrial organization theory introduces the concepts of strategic groups (Caves and Porter, 1977; Porter, 1979; Harrigan, 1985; Thomas and Venkatraman, 1988), dependency between firms at imperfect markets, competitive rivalry at an intermediate level (Hunt, 1972).

In traditional competition, firms compete against other firms. In collective competition, constellations of allied firms are the competitive units. A comparison of features between traditional and collective competition is next.
The notion of “hyper competition” is similar to high velocity environments between individual firms, which are shifting towards one more dynamic model of “hyper-cooperation” (D’Aveni, 1994). Firms competing in hyper competitive environments exhibit behavior that differs significantly from behavior in more static environments (Thomas, 1996). The identified drivers for a shift towards hyper competition are consumer demand, the knowledge base of firms and associated workers, declining entry barriers, and the increasing frequency of alliances among firms. To assess the structure of competition in the global currency trading industry has been used the interactions between banking firms in a global electronic network (Zaheer and Zaheer, 1999).

B. Collusive relationships

Collusive relationship takes place when two competitors join forces to damage a third one. Collusive behavior dominates the study of cooperative behavior. Adam Smith (1776) wrote, “People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices”.

2. Obstacles for cooperation and coordination

The ability to provide coordination, for hierarchical controls especially in situations involving high interdependence and uncertainty in inter organizational relations is a challenge (Barnard, 1938; Thompson, 1967 and Chandler, 1977). The ability of organizational hierarchies to mitigate the uncertainty resulting from coordination and control of complex and interdependent tasks by creating cooperation and coordination among organizational members (Barnard, 1938)
Anticipated interdependence resulting from the logistics of coordinating tasks can create considerable uncertainty at the outset. "Since there is both conflict and cooperation and formal authority structure is lacking." (Litwak and Hylton, 1962: 399).

Chandler (1977) emphasized the significance of coordination in hierarchical structures. Transaction cost economists have begun to examine issues such as "temporal specificity," or the importance of timing in receipt of goods or services that are related to coordination costs (Master, Meehan, and Snyder, 1991). Genefke (2001) draws the path from the goal of the collaboration over the difficulties inherent in non-closed partnerships to the collaborative fate, which can evolve into at tight-knit cooperation or drift into some un-manageable entity. Any assessment of formal cooperation is based on benefits, costs and risks. Global and local governance establish limits and problems to solve the areas of potential co-operation.

![Figure 5. The 2001-Model of Factors Influencing Collaborative Success](image)

*CLOSURE*

**COUNTER MEASURES:**
- Transparency
- Cultural alignment
- Staffing

**AMPLIFIERS:**
- Number of participants
- Disparity

**AMPLIFIERS:**
- Unresolved
- Asymmetries

**COUNTER MEASURES:**
- Preparation
- Model
- Inclusive leadership

*DEVELOPMENT*

*INTENT*

Drift

Evolution

vague

Source: Genefke (2001).

Some obstacles to cooperation in clusters are:
Table 1: Obstacles to co-operation in clusters

<table>
<thead>
<tr>
<th>Obstacles to co-operation between firms</th>
<th>Obstacles to co-operation between firms and supporting institutions</th>
<th>Obstacles to co-operation between private and public sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prisoner’s dilemma in an un-cooperative environment</td>
<td>Difficult relationship between SMEs and associations, in particular chambers</td>
<td>Local governance issues (political rivalry, collective conservatism, and role of chambers)</td>
</tr>
<tr>
<td>Costs and risks of co-operation</td>
<td>Common problems of co-operation between firms and supporting institutions</td>
<td>Global governance issues (externally owned firms, foreign buyers)</td>
</tr>
</tbody>
</table>

Source: Amato Neto (2003).

According to Amato Neto (2003) the social and cultural barriers for creating cooperation networks among SME’s in Latin America, among others are:
1. Lack of real commitment and confidence among the partners.
2. Lack of resources in terms of information technology (IT).
3. SME’s don’t use to cooperate with each other.
4. The precarious organizational structure and the specific organizational culture
5. SME’s are in general just concentrated in performing everyday operations and there is no vision for the long run.

To establish a cooperative relationship between firms requires some elements. León (1998) present different aspects to consider in a trustworthy situation:

- The importance of the pre-existent social relations networks
- The importance of the mutual respect
- The learning of the relationship
- The importance of the reputation of each partner
- The risks involved in cases of opportunist behavior, mainly in terms of the necessity of shouting out some partner from the network
- The learning of the social “savoir-faire”, among others.
A successful collaboration involves a shared mental picture of the dependencies between the participating organizations’ work-, goal, and need systems. A messy picture gives misunderstandings and conflict (Genefke, 2001).

**Figure 6: A human system view of collaboration**

Source: Genefke (2001)

A partner who perceives that the two partners’ goals and needs is related, but the work-systems’ are unrelated which can be understood that the problem is one of trust

**Figure 7. Problem of trust in collaboration**

Source: Genefke (2001).
When the partners perceive they do not have common goal-systems but the work- and need-systems are closely related, the problem may be one of ensuring reputation.

**Figure 8. The ensuring reputation’s problem**

Source: Genefke (2001).

Traditional set of believes held by economic and political elites are attitudes suggesting distance, clientele relations, or authoritarian postures, etc., blockade any possible interaction and relation with other actors. This non-cooperative behavior is a barrier for complex social coordination to make and implement decisions in particular settings like communities, firms, government agencies, etc. Social coordination and governance requires more collaborative and cooperative attitudes between the different private and public stakeholders involved, more specifically when public goods are scarce and common-pool resources need to be managed.

To promote cooperation in associative network between popular sectors (workers) and elites (managers) it is necessary to develop cognitive skills. Such network is an arena where outcomes will not be determined by political resources associated by property, class, social status or access to the means of coercion (Chalmers, et al, 1997).

Regardless of whether collaboration is driven by strategic motive or by learning considerations to gain access to new knowledge or by embeddedness in a community of practice, connectivity to an inter-organizational network and competence at managing collaborations have become key drivers of a new logic of organizing.
This view of organizations and networks as vehicles for producing, synthesizing, and distributing ideas recognizes that the success of firms is increasingly linked to the depth of their ties to organizations in diverse fields. Learning in these circumstances is a complex, multi-level process, involving learning from and with partners under conditions of uncertainty, learning about partner’s behavior and developing routines and norms that can mitigate the risks of opportunism, and learning how to distribute newly-acquired knowledge across different projects and functions Powell (1998)

**Concluding remarks**

A Strategic alliance o scale alliance is a horizontal, link alliance or vertical strategic, diagonal alliance or cooperation between firms in different industries. It is set up as a separate joint venture if there is a perceived need to tie in the partners, scope is a distinct of core business or geographically, assets are specific and separable from parents, and clear objectives.

Cooperative relationships between vertical agents are built on a distribution of activities and resources. Through vertical cooperation or integration between firms, the problems of appropriateness of complementary assets can be solved. Through different forms of cooperation, firms can achieve targets that could not achieve alone as for example, to combine the advantages of vertical integration and scale economies in merging resources but keeping individual companies focused on its core competencies. A vertical alliance is an agreement between a firm and organizations to exchange in one direction, either supplying inputs or using its outputs.

Vertical integration is a hierarchical relationship more likely to predominate where the innovation chain is characterized by uncertainty and complexity of environment. Cooperation through vertical associations between innovating firms, users of innovations and suppliers is user and supplier led. Trade-offs in vertical relationships between cooperation and competition/conflict involve that actors compete to be effective and cooperate to create long-term relationships.

Some forms of these cooperative arrangements can be horizontal alliances between organizations. These alliances compete for the same resources with exchanges in one direction. Politicians for example, support horizontal cooperation between firms for innovation and international competitiveness and to solve market failures and deficiencies through exploitations.
of economics of scale and scope, use of synergies, internalization of externalities and reduction of financial constraints and risks.

The complexity of scientific and technological inputs, the uncertainty of economic conditions and the risks associated with uncertain technological trajectories, appear to have reduced the advantages of vertical and horizontal integration and made hierarchies a less efficient way of responding to market imperfections. But the needs to respond to and exploit market imperfections in technology have also increased, and have thus pushed inter firm agreements to the forefront of corporate strategy. Hybrid arrangements include all forms of cooperative relationships between market transactions and vertical or horizontal integration.

Hybrid forms of cooperation and coordination agreements between firms are the new strategy to cope uncertainty of economic competition on the international market. Cooperation agreements between the transaction partners are hybrid forms of cooperation lying in between hierarchies and markets, have the advantages of the first and the benefits of the second. Network is a hybrid form of cooperation alongside relations of competition between markets and hierarchies and includes formal and informal arrangements.

Firms both compete and cooperate in a well-functioning market economy. Relationships at the horizontal level focus on cooperation between competitors between competitors can emerge vertical and horizontal relationships, which include elements of competition/conflict and cooperation/harmony. Conflict, competition and cooperation are also present within an alliance.

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