

# RELATIONAL KNOWLEDGE AND GOVERNANCE CHOICES: A VIEW WITHIN RESOURCE-BASED THEORY PERSPECTIVE

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## Abstract

The paper is a theoretical paper, focused on the analysis of the intangible and cognitive content of inter-firm relationships, according to Knowledge Based View (Kogut and Zander, 1992; Foss, 1993, 1996; Nonaka, 1994; Grant, 1996, Teece, 1998). In particular, the issue is examined taking into account two main approaches on learning and knowledge creation: the exploration/exploitation model (March, 1991) and the model based on the concept of absorptive capacity (Cohen and Levinthal, 1990). These approaches are analyzed critically, with specific reference to inter-firm collaboration, taking into account also contributions within the so called Relational View (Gulati, 1998; Dyer and Singh, 1998; Kale and Singh, 1999, 2007; Kale, Dyer and Singh, 2002), according to which the social aspect of the relationship between the firm and its external environment is a central question.

The basic assumption is that external relationships can generate knowledge and competences that are potentially able to generate relational rents (Dyer and Singh, 1998), important not only for the single firm but also for the whole aggregate (alliance, rather than network) it belongs to. Then a systemic logic comes out, according to which partners interact, exchange knowledge and resources, through different governance models, in order to reduce relational costs and gain the most intense synergic effects. The problem is, however, that such a profitable collaboration does not seem to be so widespread and in some cases networks fail because of the lack of coordination mechanisms. From this point of view, a governance entity can be necessary or at least appropriate (Kale, Dyer and Singh, 2002).

Therefore, the aim of the paper is to verify: the role of relational knowledge within and between networks, in order to gain sustainable competitive advantage. In this direction, also the relationship between knowledge view and resource-based theory is analyzed, considering the former to complete and enrich the latter; if governance choices regarding relational knowledge can be themselves sources of competitive advantage.

**Keywords:** Resource-Based Theory, Firm, Relational Knowledge, Governance Choices

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## 1. Knowledge-based view and RBT

### 1.1. Introduction: theoretical background

Studies on the intangible sources of competitive advantage have been spreading in the last decade, giving emphasis to the main difficult and tacit sources of firm's competitiveness. This complex source has been labelled as knowledge, including all intangible factors, both more explicit or implicit, that can determine, either more directly or indirectly, firms' superior performance. This definition has to be attributed to Polanyi (1966: 4), who asserted that "we can know more than we can tell", being knowledge the tip of iceberg of a firm's patrimony, made of both explicit (codified and transmittable in a clear and

systematic language) and implicit knowledge (personal qualities, less codifiable and difficult to formalize and connected to men's attitudes, commitments and interactions).

Over time, several articles and books have been proposed, both theoretical and empirical.

Contributions have progressively enriched in an interdisciplinary view, such as in psychology and sociology (Weick and Roberts, 1993; Cook and Brown, 1999). This movement has led to the proposition of knowledge-based view, sometimes even labelled as knowledge-based theory, as an approach/theory used with reference to strategic management, to the theory of the firm and to organization theory, according to which knowledge

represents the main reason for competitive advantage and organizational success.

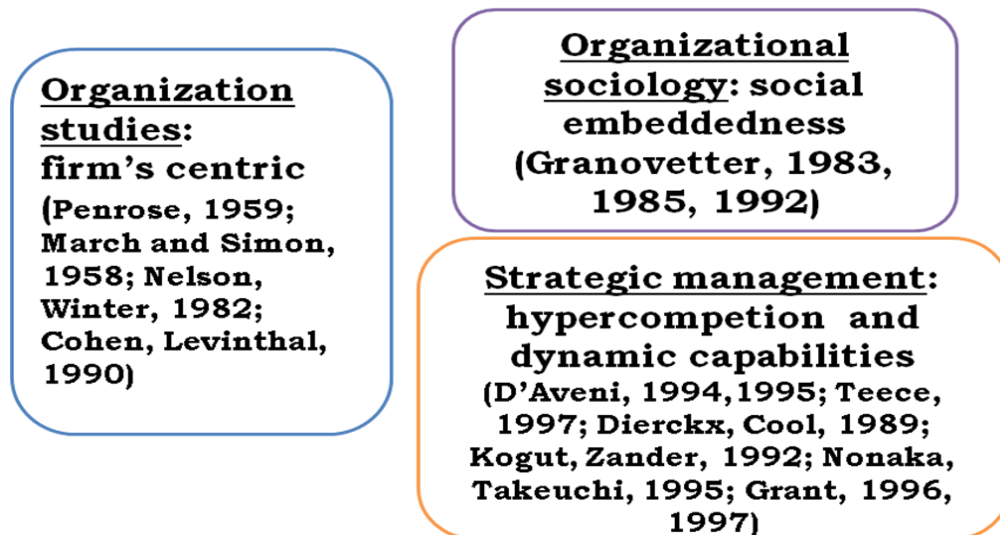
After several years from previous systematizations on the subject (Eisendhart and Santos, 2002), we however still confirm that more than a different approach or new theory, it is a specific stream of research, within resource-based theory, that mainly concentrates on intangible assets. In our view, very interesting contributions of “knowledge stream” to resource-based theory advances have developed in two main directions: with reference to the issue of change (either incremental or radical), adding the question of dynamic capabilities in a dynamically competitive environment, and to the issue of inter-firms relations. These two issues have almost be dealt in terms of knowledge creation, exploitation and transfer within and between organizations. Our main interest is not only in studying these processes but

mostly in explaining if, how and at what level they can generate sustainable competitive advantage. More specifically, we try to investigate the role of relational knowledge in inter-firm alliances and networks’ governance choices.

### ***1.2. Knowledge in a dynamic and complex competitive context: a multidisciplinary approach***

As regards the first aspect – change and dynamic processes – contributions have been developed in different research areas. It is moreover absolutely necessary to deal this topic with a multidisciplinary approach, since it’s an issue that has some relevant impacts not only on business and corporate strategy but also on organizational structure and its relative evolution as well as on sociology (fig. 1).

**Figure 1.** Changes and dynamic capabilities



Within organization studies, the first contribution to the concept of knowledge dates back to Penrose's work (1959), where she underlines that new knowledge is generated by the learning process and represents the basis for the firm's growth through firm's resources recombination. On this wake, March and Simon (1958) developed the concept of routines, as expression of a firm's identity and know-how, in a vision of change as an incremental process of adaptation. On the other end, Nelson and Winter (1982) first introduced this issue in the light of dynamic competition: the firm is seen as a knowledge repository but they also focus on how to respond to environmental complexity and uncertainty. This took to Cohen and Levinthal's vision (1990), according to whom organizational learning and innovation are at the basis of firm's knowledge.

This view is firm's centric, with an opposite optic compared with the organizational sociology's view, according to which organizations find their own

legitimacy in their own environments according to their *embeddedness* (Granovetter, 1983, 1985, 1992).

As regards strategic management contributions, the question of dynamic or even hypercompetition (D'Aveni, 1994, 1995), characterized by discontinuous changes, increasing demand variety and variability, technological development, has put theorists in front of the problem of how to gain and especially sustain competitive advantage in such difficult contexts. From this point of view, some authors proposed the concept of dynamic capabilities, connected with firm's ability to combine, build and rebuild competences, in order to face an ever changing environment (Teece et al, 1997; Teece, 2007). Other relevant contributions, within resource-based theory, regarded Dierickx and Cool's vision (1989) of knowledge as characterized by stocks (accumulated knowledge assets) and flows (dynamic streams of knowledge). Still in strategy field, some authors mainly concentrated on the question of knowledge creation within organization (Kogut and

Zander, 1992) and on the issue of the relationship between individual and organizational knowledge. The question of knowledge creation within organization is based on the assumption that individuals in an organization hold their own knowledge, transfer it inside the organization that so becomes embedded in the values and culture created by its members in a volunteer and cooperative way. This knowledge so accumulated develops according to an incremental process of path dependence. However, if it provides firms' development, on the other hand it can be more easily copied. Therefore, firms' competitiveness depends on their capabilities in combining and recombining knowledge through an ever ending recreating process.

In this direction, other scholars concentrated on the integration of individual and organizational knowledge, viewing the firm as a network where knowledge created by individuals makes its roots and amplifies each individual's knowledge at the same time, through a process of both tacit and more explicit knowledge creation (Nonaka and Takeuchi, 1995).

The link between organizational and strategic management studies, in this direction, is represented by Grant (1996a, 1996b, 1997), who mainly concentrates on tacit knowledge as a main source of competitive advantage, through the integration of individuals' own knowledge and its application in new productions. This concept is rather close to that of routine, mentioned above. A very interesting aspect to underline is that in dynamic contexts proprietary knowledge easily erodes and becomes obsolescent. Therefore, in such cases, tacit knowledge held by individuals can be the real source of competitiveness, provided that, to be profitable for the organization, an efficient, flexible and of a broad scope integration process is required. On this stream, knowledge view has been defined as a specific theory (Grant, 1996a; Kogut and Zander, 1996; Spender, 1996; Dagnino, 2005), different from resource-based view, since the real source of competitive advantage is considered to be knowledge as a multifaceted factor. As said, however, this idea is rather arguable since it's quite simplistic to look at knowledge and, even more, tacit knowledge as the only source of competitive advantage. This is a specific aspect that, by itself or better combined with other possible sources of advantage, can influence firm's competitiveness: strategic resources can in fact be tangible or intangible and each of these macro-categories has a whole set of resources that characterizes

it. Therefore, we assume that knowledge is a specific resource within RBT: the mechanisms for rent generating do not differ from RBT main analytical frameworks (such as VRIO framework<sup>41</sup>).

<sup>41</sup> As known, VRIO framework allows to analyze whether a resource can generate competitive advantage, both temporary and sustainable. Strategic resources are valuable (able to favour the firm in reducing menaces and/or

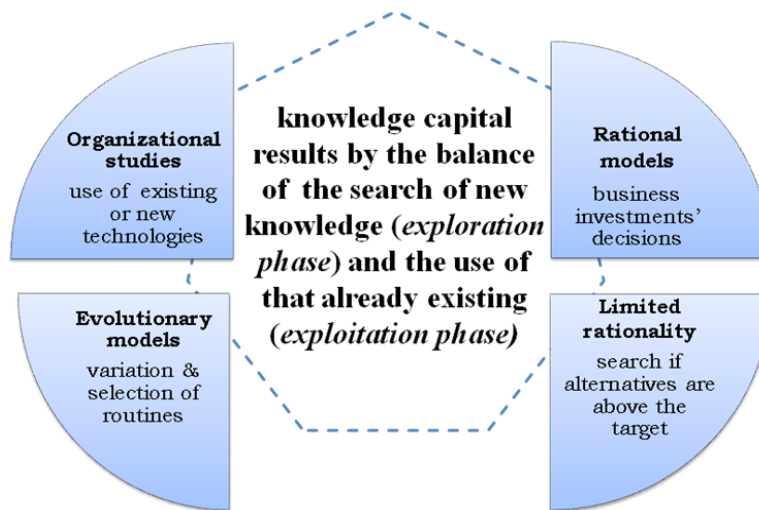
Since knowledge is anyway one of the most difficult aspects to examine, not only within theory but also in management practice, from these studies some interesting hints come out, even enriching resource-based theory, with specific reference to the issue of dynamism in competitive advantage's generation and to sources of competitiveness that can lie outside the organization but be somehow available for it.

As underlined, the former aspect can be referred to dynamic capabilities, interpreted as "the entrepreneurial way in which intangible assets are deployed" (Teece, 1998: 290) and analyzed through both the exploration/exploitation model and the social embeddedness concept.

According to the first one, firms have to manage their knowledge capital trying to balance the search of new knowledge (*exploration phase*) with the attempt of using and evaluating the already existing one in a profitable way (Boisot, 1998). The *exploration* phase seems necessary to sustain a bundle of innovations, fundamental to compete in highly competitive markets (Wiig, 1997). On the other hand, it implies higher costs and risks, being less certain.

The roots of this model (figure 2 - March, 1991) mainly lie in rational models of choice (Radner and Rotschild, 1975; Hey, 1982), including those of limited rationality (Simon, 1957; Cyert and March, 1963) as well as the studies on organizational learning (Winter, 1971; Levinthal and March, 1981; Levitt and March, 1988) and evolutionary models (Ashby, 1960; Hannan and Freeman, 1987).

catching opportunities), rare (that is possessed by a reduces number of firms and anyway a number which is lower than that of perfect competition), inimitable (that is difficult or costly to imitate or to duplicate) and used by the organization. In this case they succeed in generating sustained competitive advantage; if they are not difficult or costly to imitate, it generates temporary success. If not rare, just competitive parity and if neither valuable, just competitive disadvantage (Barney, 1996; 2006).

**Figure 2.** The exploration/exploitation model (March, 1991)

In rational models the process is mainly analyzed in terms of business investments' decisions, that can be taken either using information already available or acquiring new information. This trade off, that has to be managed, is complicated by the fact that probability distributions may result unstable, others' choices may influence investment's decisions and new opportunities may appear. In situations of limited rationality, the basic assumption is that search is stimulated if preferred alternatives are above the target. Organizational studies deal this issue with reference to the use of technologies, considering the possibility of using the existing ones or rather catching new ones. Also in this case there is a trade off, since the exploration of new technologies reduces the speed of usage of already existing ones, while the concentration on exploitation of those available makes experimentation less attractive. Evolutionary models consider the issue in terms of variation and selection of routines and practices: effective selection is fundamental for firm's survival but generation of new alternatives can be strategic in changing environments. On the basis of these studies, where intangible aspects are considered, such as information rather than technologies or routines and practices, March's exploration/exploitation model is specifically based on the analysis of knowledge. The author in particular considers the trade off between the two processes in terms of learning, and more specifically to the extent it can favour knowledge creation. The basic assumption is that learning both favours average performance and variability. When it's possible to catch new opportunities (i.d. new technologies) or to

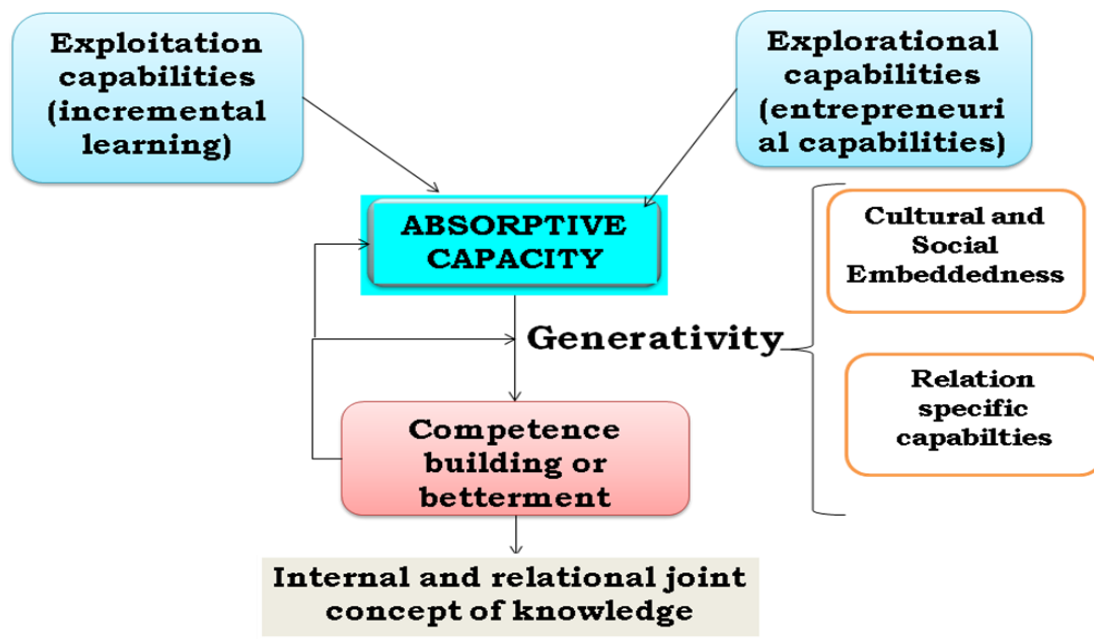
insert some new element within the organization (i.d. new individual with unusual skills, attitudes, culture, religion, frame of mind, gender or ethnicity), it's important to consider whether performance prospects are superior to the disadvantage of unfamiliarity, plus the value generated by already existing knowledge. In this direction, knowledge can increase both average performance and its relative variability (March, 1991: 84) but it is not necessarily the source of a firm's competitive success. Of course knowledge learning and rooting can help a firm's coordination and communication's process, making its performance more reliable, but the real effects depend on the management of both knowledge and discovery attitude.

In our view, transferring this model more specifically to inter-firm collaboration's contexts, some important observations can be outlined.

First, considering the risks connected with the more unfamiliar and uncertain exploration phase, external relations could be used to share the overall risk. The wider is the set of relations with external partners, the more risk can be shared. Besides, the set of relations can also help reducing the learning time and enriching knowledge itself of new contents: it can in fact favour knowledge development, through a quicker *exploitation* phase, also of new discoveries and can benefit of partners' capacity of developing knowledge from new acquired factors.

As regards the *absorptive capacity* model (figure 3), this refers to a firm's capacity to recognize external information's value, to acquire and apply it with commercial profits.

Figure 3. The dynamic relational knowledge creation process



This view introduces the Schumpeterian vision of entrepreneurship, in terms of capacity of grasping and catching the opportunities generated by radical and shaking changes in external environment (this is the process of creative destruction – Schumpeter, 1934; 1950). In this direction, the so called *generativity* (Donald, 1991) enables firms to develop new resources (*competence building*) or to better use those already possessed or controlled (Post, 1997). Therefore, the opportunities of generating new knowledge increase (Weitzman, 1996; Moran and Ghoshal, 1999). This is a more dynamic vision of knowledge itself and its relative process of generation and development.

In this direction, some authors (Brown and Duguid, 1991) underline the importance of less structured and more informal processes: they in fact refer to communities-of-practices as groups within organizations as means of innovation fostering. At the extreme, Leonard-Barton (1992) asserts that when there is low congruence between innovation and core capabilities, the latter can result a rigidity for strategic and organizational development.

This implies a continuous relation between the firm and its external environment, with reciprocal relevant influences, also synthesized in the concept of *embeddedness*. This can be of two kinds: *cultural embeddedness* (Granovetter, 1983) and *social embeddedness* (Boisot, 1986). Institutionalized social norms and the values internalized by economic actors are likely to influence even the emergence of inter-firm collaborations (Boisot, 1986, de Rond, 2003). Even if the prospective is totally different, a very important point comes out of these contributions: the cultural and relational soul of the concept of knowledge; the former mainly refers to the knowledge rooted within the organization over time, while the

latter concentrates on the advantages that can derive from a firm's social relations it's able to start and develop. The social factor is generally considered the most tacit side of a firm's knowledge, in terms of combination and recombination of different knowledges either held by individuals of an organization (Nonaka, 1994) or by organizations involved in strategic alliances or networks. The last aspect in particular regards processes of inter-firm collaboration, where the process is even more complex, not only in terms of knowledge generation and property, but also with reference to the explicit/implicit issue.

This specific topic has been analyzed by several scholars who, within the so called *Relational View* (Gulati, 1998; Dyer and Singh, 1998; Kale and Singh, 1999, 2007; Kale, Dyer and Singh, 2002), are more specifically concentrated on the social content of the relationship between the firm and its external environment.

According to this view, it's important to analyse inter-firm relationships also in the light of the overall set of relationships a certain firm has been able to start and develop over time (Koka and Prescott, 2002). This leads to a view of alliances that goes far beyond the simple dyadic relations (Gulati, 1998). External relationships can therefore generate knowledge and competences that become a source of a *relational rent* (Dyer and Singh, 1998), able to generate either temporary or sustainable competitive advantage.

## 2. Relational view in strategic alliances

The interpretation of strategic alliances according to Relational View has developed only recently. Within the industrial-economic literature, strategic alliances

have been read at first as a distortional form of control of market logics, by more or less underhanded collusion between competitors. The main debate, putting *Transaction Cost Economics* and *Resource-based Theory* against each other, within the wider field of organisation and strategic management studies, gave birth to the fertile ground on which, later on, interesting examples of analysis and reading of cooperative behaviours between enterprises flourished.

Transaction-cost economics put its emphasis on the structural aspect of alliances as an intermediate and not idiosyncratically solution between hierarchy and market in order to govern transactions during conditions of uncertainty. Compared with the usual market relations<sup>42</sup>, alliances would favour a competitive advantage, and a sustainable one at that, by a joined endowment of resources that would be hard to repeat on the market (Williamson, 1985); in those cases in which the scarcity of partners' resources and competences would not jeopardize the final endowment of resources, the working dynamics of the *strategic factor's markets* (Barney, 1986) would bring the prices to destroy every possible advantage.

Strategic alliances are one of the viable competition modes for enterprises. Gulati (1998: 293) defines them as "*voluntary arrangements between firms involving exchange, sharing, or codevelopment of products, technologies, or services.*" Some scholars in the 90s (Chan et al., 1997; Anand and Khanna, 2000) underlined the benefits of cooperation towards economic value creation for single enterprises, others (Kogut, 1989; Bleeke and Ernst, 1993; or the *Alliance analyst*, 1998) brought into the spotlight the hurdles and the risks connected to an inaccurate formulation and management of these strategic choices.

RBT initially puts a different kind of attention, a firm-centric one, on the strategic nature of these choices within the competitive advantage creation logics by means of specific competences and resources. This view has also developed over time, paying more and more attention to the advantages derived from collaboration. In this optic, strategic alliances may then become a source of competitive advantage (Dyer and Singh, 1998: 662) when they succeed in generating relational rents by basing themselves on: creating an intermediate combination of relational resource and on *relation-specific investments* the involved to secure themselves against opportunistically behaviours towards each other; on *sharing knowledge flows* order for them to start new learning processes; on *combining those resources being both scarce and complementary*, allowing the creation of new and/or unique products, services and technologies. However, as it will be fatherly explained, some *governance mechanisms* are

necessary not only in favouring the minimisation of transaction costs, compared with those met by competitor enterprises, but mostly to create rents from the uniqueness of the resource combination used in the alliance<sup>43</sup>.

Some studies focused on generative processes<sup>44</sup>, others on alliances' performing factors<sup>45</sup>. Keeping this technical framework in mind, Dyer and Singh (1998) as well as Gulati (1998) widen the view traditionally connected with alliances, until then considered and analyzed as a relation between independent subjects in the majority of the cases, to evaluate the role of the social networks in which the relations themselves develop as well and also evaluating the effects that these relations have on the genesis and the performance of an alliance.

If the "*industry structure view*" (Porter, 1980) intertwined superior enterprise performances to a sector's specific features, the Relational View shows how an enterprise's critical resources can extend well beyond its specific boundaries (Dyer and Singh, 1998), adding value to Resource Based Theory. The actions of every single enterprise cannot be evaluated disregarding its embeddedness<sup>46</sup> in a social context or in a social network, defined as "a set of nodes (e.g., persons, organizations) linked by a set of social relationships (e.g., friendship, transfer of funds, overlapping membership) of a specified type" (Laumann, Galaskiewicz and Marsden, 1978: 458), able to influence its behaviour.

The evaluation of alliances is widened by the single (or dyadic) relation to the network; also in the case of dyadic alliances, relational factors and processes who will factor in an enterprise's related results may be affected by the social networks they are in.

<sup>43</sup> Even if the authors make frequent references to the transaction cost, the presence of an implicit remark towards the VRIO model, the resources used in the alliance must be worthy, must be able to create a combination being both rare and hard to imitate for competitors, and the alliance must be constructed in order to be able to exploit such a situation at its best.

<sup>44</sup> In this field Gulati (1998: 294) poses some fundamental questions: (1) Which firms enter alliances and whom do they choose as partners? (2) What types of contracts do firms use to formalize the alliance? (3) How do the alliance and the partners' participation evolve over time?

<sup>45</sup> These studies, according to Gulati (1998: 294), focus on the other following questions: (1) What factors influence the success of alliances? (2) What is the effect of alliances on the performance of firms entering them?

<sup>46</sup> Embeddedness is defined by Marsden (1981) as a consequence of the fact that the relationships in a group have an history that could bring to the creations of routines and to steadier relationships amongst group members. This relational structure modifies individual behavior both by explicitly limiting his freedom of action and by modifying personal preferences towards possible actions.

<sup>42</sup> Dyer and Singh (1998: 661) refer to "arm's length market relationships", to be precise.

The relation between *social networks* and alliances appears to be a complex one indeed, not only because of the influence the social networks produce on alliances (the so-called endogenous view), but also because the structure of the social networks itself gets to be modified by the new relations developing by means of alliances (and that is called external view) (Gulati, 1998).

Understanding and governing these effects, furthermore, allows the enterprise to switch from a passive role in the management of alliances (*path-dependent strategies*) to a more active one (*path creation strategies*) (Garud and Rappa, 1994).

The first studies pertaining the effects of social networks (Burt et al., 1994) focused themselves on structural factors, such as *inequality*, *embedding*, *contagion*, and *contingency*.

Differences in the structure of a social network (*inequality*) can explain the differences in the availability of resources; *embeddedness* emphasizes the role of structure as an important element towards facilitating the creation of relations. The concept of *contagion*, i.e. the phenomenon through which social networks can promote homogeneity of behaviour by making the passage of information and the management of activities easier, as well as the effects on the spreading of information. The last approach (*contingency*) raises the issue of how social structure may affect and influence the main management projects.

Concerning social networks, besides their structure, their aim and the ways the information flows within them must also be analyzed (Stinchcombe, 1990). Furthermore, two ways in particular have been detected for Social Networks to affect the actions of those who take part in them: the first is based on creating advantages connected with access to information, while the second stems from the position a subject has within the framework of the enterprise.

Both these advantages are in effect linked with the transfer of information that, according to Granovetter (1992), depends on two forms of *embeddedness*: *relational embeddedness*, i.e. the ability of two actors sharing a relation to access the same hoard of information, to lessen uncertainty and promoting trust (reliability) amongst them, and *structural embeddedness* that is the global capacity of the network's configuration to facilitate the passage of information, which allows every actor involved to gain an advantage based on his or her "status" within the network (Podolny, 1993, 1994).

According to Relational View, these factors give an interpretative framework that results more effective towards the study and comprehension of rents and competitive advantages in strategic alliances.

On one hand, belonging to the same network allows involved enterprises the slow propagation of a *knowledge-based* climate of faith (Shapiro, Sheppard

and Cheraskin, 1992) which reduces the threats of opportunism (Barney and Hansen, 1994).

Enterprises tend to select their partners within their social networks, sometimes by means of a "chain reaction" mechanism: the relations belonging to other partners involved in the network to activate new alliances and forge new links.

The structure of relationships within a network may itself become the base for the creation of a *deterrence-based* trust (Kreps, 1990; Raub and Weesie, 1990; Shapiro et al., 1992; Burt and Knez, 1995). And it's just the fear of the consequences of unfair behaviour with specific regard to reputation and to the negative impact it may have on other relationships the enterprise keeps, to stifle opportunistic behaviours.

These typical effects of social networks, combined, may reduce the necessity of equity forms of agreement between subjects belonging to the same social network.

Furthermore, several studies showed how previous experiences of alliance within the same social network allow the enterprise to hold a more central role within the network itself or to create a steadier sub-network<sup>47</sup>, with the ultimate effect of making the creation of new alliances easier (Kogut, Shan and Walker, 1992; Gulati, 1998).

Thus, such an enterprise becomes a worthier partner, both for its better reputation, for the quality of the information sources it manages to acquire and for its deeper development of competences and tools towards managing alliances.

To facilitate the birth of such competences, the enterprise may decide to create an organisational branch specifically dedicated to the development of alliances, allocating to this branch. This may favour the creation of more silent knowledge (Polanyi, 1966) and, by management turnover spreading it within the organisation. Besides its role in the learning processes, a dedicated branch would have the further advantage of evaluating new possible partners and of constantly monitoring the performance of already running alliances. Overall, Kale, Dyer and Singh (2002) noticed how an alliance-dedicated branch in enterprises could bestow long-term positive results more easily<sup>48</sup>.

<sup>47</sup> The density of a social network is measured by the total number of dyadic relations developed within it compared with their theoretical maximum. This is a measurable parameter, and can be expressed as such:  $D = (2R / n(n-1))$  where R equates the maximum number of relations and n is the number of subjects involved in the social network.

<sup>48</sup> Such result appears less meaningful, as the authors themselves detect an important relationship between the aggregate number of alliances the enterprise developed and the presence of a dedicated branch; this element suggests how the role of such an organisational dedicated branch was already known to those enterprises widely using this strategy.

The processes involving the sharing of resources generate *relation-specific capabilities* (Dyer and Hatch, 2006)<sup>49</sup>, themselves able to become a barrier to knowledge transfer, succeeding in preventing the possibility of external spill-overs, even in the face of a strong absorptive capacity (Cohen and Levinthal, 1990)<sup>50</sup>.

In these cases reaching a relations-linked competitive advantage (Dyer and Singh, 1998; Gulati, 1999) depends on the enterprise's capacity to use its knowledge base in order to initiate learning processes. This learning must then be spread within an enterprise's structure so to distil itself into greater competences (Conner, Prahalad, 1996; Grant, 1996a).

On a cue by the *knowledge-based view* (Collis, 1996; Grant, 1996a), in Relational View as well hoarding and using knowledge allows enterprises to improve their processes and to foster a push towards further learning in order to improve routines and processes (Zollo and Winter, 2002). Towards this goal, Kale and Singh (2007) propose a knowledge management process moving from a conscious effort towards making individual competences known (Senge, 1997); that's the so-called *articulation of alliance know-how* phase, which attempts to relate past experience to future ones in order to augment the knowledge base useful for learning processes (Zollo and Winter, 2002).

The second phase consists of the codification of silent knowledge pertaining to an alliance (*codification of alliance know-how*), in order not only to facilitate an easier transfer of knowledge (Kogut and Zander, 1992; Nonaka, 1994), but also to foster a process able to create further knowledge (Zollo and Winter, 2002). The third phase is the one involving *sharing of alliance know-how* to create structures facilitating the spreading of knowledge by means of the interaction between subjects within the organization (Seely, Brown and Duguid, 1991; March, Sproull and Tamuz, 1991). Lastly, there's the phase

involving *internalization of alliance know-how*, during which each single manager improves his or her knowledge base regarding alliances' management and, at the same time, improve their *absorptive capacity*.

A problem that's been tackled only recently within the Relational View milieu is the issue of the distribution of benefits and of relational rents amongst the several participants in the alliance or in the network. In this field, too, belonging to a social network may play a fundamental role.

Relational rents are distributed amongst partners in a way based on factors that may refer to common (*common benefits*) or specific (*private benefits*) areas. According to Dyer, Singh and Kale (2008), in the first case, a partner's negotiation power may allow said partner to take the value created by the alliance when it succeeds in convincing the other partners that it alone owns valuable, rare and inimitable (VRIO) resources which the other partner would be unable to gain from the market or from other partners. The negotiation powers between parties may however be modified following the capacity, achieved by one of them during the alliance, to acquire those VRIO-related skills and competences from the partner and to autonomously replicate them. Such is Pfeffer's and Salancik's "resource dependence" view (1978).

Regarding unilateral, factors, i.e. those specific to a single partner in the alliance, Dyer, Singh and Kale (2008) refer to three different views: *Related Resources Theory*, *Structural Holes Theory* and *Resource Development Theory*. The partner holding a *scope of resources and activities* resulting more related and in tune with those important to the alliance, endowed of the greatest *relative absorptive capacity* (Cohen and Levinthal, 1990) within the alliance and has particularly effective interorganisational routines in order to secure the effective transfer of resources and knowledge is able to generate bigger *relational rents*. The enterprise having the widest network of relationships and alliances and who is placed at the centre of such a network is able to generate bigger relational rents by exploiting (harnessing) informative benefits and exerting control over relationships. Lastly, the wideness of the alliance portfolio, in association with an high capacity regarding market access and strong "sense-making capabilities" favours, in partners, the capability to develop new resources, better harnessing those opportunities alliances offer. The balance between *common* and *private benefits* affects stability degree of an alliance will reach the top in case of high *private common benefits*.

### 3. Governance choices as relational knowledge: source of competitive advantage?

Up to now the so called relational view seems to overcome resource-based theory and to solve many

<sup>49</sup> The authors refer in particular to Toyota's supply network in the USA, focusing only on those suppliers shared with other car enterprises and showing how, despite sharing the same structure, competitor enterprises did not succeed in seizing those routines created by the Japanese car producer, even if the latter did not create specific contractual limitation for their transfer

<sup>50</sup> This result, in particular, may seem contrary to those reached by RBT as it is asked of the enterprise to keep sharing its knowledge base with external subjects also in those cases in which the risk of *knowledge spill-over* is high. In fact, such positions are very close to each other. By continuous knowledge transfers, two enterprises may create a common legacy of resources that is linked to a single specific relationship, as no single enterprise may fully tap it without the other; furthermore, because of the greater connection of resources, the action of routine imitation is itself stifled by causal ambiguity.



issues of scientific debate on competitive advantage and its relative sustainability and sources. However, as it comes out of the focus on strategic alliances, it seems that certain mechanisms still exist in order to avoid opportunistic behaviours. This process, as underlined, can be explained through transaction cost economics or relational view (in this last case, with specific reference to social networking). However, none of the above analysed theories really solves the theoretical problem of how to push firms towards collaboration, how to make them realize the real importance of interacting both strategically and operationally speaking, and of the overall major created value.

In other words, if there are so many advantages from collaboration, why is it so difficult to start, implement and reinforce it? This is as much true as thinking about the concept of the so called *deterrence-based trust* (Kreps, 1990; Raub and Weesie, 1990; Shapiro et al., 1992; Burt and Knez, 1995), according to which an actor behaves correctly just not to compromise the wider set of relations it's involved in. At the extreme, the concept of embeddedness itself implies the firm's presence in a set of relations that increases the cognitive salience of the competitors within the network and somehow influences their competitive behaviour. This result can be considered as a paradox, compromising the firm-centric view with a sort of return to context-based approach.

On the other hand, some research on this topic (Della Corte, 2009b: 407) tries to explain why inter-firm collaboration does not work in most of cases. On this regard, the author shows that each actor's approach towards collaboration depends on the perceived risk of the relationship (Kogut, Shan, Walker, 1992; Gulati, 1995b; Powell, Koput, Smith-Doerr, 1996) and on some specific factors:

1. involved entrepreneurs' and/or managers' personal attitudes and moral approaches;
2. firms' history and reliability;
3. previous experiences in inter-firm collaboration;
4. partner's awareness of the need of network or other parties' resources and competences.

These factors can somehow influence the initial behaviour of each partner: the higher they are the higher is the probability of a favourable inter-firm collaboration. When however this initial set is not so able to push towards collaboration or previous experiences have made the potential partner less prone towards building relationships, than a governance actor appears necessary to move the process. This actor must have specific resources and competences thanks to which it realizes fully the importance and value generated by collaboration. In order to favour the process, a specific research (Della Corte, 2009b) shows, through game theory, that it can work either increasing the awareness of the necessity of counterparts' strategic resources/competences or favouring reciprocal knowledge of the strategic

resources and competences each of them possesses, controls or can manage.

This approach should lead to multiple firms' system constitution and development. No matter the nature of the network governance actor: it can be either private, public or of mixed equity; it can result from a bottom-up process (promoted by local firms) or rather from a top-down one (promoted by local Authorities – Della Corte, Migliaccio and Sciarelli, 2007). However, in order to work, it must have specific competences, of those underlined above, that allow it to see farther than single partners, to understand more, to be wiser, to have some social aims (better quality of life for residents, the whole system's success – whether a business district or a tourist destination) and therefore to be able to lead the process.

From this point of view, three important implications can be derived:

1. according to resource-based theory, inter-firm collaboration depends on: resources complementarity (Hitt, Bierman, Shimizu and Kochar, 2001), interdependence of each firms' competitive advantages (Ireland, Hitt and Vaidyanathan, 2002) and management support in developing synergies both at a strategic and at an operation level, thus concentrating on the cultural and relational sources of competitive advantage;
2. in inter-firm collaboration, trust is not a resource but rather the result of specific resources' application (in particular intangible ones, that is knowledge or relational-based): this statement is in contrast with several contributions on the topic (Barney and Hansen, 1994) but applying RBT approach to this issue, it's relevant to understand what can conduct to trustful situations, especially when moving from situations of distrust;
3. when focusing on business networks and systems rather than on simple alliances, that is on situations where firms' interconnectedness can be higher and relations are at different levels and therefore more complex, strategic governance configurations seem to be necessary. From this point of view, it can be asserted that governance can result a significant source of competitive advantage. Moreover, the role of the governance actor is that of favouring the exploration/exploitation process within the network and among networks. The result can be the social embeddedness, since the single firm ends to be influenced, in its own decisions, by the fact of belonging to the network. However, this can take place, as proved by previous research with game theory support (Della Corte, 2009b) until the benefits that can be obtained by inter-firm collaboration are major than the performance results in hypothesis of non-collaboration.

Therefore, from this point of view, knowledge-based view and more specifically relational view

undoubtedly add value to RBT opening the boundaries of the firm to the external resources and competences of the network it interacts with. On this topic, specific contributions (Gnyawali and Madhavan, 2000: 432) have defined the network itself as a *loci of resources* in terms of “potential conduits” to internal resources held by the other actors of the network, external economies generated by cooperation processes (Branderburger and Nalebuff, 1996; Dagnino and Padula, 2002; Della Corte, 2009a, ch. 2), the strict connection between the single actor’s rate of return of internal resources and the level of network’s structure, the firm’s relative position within the network, that determines its possibilities of acquiring new competitive capabilities of attracting further relations. In the set of resources’ flows, relational view is mainly concentrated on the so defined information flows (information and knowledge derived from other parties, their relative strategies and relations and status flows, connected with the firm’s image, legitimacy, power - Padgett and Ansell, 1993). This implies a very important aspect, that is inserting the concept of competitive dynamics in explaining how a network can be a resource. This is, in our view, one of the main points in a real revolution of firm’s identity and meaning, in a world where discussing of its boundaries appears overcome. The real value both knowledge-based view and relational view add to resource-based theory is just that of favouring a less centric approach towards an open-minded set, according to which every actor that surrounds the firm can be interpreted and become a real source of advantage, that is to say a strategic resource. In this optic, even the customer can become a resource, when adequately managed also to get some important hints on the product-services provided. In this direction, approaches like service dominant logic (Vargo and Lush, 2004, 2006, 2008; Arnould, Price and Malshe, 2004) show how the real value of a product/service provided by a firm depends on the customer’s background and therefore on his/her own capacity of getting benefits from it. At the same time, the way customer uses the product/service provided by the firm can add value and give relevant hints for further investments in specific resources and competences. This is particularly true in service industry, where in customer satisfaction and retention analyses precious information on competences to invest on can be obtained.

A similar approach can be extended to firm’s competitors, that can become an incomparable source of resources and competences. Analyzing in particular networks more than single alliances, the cooperation and competition processes have necessarily to be considered not as separate constructs but rather as aspects that can coexist both in terms of time and space.

In our view competitive dynamics, that is connected with the exploration phase and implies the entrepreneurial vein of strategic management, really

extends the unit of analysis not only in organizational terms, the network rather than the single firm but also in terms of available sources of advantage, that change rapidly over time and that can be outside the firm. From this point of view, governance practice can become a resource not only at the network level, with the network governance actor, but also among firm: the number of accesses to external resources and their relative profitable application depends on the set of resources and competence of each involved firm. This means that the available resources for parties of the network/system are never equal: that’s exactly why competition and collaboration can coexist; even more, they do have to coexist, since this favours the exploration phase.

#### 4. Conclusions: hints for future research and managerial implications.

This paper has tried to systematise the main contribution on the topic and to analyze the theoretical models developed within knowledge-based view and relational-based with RBT lenses. In particular, it is underlined that these approaches do not seem some alternative or substitutable theories but rather complete and enrich of content RBT.

However, it is very important to take into account the dynamic aspect of competitive advantage: in almost hypercompetitive contexts it is nowadays difficult to sustain competitive advantage with a static view. It’s important for firms to build and rebuild specific competences continuously. Besides, in such complex environments, firms can develop relations of different nature, among which more structured forms of collaborations. These forms, however, do have to be dynamic themselves, in order to avoid to create and organizational set that can run the risk of preventing change. The key, from this point of view, is the governance capability of catching continuously external opportunities, adequately mixed with the firm’s resources’ patrimony. This process requires:

- a very open-minded approach, according to which everything (including customers and competitors) can be sources of advantage. Therefore the traditional five forces model of competition (Porter, 1980) seems to be totally reversed, in a framework where there is also the force of complementors: these can be either external actors, connected with the focal firm, that reinforce its competitive position, or the same actors of the five forces with which the firm has developed collaborations, thus reducing their menace as competitors. (Branderburger and Nalebuff, 1996; Della Corte, 2009a, ch. 2);
- in firm’s conduct, the entrepreneurial vein has to be cultivated more, without abandoning the managerial approach towards efficiency of course, in order to grasp from outside these potential advantages;

- it's relevant to study deeply, both for theoretical and practical purposes, the dynamics and configurations of governance, in terms of being possible source of superior performance both for single firms and for networks.

This requires new competences within organization and network's governance actors than in the past. Innovation has to be ordinary and specific training activities have to take place and these specific governance competences can be investigated with reference to different contexts. Even university and job training organizations have to innovate on this stream and a more clear link between business and education worlds is necessary more than it was in the past. This could help also theorists to better understand the real world, in a context where knowledge transfers and relations conduct to an overall higher performance.

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