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Inter-Firm Resources and Sustained Competitive Advantage**

Resource-oriented perspectives of strategic management are on the way to discovering a topic to which little attention has been paid so far within their own ranks: inter-firm networks. In this article, it is argued that the resource- and competence-based view – despite its new facet of analysis – falls back on a traditional firm-focused explanation. Conversely, the relational view, the youngest branch of strategic management, follows completely new explanatory paths. Here, an inter-firm focus is established. Overall, there are two related, but diametrically opposed strategic management approaches, each assigning a different kind of importance to the meaning of competition in the context of analysing cooperative inter-firm relations.

Key words: **Resource-based view, relational view, networks, network resources, social network theory**

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1. Introduction

For a long time, industrial organisation economics-driven research dominated in strategic management, and thus a market-oriented and externally aligned explanation of the achievement of sustained competitive advantage of firms. However, since the early 1990s, there has been an essential change in the literature on strategic management. Today we can see a dominance of resource-oriented approaches in strategic management. Moreover, at present we not only find a new era of resource-based strategic analysis, but also the birth and first steps of another resource perspective: the relational view. Whereas the traditional, resource-based view deals with supernormal earnings resulting from resources controlled by a single firm (Wernerfelt 1984; Dierickx/Cool 1989; Prahalad/Hamel 1990; Barney 1991; Teece et al. 1997), the relational view explains that long-term profits are essentially based on network relations, or more precisely on resources that are deeply embedded in inter-firm relations (Dyer/Singh 1998). However, both resource perspectives understand exchange relations between firms as a relevant strategic medium for achieving superior resource-based performance (Ireland et al. 2002; Duschek 2002). Admittedly, the understanding of inter-firm cooperation within the resource- and competence-based view is under-explored to date, and the relational view is at an early stage of development. In the following, both resource perspectives are discussed with reference to their idiosyncratic contribution towards understanding cooperative relations between organisations. It will be shown that the relational view goes beyond the value appropriation focus of traditional resource-based view analysis of inter-firm cooperation and offers a distinct strategic focus on how firms create resource-based rents. Furthermore, the essential implications of both approaches for the strategic management of resources in collaborations are also shown. All things considered, the prime objective of this article is to discuss the crucial, but hitherto underexposed differences between a firm- and a network-focused localisation of above normal firm-profit creation within the scope of inter-firm relations. By contrast to the resource- and competence based view, it will also show that the relational view proposes not only a novel unit, but also a novel object of analysis with which to explain sustained competitive advantage within strategic management theory: network resources. Last but not least, insights of social network theory (Burt 1992; Coleman 1990) are used to explain the main differences between firm- and network-oriented rent types.

2. Inter-Firm Cooperation in the Light of Resource-Based Approaches: Firm-Specific Resources and Self-Interest Oriented Learning Alliances

The resource-based view of the firm (RBV) and its less formal and more management-oriented derivative, the concept of core competencies, have become the leading research paradigms in the field of strategic management (Bresser et al. 2000). Contrary to the '(industry)structure-conduct-performance paradigm' of industrial organisation economics (Bain 1968; Porter 1985, 1991), these strategic concepts explain the competitive advantage of firms primarily by their internal resources and capabilities, i.e. factors that are located within fundamentally heterogenous firms. However, within the framework of RBV, it is assumed that only certain resources and

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capabilities, namely the so-called strategic resources, put firms in a position that enables them to achieve above normal profits (rents). Accordingly, the RBV is interested conceptually in those resources which are owned and controlled by a single firm and which have the potential to generate sustained competitive advantage (Dyer/Singh 1998: 661; Gulati et al. 2000: 203). In a nutshell, these "crown jewels" (Montgomery 1995: 256 ff.) of companies can be "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness" (Barney 1991: 101).

Such strategic resources, mostly a bundle of *firm-specific,* tangible and intangible resources (Peteraf 1993: 184; Chi 1994: 273; Teece et al. 1997: 513), must meet all of the the following special requirements (Barney 1991: 105 ff.; Grant 1991: 111 ff.): They should be *valuable*, i.e. they should increase the efficiency and/or effectiveness of the firm; they should be *rare,* as otherwise it would not be possible to gain any long-term competitive advantage on the basis of these resources, and it should not be possible to *substitute* them, i.e. there should not be any other resources that can enable a comparable performance. Moreover, strategic resources should be inimitable, that is to say imperfectly mobile or specialised to firm-specific requirements (Peteraf 1993: 183). The criterion of *inimitability*, i.e. the *firm specificity*, of strategic resources is essentially reliant on the firm history, "causal ambiguity", "social complexity" and on the interdependence of resources, which together represent the main "barriers of imitation" (Reed/DeFillippi 1990; Barney 1991; Madhok/Tallman 1998: 328 f.).

The so-called *core competencies* spring from a specific development of strategic resources to which the concept of core competencies is dedicated. This concept particularly emphasises the process-oriented, organisational and integrated aspects in the generation and maintenance of long-lasting competitive advantage that span the business units of firms (Prahalad/Hamel 1990). Consequently, here firms are considered as bundles of (core) competencies. Accordingly, strategic management concentrates on the understanding, maintenance and further development of (core) competencies, i.e. the unique and immaterial bundles of firm-specific resources.

Answering the well-known question of strategic management, 'why are firms different', researchers from the extant resource- and competence-based view have typically chosen to analyse the relevant entities of rent creation from an atomistic or self-interested firm-level perspective (McEvily/Zaheer 1999: 1152; Gulati et al. 2000: 203). This focus implies that "the resource-based perspective is solely occupied with analysis of the individual firm's bundle of resources (in terms of their ability to contribute to competitive advantage), and has next to nothing to say about inter-firm-relations" (Foss 1999: 2). Actually, the more or less explicitly stated 'firm-focus', as the level of RBV-analysis, never goes so far as to see no role at all for relationships between companies in gaining imperfectly tradeable resources. However, the phenomenon of inter-firm relations is perspicously under-explored within the resource- and competence-based literature (Das/Teng 2000; Hoopes et al. 2003). In a very limited amount of the more recent resource-based literature we can find first attempts at transferring the theoretical frame of the RBV to inter-firm relations (Eisenhardt/Schoonhoven 1996; Das/Teng 2000; Ireland et al. 2002). Admittedly, the

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concept of core competencies in particular, although only sporadically, has been explicitly referring to the significance of the cooperative utilisation of external resources for establishing sustained competetive advantage in the form of core competencies *from the very beginning* (Hamel et al. 1989; Hamel 1991; Lei 1993; Leonard-Barton 1995; Mildenberger 2001). In the older as well as in the more recent resource- and competence-based literature, the general purpose of cooperation is actually seen in the possibility of an alternative "acquisition" of or "access" to valuable resources (Hamel 1991: 99; Tidd et al. 2001: 230; Ireland et al. 2002: 427). "Thus, the distinct advantage of strategic alliances is to have access to precisely those resources that are needed" (Das/Teng 2002: 37).[1]

Generally, hierarchical, market- and network-based or cooperative organisational arrangements are available for the acquisition of resources. However, there are occasionally important reasons for preferring the cooperative form of resource acquisition to the market-based *and* hierarchical ones. The market-based form of purchasing resources, in particular, does not play any significant role in establishing imperfectly mobile factors in resource-based approaches, as only a transfer of non-specific (tradeable or more or less perfectly mobile) resources is possible on account of governance and incentive mechanisms mentioned here. "In essence, the capability-sharing, capability-creating relationship between companies requires something other than traditional market transactions" (Badaracco 1991: 100). But even from the atomistic resource- and competence-based perspective, sometimes it is advisable not to aim at a hierarchical 'acquisition' of competitive resources and thus at a development of competitive advantage based exclusively on internal resources, especially on account of cost and time considerations (Madhok 1997: 43). "For some skills, what Itami (1987) terms 'invisible assets', the cost of internal development may by almost infinite" (Hamel 1991: 99).

In order to overcome this problem and acquire such critical resources, cooperative arrangements are seen as the only alternative mode of acquisition of non-tradeable resources from the resource-based perspective. On account of factor market imperfections, strategically relevant resources can be acquired almost exclusively via learning processes in the firm itself, but also with the aid of interorganisational relations (Hamel 1991: 99; Combs/Ketchen 1999: 872; Tidd et al. 2001: 226; Ireland et al. 2002: 430 ff.). Principally, it has even been argued that "very few, if any, companies can build core capabilities without importing some knowledge from beyond their boundaries" (Leonard-Barton 1995: 135).

Basically, within the resource- and competence-based perspective of strategic management it is noted that collaborations or rather learning alliances can be used both for value generation and for value appropriation (Hamel 1991: 99 f.; Hennart et al. 1999: 16; Das/Teng 2000). However, the possibility of value generation is crudely ignored or at least underexposed. Instead, it is occasionally and astonishingly stated

[1] If firms require critical external resources, they must interact with other organisations. According to this, firms inevitably depend on their environment. This coherence in mind, it is truly astonishing that there is no systematic attempt to connect the resource-based view with resource dependence theory (Pfeffer/Salancik 1978).

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that transaction cost theory, for example, is already taking up a perspective of collective value generation, whereas the process of value appropriation within the scope of alliances has not been explored yet (Hamel 1991: 100; Hennart et al. 1999: 16). Beyond this supposition, however, the constitutive 'firm-specific resource-focus' – and the atomistic or egoistic view – of the resource- and competence-based perspective determines the potential of *value appropriation* due to collaboration as the central and decisive strategic option of inter-firm relationships anyway. For example, Hamel (1991) makes it very clear that from the point of view of resource-based models, collaboration does not represent an optimum or efficient solution for the acquisition or generation of resources between market and hierarchy, so-called "network resources" (Gulati 1999). Cooperation should rather be interpreted "as a half-way house on the road from market to hierarchy" (Hamel 1991: 99). The acquired resources must undergo an internal and *firm-specific* 'adaptation' so as to be assimilated into the typical firm processes, in order to actually lead to supernormal competitive advantage of a firm. Thus, the generation of rent-creating (strategic) resources remains hierarchically anchored in the resource- and competence based approach, even if cooperative firm relations are analysed. The fact always holds true that "[i]n the resource-based literature (...) it is argued that only the unique aspects of a company's resource can be the source of long-lasting success" (Foss/Harmsen 1996: 134). The firm remains the primary unit of analysis (Zeng/Hennart 2002) and the logical centre of rent creation.

A more formal argument for this unilateral perspective lies in the underlying conception of rent: The RBV – as well as transaction cost theory (Williamson 1985) – grounded the potentiality of long-lasting competitive advantage of firms particularly in a rent conception named "appropriable quasi rent" (Klein et al. 1978; Chi 1994, Rumelt et al. 1994; Madhok/Tallman 1998). Within this conception, sustainable resource-based advantage needs long-term specific investments in resources. In other words, these resources must be characterised as assets with high specificity (Dierickx/Cool 1989; Castanias/Helfat 1991). Within RBV and transaction cost theory, however, the generation of high asset specificity requires hierarchical governance structures on account of their optimal control and incentive mechanisms that impede the hazards of opportunism. Furthermore, particularly within the RBV, hierarchical governance structures are not only seen as suitable for "avoiding the negative" (opportunism) but also for the "creation of the positive" with regard to long-term specific investments in resources, i.e. the achievment of long-lasting rents (Reve 1990; Conner 1991; Tsang 2000; Duschek 2002). Consequently, appropriable quasi rents in the context of high specificity of resources mean, in essence, *firm-specific* quasi-rents (Dierickx/Cool 1989: 1505 f.; Peteraf 1993: 184; Chi 1994: 273; Teece et al. 1997: 513; Madhok/Tallman 1998: 329). Firm-specificity of resources represents the necessary condition for the achievement of sustainable competitive advantage of firms within the RBV (Dierickx/Cool 1989; Amit/Schoemaker 1993; Dyer 1996; Duschek 2002). Subsequently, alliances are viewed only as a medium to achieve "normal returns" (Foss/Ericsen 1995: 44). Furthermore, Hoopes et al. (2003: 892) have recently argued that "effects, labeled by Gulati (1999) as 'network-resources,' lie outside the RBV's boundaries". Overall, this means that strictly speaking the genuine potential of inter-

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firm relations to create and sustain long-lasting resource-based advantage cannot be integrated into the RBV.

2.1 Implications for managing inter-firm cooperation

Strategic management essentially implies one option of cooperative relations based on the conceptual firm-focus rationale within RBV (Hamel 1991: 84 ff.; Duschek/Sydow 2002: 427 f.): 'actual acquisition' of external resources. "[C]ompetitive advantage of alliances is based on the effective integration of the partner firm's valuable resources" (Das/Teng 2000: 48). For example, it is assumed that knowledge acquired from a partner can be valuable only when it has penetrated the organisation (Hamel et al. 1989: 139). According to this, the internal transformation of external resources plays a central role in RBV. This connection, at least implicitly, aims at the so-called "absorptive capacity" of firms (Cohen/Levinthal 1991; Dussauge et al. 2000; Lofstrom 2000). Absorptive capacities allow firms to identify the value of external resources for their competitiveness, and to assimilate these resources in order to finally implement them in their own firm (Cohen/Levinthal 1990: 128). Consequently, cooperation is instrumentalised as a means of "outlearning" (Hamel 1991) needed resources of the 'partner' (Park/Ungson 2001). Therefore, with the actual acquisition of external, imperfectly tradeable resources, reference is made to the option of learning-induced cooperation in the sense of a *de facto* internalisation of valuable resources of the partner as well as the utilisation of the absorptive capacity in all its aimed for characteristics (Leonard-Barton 1995: 135 ff.). Such cooperation should be dissolved when it has fulfilled its original objective. As expected, collaboration from this perspective is *generally* just temporary.

This understanding of learning alliances could be described as follows: The 'winner of the cooperation' is the one who quickly acquires the valuable resources of the other, in order to develop his own firm-specific resource-based advantage independently, using the acquired resources and at the same time preventing access to his own strategic resources (Das/Teng 2000: 44). At times, and more or less implicitly, Machivellian tactics are recommended which give preference to pursuing opportunistic interests of the learning firms as opposed to the explicit strengthening of the common utility of all cooperating partners (Hamel/Prahalad 1993: 83; Park/Ungson 2001: 43). From this point of view, it is not surprising that in branches of the resource-based literature, the potential of cooperation is usually paraphrased in martial terms like "trojan horse", "bridgeheads", "game with hidden cards", "wait-and-watch positions" and "kiss of death" (Reich/Markin 1986; Hamel et al. 1989; Hamel 1991; Dussauge et al. 2000). Therefore, things are a little less surprising (now), if, from the rationale of the resource- and competence-based perspective, inter-firm cooperations are predominantly seen as "races to learn" and/or "competitive collaborations" (Hamel 1991; Lei 1993; Gulati et al. 2000; Baum et al. 2000; Duschek 2002).

2.2 Limitations of resource-based approches of inter-firm cooperation

The limitations of this one-dimensional understanding of inter-firm relations are quite easily identified and closely connected to each other:

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1. Mutual pooling of success potentials with the aim of creating unique and long-lasting value potential within the framework of cooperation, not only for individual companies, but also for the partners in the cooperation (Khanna et al. 1998; Inkpen 2000), is hardly integrable into the logic of the resource- and competence-based approach of strategic management (Dyer/Singh 1998; Gulati 1998, 1999; Gulati et al. 2000). "Thinking in networks" (Mattson 1987: 239), i.e. understanding networking or cooperative relations as the locus for the generation, maintenance and further development of strategic resources is out of the question (Hoopes et al. 2003). Collaboration represents rather a temporary, intermediate position of resources on the way to a firm-specific 'refinement' of strategic resources. In fact, alliances do not play a noteworthy role as a distinct organisational form, in terms of a systematically established network perspective. Instead, they represent mostly instruments of firm-focused outlearning strategies, based on normative implications of an atomistic and opportunistic model of strategic management.

However, it is actually the case that cooperation examples mentioned by Hamel et al. (1989), Hamel (1991) and Rasche (1994) themselves as the starting point of their "outlearning hypothesis" between Japanese and U.S. companies – in which the Japanese partners allegedly go to U.S. companies chiefly on account of the 'outlearning' – have never been so opportunistic and short-term in nature. Moreover, Hennart et al. (1999) point out that, in most of the cases of U.S.-Japanese cooperation, the primary motivation of the Japanese partner was neither "knowledge expropriation" nor a temporary cooperation in this vein. Within the sample of 58 U.S.-Japanese cooperations (over a period of nine years), a "Trojan horse scenario" could be confirmed in only one case (Hennart et al. 1999: 25). Instead, alliances are described as "workhorses", where companies are given long-term access to complementary and difficult to transfer resources or the possibility of generation of a *cooperation-specific* resource pool, so that both the partners can use it within as well as beyond the cooperation. Evidently, and in contrast to the stated resource- and competence-based view, cooperation as an institutional form has the principal potential of producing value *'per se'*.

2. By concentrating on value appropriation and outlearning, the resource- and competence-based approaches engender an *inconsistent understanding* of the underlying exchange processes of inter-firm relationships. If cooperating partners actually behave in such a manner as is normatively considered, then it stands to reason that attempts by partners to absorb the needed resources of each other while preventing access to their own pool of resources are likely to produce subliminal conflicts between them that will impair their relationship (Zeng/Hennart 2002: 193). Thus, in the end, the value appropriation strategy would lead to cooperation where the participating partners grant one another access to strategically irrelevant resources and less access to valuable resources. Furthermore, the normatively 'best' strategic recommendation for the management of cooperation within resource- and competence-based view clearly implies a contradiction in terms, because the targeted pursuit of the optimal strategy of self-interest seems to be incompatible with the attainment of that very strategy (Park/Ungson 2001). Finally, it is actually ironic that the so-called "resource-based theory of strategic alliances" (Das/Teng 2000) has proposed the value creation

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potential of pooled partner resources and the normative assumptions of RBV at the same time without recognising their intrinsic incongruity (Zeng/Hennart 2002).

3. The understanding of inter-firm cooperation according to the resource- and competence-based perspective is static in at least two respects (Hennart et al. 1999: 27; Zeng/Hennart 2002: 193 f.). Cooperation is considered as an instrument for the internalisation of imperfectly mobile resources of cooperating partners; a predetermined strategic goal clearly exists. First, this view assumes that there is an already existing stock of needed resources. After the relevant stock has been transferred, the cooperation should be dissolved. However, this understanding overlooks the fact that resource stocks of cooperation partners could be subject to an ongoing process of reproduction and change, independent of the cooperation as well as within its scope. Second, the possibility that the original motivation of the partner can undergo a change during the course of the cooperation remains disregarded. Due to the argument that resource stocks undergo a constant change, it may be advisable to create permanent learning alliances, as otherwise there is no access to the 'additional' partner *and* network resources (Mathews 1994; Duschek 1998). For example, the creation of a joint resource pool, which was not deemed necessary at the beginning of the inter-firm relationship, implies an enduring cooperation, as these relation-specific resources give the partners a competitive advantage within the scope of the cooperation as well as outside of it. This would not be possible without drawing on the joint resource pool.

4. The logic of the resource- and competence-based perspective advises against simply *utilising* cooperation without integrating the partner firm's valuable resource(s). Whereas a purely (self-interested) learning-oriented cooperative strategy is recommended, the potential of a product-oriented strategy remains overlooked. However, these cooperation strategies do not represent mutually exclusive strategies at all. On the contrary, they are only the two extreme points of a continuum (Westney 1988; Badaracco 1991). Accordingly, it is often impossible to make a clear differentiation within and between these alternatives (March 1991; Koza/Lewin 1998). Furthermore, an appropriate inter-firm relationship often represents a cooperative specialisation of resources and products (Zeng/Hennart 2002). For example, in the case of supplier-manufacturer relations, the cooperation covers relevant resources at diverse levels of the value chain. An intensive and sustainable use and access to relevant complementary resources of the partners, i.e. a vertical specialisation, is seen as a more efficient solution. Outlearning does not make much sense due to the loss of co-specialisation advantage (Dyer/Nobeoka 2000).

In conclusion, cooperative firm relations are undoubtedly considered within the scope of the resource- and competence-based view, albeit foremost as competitive collaboration. The logic of the approach remains aimed at a firm's internal long-term resource advantage, i.e. neither more nor less than its firm-specific rent creation resources. Nevertheless, this analytical view has begun to open the 'black box' by taking us into fields where economics is at its weakest – inside the firm (Rumelt et al. 1991: 22). However, exactly this strength also produces one-sidedness: Even if inter-firm cooperation is analysed, the individual firm remains the central unit of analysis, i.e. the sole locus of the generation of sustainable competitive advantage is 'inside the firm'.

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The opportunity of mutually produced, long-lasting resource-based value creation within the scope of inter-firm cooperation itself lies, logically, outside the boundaries of this view. According to this, effects like sustainable network-specific resource advantage are ignored in favour of the immanent firm-focus, in spite of some inconsistencies that can hardly be overlooked. Williamson (1999: 1093) concludes that "[i]ronically, considering the Japanese success at subcontracting, Prahalad and Hamel conclude that 'too many [American] companies have unwittingly surrendered core competencies' by engaging in outsourcing". This antithesis in mind, it is inevitable to emphasise that we have to adopt another strategic perspective if we want to analyse network advantage. It takes more than merely appending additional explanatory power to extant models of strategy research (Das/Teng 2000; Ireland et al. 2002). The limitations of the resource- and competence-based view of inter-firm cooperation are dissolved only by means of a *de facto* relational explanation perspective of resource-based sustainable competitive advantage. What we need is a perspective that changes our understanding of the potential of inter-firm relations fundamentally from an atomistic to a relational view (Gulati et al. 2000).

3. Inter-Firm Cooperation in the Light of the Relational View: Discovering Network Resources as the Source of Long-Lasting Competitive Advantage

The "relational view" (Dyer/Singh 1998) has begun to prepare the "third leg in strategy theory" (Contractor et al. 2002: 493). The starting point of the relational view is a criticism of both established approaches of strategic management, industrial organisation economics and RBV. These strategic approaches analyse how firms gain above normal competitive advantage. However, both ignore the fact that the sources of this advantage are often *deeply embedded* within a network of firm relations (Dyer/Singh 1998; Duschek 1998, 2002; McEvily/Zaheer 1999; Ahuja 2000; Gulati et al. 2000; Dyer/Nobeoka 2000; Croom 2001). Consequently, resources inherent to (inter-firm) network relations are called *network resources* (Gulati 1999: 399; McEvily/Zaheer 1999: 1152). While the resource- and competence-based approach, as discussed, assumes that competitive advantage deals with resources owned and controlled by a single firm, the relational view points out that resources generating competitive advantage often span firm boundaries. The search for the sources of value creating resources extend beyond firm's boundaries and concentrates on network resources. The underlying idea is that in certain constellations, inter-firm networks are more efficient institutional arrangements for achieving resource-based advantage than single or egoistic firms (Dyer/Nobeoka 2000: 364). Correspondingly, in the extreme case, it is possible to speak of "cooperative core competencies", if sustainable inter-firm-based competitive resource advantage evolves (Duschek 1998, 2002). From this perspective, the *primary level of analysis* for the search for competitive advantage is no longer the firm but the *network of firm relations* (Dyer/Singh 1998: 661 f.; Duschek 1998). Due to the focus on resources as the primary object of analysis, the relational view could be seen, in principle, as a 'complementary extension' of the resource- and competence-based approach aiming at a conceptual anchoring of sustained competitive advantage in network resources.

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The notion of relational competitive advantage is defined as above normal profits or interorganisational quasi rents which are fundamentally generated in inter-firm relations. Accordingly, they cannot be generated by one of the participating firms alone, but only within the scope of the joint, idiosyncratic contributions of the specific partners of cooperation. Relational rents generally arise when network partners exchange (material and immaterial) resources and/or invest in inter-firm resource relations, and/or use governance mechanisms which lower transaction costs and/or enable the realisation of 'added value' by a synergetic combination of (material and immaterial) resources (Dyer/Singh 1998: 662). Obviously, the relational view is a conceptual amalgam of the resource- and competence-based view (Prahald/Hamel 1990; Barney 1991; Teece et al. 1997) and transaction cost theory (Klein et al. 1987; Williamson 1985, 1991). Furthermore, the relational view is based more or less implicitly on ideas of the social network perspective (Granovetter 1985; Burt 1987, 1992; Coleman 1990; Contractor 2002). Accordingly, the conception of network resources is related to the notion of social capital (Gulati 1999; Gulati et al. 2000; Lee et al. 2001), which is "the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor" (Adler/Kwon 2002: 23). Within the scope of the relational view, social capital as a bundle of resources inheres primarily in the social network of *inter-firm relations*. Nevertheless, social network theory has not been systematically applied to the relational view. At present the crux of the relational view lies in the normative substantiation of the evidence of predominant sources of sustainable relational competitive advantage and their barriers of imitation – and therein lies its genuine explanatory power.

3.1 Sources of relational competitive advantage

Within the relational view there are four potential sources of interorganisational competitive advantage which arise – in strict contrast to the RBV – solely due to cooperative relations between companies:[2] (1) "relation-specific assets", (2) "knowledge-sharing routines", (3) "complementary resources/capabilities", and (4) "effective governance". Besides these, a few typical *inter*organisational barriers of imitation are identified in delimitation from the *intra*organisational isolation mechanisms known from the RBV (Dyer/Singh 1998: 661 ff., 672 ff.). Furthermore, in this context some normative strategy recommendations are also introduced, which are partly but sharply opposed to the RBV. By examining the sources of relational competitive advantage of firms, in this paper the essential differences between a (competitive) firm- and a (cooperative) network-focused explanation of the locus of above normal rent achievement become obvious.

(1) As discussed, long-lasting resource-based advantage always requires high specificity of resources. Consequently, within the relational view *relation-specific assets* present an essential source of inter-firm-based competitive advantage. Following transaction cost theory (Williamson 1985), three types of specificity that constitute re-

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[2] Market-based inter-firm relations are seen to be unsuitable for achieving relational advantage due to the impossibility of idiosyncratic transactions.

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lation-specific resources can be identified: “site specificity”, “physical asset specificity” and “human asset specificity”. Interorganisational rents are accomplished when specific investments of alliance partners are achieved in co-specialised resources. Relational “human asset specificity” sets in when, for example, cooperating partners gain mutual experiences in specific production stages and thereby establish a common language, knowledge and routines etc. which represent more efficient communication structures. “Site specificity” can be achieved by the fact that sequenced stages of value chains jointly organised within a network are placed spatially close to each other (Dyer 1996).[3] Compared to competitive networks and firms this allows for specific differences in production procedures that are expressed in ‘economies of scope’, the source of which is established by the resource specificity in the network. The generation of relation-specific resources is favoured by the long-term horizon and the volume of transactions developed due to the relationship.

(2) *Knowledge-sharing routines* primarily concern the sustainable learning or problem-solving capacities of cooperating firms necessary for achieving relational competitive advantage. For example, interorganisational capabilities of innovation are targeted here, which reside in specific and institutionalised patterns and mechanisms of knowledge transfer, (re-)combination and/or creation. Ultimately, a dynamic interorganisational learning process which contains the potential for the ongoing development of innovations arises only by means of such routines (Duschek 2002). In principle, networks are seen as a more efficient organisational arrangement of knowledge transfer and recombination than hierarchies, especially in the case of distributed and complex knowledge stocks (Powell et al. 1996; Dyer/Nobeoka 2000: 364). Moreover, it is assumed that in many cases network partners represent the most important sources of unique ideas, which then result in product and process innovations (von Hippel 1988; Powell et al. 1996). Inter-firm knowledge-sharing routines are supported by a *partner-specific* absorptive capacity (Mowery et al. 2002), as well as by incentives for transparency of necessary knowledge stocks and processes and against “free riding” (Dyer/Nobeoka 2000).

(3) *Complementary resources and capabilities* are a basic requirement of resource interconnection within the scope of network partnership (Kale et al. 2000: 224). They represent a source of relational rents through the option of mutual expansion. Complementary resource endowments are defined as distinctive network resources which create a competitive advantage through joint, synergetic cooperation between the network partners that is larger than the sum of individual advantage which would have been achieved by the individual firm use of resource stocks. Such a relationally generated resource endowment is possible due to a specific combination of the already present resource stocks. According to this view, it is best if none of the network partners have access to similar resource stocks outside the network. Apart from the general strategic compatibility of resource endowments, a minimum organisational and cultural ‘fit’ between the network companies is a pre-requisite for the successful combination of partner resources. For example, it is assumed that compatible decision-

[3] The Smart lean manufacturing system in Hambach (Lorraine) presents a classic example of such interorganisational “site specificity”.

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making processes, as well as information and control systems in particular, are needed in order to be able to use the compatibility of functional resources. The achievement of relational advantage based on interorganisational resource endowments is supported especially by experiences in network management, a strategic function or position in the network, which allows access to opportunities of resource complementarities so as to be able to identify and evaluate potential complementarities (Eisenhardt/Schoonhoven 1996: 137; Gulati 1999: 413; Chung et al. 2000: 5). Consequently, the notion of complementary resource endowment certainly concerns the competitive importance of personal and organisational social capital which inheres in the structure of inter-firm relations (Uzzi 1997; Chung et al. 2000).

(4) An *effective governance structure* represents an important element of achievement in inter-firm competitive advantage. It influences not only transaction costs, but also the readiness of the network partners to engage in interorganisational value adding processes or transactional value generation processes (Zajac/Olsen 1993; Dyer 1997). An important function of network companies is to establish suitable network institutions and mechanisms which minimise transaction costs and at the same time create incentives for maximising transaction values. Protection against opportunism is seen as an important component of an effective governance structure of networks, which, according to this view, seems inevitable due to the specificity of the network resources: Relational competitive advantage can be achieved only because of co-specialisation. High co-specialisation of (network) resources, however, simultaneously reduces the value of these resources in alternative uses. Hence, there is a risk of opportunistic behaviour. According to transaction cost theory, various contractual modes are basically available for avoiding opportunism. For example, one could concern instruments that favour legal settlements or third-party enforcement of agreements in case of conflicts or even refer to out-of-court, amicable settlements which are directed at the maintenance and continuity of network relations. The establishment of such contractual relations can undoubtedly lay the foundation for a significant differentiation potential. They also contribute significantly to the formation of network identity. Especially relevant for preventing the eminent danger of opportunism in the context of achieving relational profits is the ability to utilise self-enforcement governance mechanisms, and informal self-enforcement governance structures, in particular, which mainly contribute towards building trust among the partners. Social capital in its sense of goodwill and trust is an underlying category for the explanation of this source of relational competitive advantage, too.

3.2 Barriers of imitation of relational competitive advantage

According to the relational view, competitors should also protect relational advantage against imitation and substitution. Besides some isolation mechanisms discussed in the context of the RBV (see above), Dyer/Singh (1998: 671 ff.) have identified four other imitation barriers which are especially directed at the isolation of relational advantage: (a) “interorganisational asset interconnectedness”, (b) “partner scarcity”, (c) “resource indivisibility” and (d) “institutional environment”. The central assumptions of these relational barriers of imitation are elucidated and exemplified next. This particularly

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clarifies the differences between a self-interested and a relational explanation of resource-based advantage of firms.

(a) *Interorganisational asset interconnectedness* is based on the accumulation of interorganisational resource stocks. During the course of cooperative inter-firm relations, an increasing co-specialisation of network resources often takes place. Initial relation-specific investments generate resources (endowments) which enable and/or necessitate further investments (Zeng/Hennart 2001). These, in turn, enable/require further co-specialisation. Without such interorganisational asset interconnectedness, unique competitive advantage is often not achievable, as clearly stated by Dyer (1996) in the example of site specificity in the automobile sector. Compared to General Motors, Toyota achieved better productivity advantages by creating a comprehensive and cumulatively expanded supplier network related to production technologies, directly related to their own production plants in cooperation with the suppliers. In the same production network of Toyota, Dyer/Nobeoka (2000) show the targeted creation of a "high performance knowledge-sharing network" for the management and generation of knowledge. By means of this example of the relational interconnectedness of knowledge in and due to the network, it can be highlighted how a dynamic learning capability is created which, on the one hand, allows unique competitive advantage and, on the other hand, requires specific reciprocal network embedding not only for the creation, but also for the maintenance of this capability. Finally, cumulative reciprocal links are also effective in stabilising relations and thereby excluding companies which are not involved in the network relationship. An imitation by external parties is prevented as it concerns dynamic and cumulative resource links which imply the constant development of specific competencies. A manager at Toyota makes this association clear: "We are not so concerned that our knowledge will spill over to competitors. Some of it will. But by the time it does, we will be somewhere else" (Dyer/Nobeoka 2000: 365). As supernormal returns would not have been achieved without cooperative relations in the examples mentioned here, an important strategic implication of this imitation barrier can be identified according to which networking firms should specifically try to establish bundles of relation-specific resources in order to specifically appropriate the general potential of inter-firm relations.

(b) Relational rents or cooperative core competencies are often not easy to imitate due to *partner scarcity*, i.e. partners with complementary resources and relational capacities. Accordingly, the generation of cooperative competitive advantage is closely coupled with finding the right firm with complementary resources from a limited number of firms within a given period. If one is late in finding an adequate network partner, the potential partners may already have become part of another network (Gomez-Casseras 1994). Thus, a key implication for this imitation barrier is that there is first-mover advantage for finding complementary network partners. However, these potential partner companies should be ready to and capable of providing these resources in the relationship. Especially those companies which have relational capacities, i.e. social capital to find *and* to commit network firms corresponding to these requirements have a chance of creating and safeguarding interorganisational competitive advantage.

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(c) *Resource indivisibility* represents another imitation barrier. In networks, the combination and/or the mutual creation of resources can be carried out to such an extent that the separation of relation-specific resources without destroying resource advantage becomes impossible. A typical example of this are the immaterial resources generated in the context of the Toyota network. A "mutual co-evolution of capabilities" (Dyer/Singh 1998: 673) often connects the resources in the network in such a manner that they cannot be separated and the imitation seems (nearly) impossible, e.g. even due to network-path dependencies. An important implication of this relational isolation mechanism can be seen in the fact that the co-evolution of resources limits the options of controlling and using these joint resources for individual (networking) firms. Even though resource and/or value generation processes are jointly possible only in a network, this always results in limiting the flexibility of the embedded firms. Network relations always simultaneously present the source of opportunities *and* limitations (Uzzi 1997; Gulati et al. 2000: 204).

(d) Another imitation barrier is the *institutional environment*. Country-specific institutions are typical examples, i.e. the Japanese behavioural regulation of cooperative arrangements based substantially on trust, which reduces transaction costs by minimising the risk of opportunism, thus permitting relational profits. Borys/Jemison (1989) aptly describe these mechanisms for limiting opportunism as "extra hybrid institutions". Typical occurrences of such institutions are the main characteristics of the so-called "regional economy" (Sabel 1989) or "industrial districts" (Marshall 1982). Such country or region-specific formal and informal behavioural norms can hardly be imitated, as they require global institutional modification. In this case, the main strategic implication for firms is that economic activities have to be carried out in places where profits can be achieved on account of general institutional conditions. Particularly relevant in this institutional context is that the embeddedness of firms in interorganisational relations represents not only the source of economic opportunities, but of problems too (Granovetter 1985; Kern 1998).

Through the discussion of relational sources and relational barriers of sustained competitive advantage it should be clear that even if it is principally possible to describe the capacity of a firm to effectively act in a network as a firm-specific resource, it does make sense to differentiate the logic of the relational view from the RBV-logic. The relational approach definitely allows a perspective differing from the RBV on the question of how firms can obtain long-term profits. The two main differences are that

- the level of analysis is no longer the single firm, but the network in which the firm is emdedded, and
- the competitive advantage and/or the potential of value generation are firmly embedded in the network – with respect to their generation, maintenance and modification.

Accordingly, the sources of such network-focused resource-based advantage, i.e. relational rents, as well as the concrete specifications of (interorganisational) imitation barriers have to be clearly differentiated from those of the RBV. Resources resulting in relational profits are partly beyond the control of a single firm. Relational profits are based not only on (complementary) *intra*organisational resources which networking

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companies have to bring along for the creation of interorganisational revenues, but also on resources which have their source *exclusively* in the network structure (Gulati et al. 2000: 212). Relational competitive advantage is generated via the institutional arrangement 'firm network' in which the firms are connected to one another. The (inter-)firm supernormal returns are essential structural characteristics of the network and are not attributable to any single firm in the network. At the same time, they require complementary firm resources. The dissolution of networks with relational rents always leads to the destruction of important advantage generating resources.

4. Two Types of Resource-Oriented Rents: Insights from Social Network Theory

By considering two social network theory-based types of rent, it is possible to highlight the main differences between the two resource-oriented approaches in strategic management, the resource- and competence-based view and the relational view. Without the differentiation of the two resource-oriented models analysed here, Kogut (2000: 413 ff.) emphasises two essentially distinguishable types of rents:

- The so-called "Burt-rent" which is aimed at by companies that resort to opportunistic exploitation or egoistic optimisation of a central, non-redundant position in the network in order to bridge the "structural holes" in the network (Burt 1992).
- The so-called "Coleman-rent", which is created in spite of partly redundant relations between the network companies, is based on stable and trustworthy interactions among the network firms, and can benefit all the participating network companies (Coleman 1990).

Obviously, the Burt-rent concerns the normative assumption of the resource- and competence-based view. Networks constituting Burt-rents are "the outcome of the competitive struggle among egos motivated by envy and self-interest" (Kogut 2000: 413). Such networks are not suitable for mutual learning in order to create new competencies or innovations, i.e. sustainable competitive advantage in the form of network resources. It rather concerns networks in which hub firms undertake the function of a pure information broker and forward information using a minimum amount of relations in the network and/or in the network interactions (Kogut 2000: 414). Due to the immanent instability and the tendency towards market-based relations between the firms involved, Burt (1999) describes this type of network as a "market network".

Particularly the given example of the supplier and production network of Toyota points out that by no means all 'hub-based networks' are such opportunistic market networks. Without a doubt, hub-based network relations always involve the risk of egoistic optimisation of inter-firm relations. Admittedly, the pursuit of the inherent appropriation hazards is a main reason for the failure of alliances (Park/Ungson 2001).

Coleman-rents, on the other hand, are based on the stability of relations between the partners. The network is based on the decision of the network firms to jointly solve specific problems which they could in principle have tackled with other partners as well (Kogut 2000: 414). The main characteristic of this network is the necessary

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frequency of interactions between the networking firms in order to initiate new products and processes via exchange and creation of joint know-how. A stable and trustworthy exchange relation is, in this case, a medium as well as the result of the network process and it often results in a unique network identity. The Coleman-rent is based especially on the quality of relations between the core partners, with the option of referring to new partners in case of problems that cannot be solved jointly. Networks which generate Coleman-rents are thus characterised by "the flexibility to explore new relationships and opportunities, but within a relatively closed clique that supports long-term trust among members" (Kogut 2000: 414). Without a doubt, the Coleman-rent is a special form of expression of a relational rent.

5. Conclusion

It can be concluded that the relational view represents a perspective resulting from the focus on resources as the primary object of analysis, principally complementary to the resource- and competence-based view. Nevertheless, the relational view recommends firm strategies for achieving sustainable profits which, in part, are clearly opposed to the strategic recommendations for the management of inter-firm relations within the firm-focused approach. Furthermore, the neglect of sustainable interorganisational arrangements of resources as the source of sustainable competitive advantage within the scope of the RBV is resolved at the core. This is highly important because such a *de facto* relational perspective implies the analysis of a hitherto unusual subject within the strategic management theory: inter-firm networks.

However, when linking the relational view to the resource- and competence-based view directly, there are certain weak spots in the newest perspective of strategic management. For example, an essential weak point of the internally oriented resource approach – not being able to offer an adequate *conceptual explanation* of the processes of generation of long-lasting competitive advantage (Moran/Ghoshal 1999: 409; Duschek 2002) – has not been overcome completely. The actual process of value generation, the evolution of resources allowing competitive advantage, remains conceptually in the dark, apart from a few additional relational categories (sources of relational rent creation and interorganisational imitation barriers) and some borrowing from social network theory. How exactly the process of rent generation (and core competencies) takes place still remains more or less outside the field of the strategic management focus of the relational view.

An essential reason for the conceptional 'blindness' of the discussed resource-oriented models of strategic management regarding the explanation of the value generation processes of competitive advantage lies in its theoretical foundation. The RBV in particular emanates from a theory of strategic management shaped largely by neoclassical economics (Schulze 1994; Foss et al. 1995). There, the achievement of sustained competitive advantage is understood as an ongoing search for and optimisation of (economic) rents (Mahoney/Pandian 1992: 364). The generation and maintenance of sustainable rents, for example in the context of (inter-) organisational learning processes, however, is always an "organizational, social, and individual phenomena" (Barney 1991: 116). The question arises whether the underlying original theoretical framework of the RBV, which ranks rationality or self-interested profit maximisa-

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tion as central premises (Foss et al. 1995: 12; Teece et al. 1997: 527; Oliver 1997: 700 f.), is overstrained by the explanation of problems which place expressly interorganisational and thus collective processes at the centre of the analysis – for instance learning processes and the evolution of trust-based interdependence between actors. Such social phenomena are rather the "subject of a great deal of research in organization theory" (Barney 1991: 116). Apart from the use of some transaction-cost-theory-based assumptions, resource-based models only apply conceptual ideas of organization theories excursively (Foss 1996 193). Therefore, an intensified consideration of organisational, social and personal aspects and relations within the resources-oriented models of strategic management should lead to an intensified integration of organization theory-based insights into the concepts of strategic management (Scarbrough 1998: 229 f.). An intensified integration of social network theory also seems to be a quite suitable way, as the discussion of the Burt- and Coleman-rents shows.

A problem of the present relational view is justified in its characteristic focus of analysis. Interorganisational relations represent the central level of analysis of the achievement of relational competitive advantage. However, if it is pointed out that *inter*organisational rents and resources are always directed at *intra*organisational resources (Kale et al. 2000), there is a danger that the relational approach of strategic management neglects the organisational level and the significance of resources of the embedded single network firms, as is often the case in network literature. An adequate extension of resource-oriented approaches of strategic management and an adequate resource-based analysis of inter-firm profit achievement *always* have to take *intra*organisational and *inter*organisational resource processes into consideration, i.e. the recursive interplay between these closely related levels.

References

Adler, P./Kwon, S.-W. (2002): Social capital: Prospects for a new concept. In: Academy of Management Review, 27(1): 17-40.

Amit, R./Schoemaker, P.J.H. (1993): Strategic assets and organizational rent. In: Strategic Management Journal, 14(1): 33-46.

Ahuja, G. (2000): The duality of collaboration: Inducements and opportunities in the formation of interfirm linkages. In: Strategic Management Journal, 21, Special Issue, March: 317-343.

Badaracco, J.L. (1991): The knowledge link: How firms compete through strategic alliances. Boston, MA: Harvard Business School Press.

Bain, J.S. (1968): Industrial organization. 2. ed., New York: Wiley.

Barney, J.B. (1991): Firm resources and sustained competitive advantage. In: Journal of Management, 17(1): 99-120.

Baum, J.A.C./Calabrese, T./Silverman, B.S. (2000): ‚Don't go it alone': Alliance network composition and start-ups' performance in Canadian biotechnology. In: Strategic Management Journal, 21, Special Issue: 267-294.

Borys, B./Jemison, D.B. (1989): Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations. In: Academy of Management Review, 14: 234-249.

Bresser, R.K.F./Hitt, M.A./Nixon, R.D. (2000): The deconstruction of integrated value chains: Practical and conceptual challenges. In: Bresser, R.K.F./Hitt, M.A./Nixon, R.D. (eds.): Winning strategies in a deconstructing world. Chichester, New York: John Wiley: 1-21.

Burt, R.S. (1987): Social contagion and innovation versus structural equivalence. In: American Journal of Sociology, 92: 1287-1335.

https://doi.org/10.5771/0935-9915-2004-1-53, am 28.08.2024, 14:23:55
Open Access – (cc) BY - https://www.nomos-elibrary.de/agb

Burt, R.S. (1992): Structural holes: The social structure of competition. Cambridge, MA: Harvard University Press.

Burt, R.S. (1999): The network structure of social capital. Mimeo: University of Chicago.

Castanias, R.P./Helfat, C.E. (1991): Managerial resources and rents. In: Journal of Management, 17(1): 155-171.

Chi, T. (1994): Trading in strategic resources: Necessary conditions, transaction cost problems, and choice of exchange structure. In: Strategic Management Journal, 15(4): 271-290.

Chung, S/Singh, H./Lee, K. (2000): Complementarity, status similarity and social capital as drivers of alliance formation. In: Strategic Management Journal, 21(1): 1-22.

Cohen, W.M./Levinthal, D.A. (1990): Absorptive capacity: A new perspective on learning and innovation. In: Administrative Science Quarterly, 35(1): 128-152.

Coleman, J.S. (1990): Foundations of social theory. Cambridge, MA: Harvard University Press.

Combs, J.G./Ketchen, D.J (1999): Explaining interfirm cooperation and performance: Toward a reconciliation of predictions from the resource-based view and organizational economics. In: Strategic Management Journal, 20(9): 867-888.

Conner, K.R. (1991): A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? In: Journal of Management, 17(1): 121-154.

Contractor, F.J./Kim, C.-S./Beldona, S. (2002): Interfirm learning in alliances and technology networks: An empirical study in the global pharmaceutical and chemical industries. In: Contractor, F.J./Lorange, P. (eds.): Cooperative strategies and alliances. Amsterdam: Elsevier Science: 493-516.

Croom, S.R. (2001): The dyadic capabilities concept: Examining the processes of key suppliers involvement in collaborative product development. In: European Journal of Purchasing & Supply Management, 7(1): 29-37.

Das, T.K./Teng, B.-S. (2000): A resource-based theory of strategic alliances. In: Journal of Management, 26(1): 31-61.

Dierickx, I./Cool, K. (1989): Asset stock accumulation and sustainability of competitive advantage. In: Management Science, 35(12): 1504-1511.

Duschek, S. (1998): Kooperative Kernkompetenzen – Zum Management einzigartiger Netzwerkressourcen. [Cooperative core competencies: The management of unique network resources] In: Zeitschrift Führung+Organisation, 67(4): 230-236.

Duschek, S. (2002): Innovation in Netzwerken: Renten, Relationen, Regeln. [Innovation in networks: Rents, relations, rules] Wiesbaden: DUV.

Duschek, S./Sydow, J. (2002): Ressourcenorientierte Ansätze des strategischen Managements: Zwei Perspektiven auf Unternehmungskooperation. [Resource-oriented approaches of strategic management: Two perspectives of inter-firm cooperation] In: WiSt, 31(8): 426-431.

Dussauge, P./Garrette, B./Mitchell, W. (2000): Learning from competing partners: Outcomes and durations of scale and link alliances in Europe, North America and Asia. In: Strategic Management Journal, 21(2): 99-126.

Dyer, J.H. (1996): Specialized supplier networks as a source of competitive advantage: Evidence from the auto industry. In: Strategic Management Journal, 17(4): 271-191.

Dyer, J.H. (1997): Effective interfirm collaboration: How firms minimize transaction costs and maximize transaction value. In: Strategic Management Journal, 18: 553-556.

Dyer, J.H./Singh, H. (1998): The relational view: Cooperative strategy and sources of interorganizational competitive advantage. In: Academy of Management Review, 23(4): 660-679.

Dyer, J.H./Nobeoka, K. (2000): Creating and managing a high-performance knowledge-sharing network: The Toyota case. In: Strategic Management Journal, 21, Special Issue, March: 345-367.

Eisenhardt, K.M./Shoonhoven, C.B. (1996): Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. In: Organization Science, 7(2): 136-150.

Foss, K./Harmsen, H. (1996): Studies of key factors of product-development success: A resource-based critique and reinterpretation. In: Foss, N.J./Knudsen, C. (eds.): Towards a competence theory of the firm. London and New York: Routledge: 33-149.

https://doi.org/10.5771/0935-9915-2004-1-53, am 28.08.2024, 14:23:55
Open Access – (cc) BY - https://www.nomos-elibrary.de/agb

Foss, N.J. (1996): Whither the competence perspective? In: Foss, N.J./Knudsen, C. (eds): Towards a competence theory of the firm. London: Routledge: 175-200.

Foss, N.J. (1999): Networks, capabilities, and competitive advantage. In: Scandinavian Journal of Management, 15(1): 1-15.

Foss, N.J./Eriksen, B. (1995): Competitive advantage and industry capabilities. In: Montgomery, C.A. (eds.): Resource-based and evolutionary theories of the firm: Towards a synthesis. Boston: Kluwer Academic Publishers: 43-69.

Foss, N.J./Knudsen, C./Montgomery, C.A. (1995): An exploration of common ground: Integrating evolutionary and strategic theories of the firm. In: Montgomery, C.A. (eds.): Resource-based and evolutionary theories of the firm: Towards a synthesis. Boston: Kluwer Academic Publishers: 1-17.

Gomez-Casseras, B. (1994): Group versus group: How alliance networks compete. In: Harvard Business Review, 72(4): 62-74.

Grant, R.M. (1991): The resource-based theory of competitive advantage: Implications for strategy formulation. In: California Management Review, 33(3): 114-135.

Gulati, R. (1998): Alliances and networks. In: Strategic Management Journal, 19(4): 293-317.

Gulati, R. (1999): Network location and learning: The influence of network resources and firm capabilities on alliance formation. In: Strategic Management Journal, 20(5): 397-420.

Gulati, R./Nohira, N./Zaheer, A. (2000): Strategic networks. In: Strategic Management Journal, 21, Special Issue, March: 203-215.

Granovetter, M. (1985): Economic action and social structure: The problem of embeddedness. In: American Journal of Sociology, 91: 481-510.

Hamel, G. (1991): Competition for competence and interpartner learning within international strategic alliances. In: Strategic Management Journal, 12, Special Issue, Summer: 83-104.

Hamel, G./Doz, Y.L./Prahalad, C.K. (1989): Collaborate with your competitors – and win. In: Harvard Business Review, 67(1): 133-139.

Hamel, G./Prahalad, C.K. (1993): Strategy as a stretch and leverage. Harvard Business Review, 71(2): 75-84.

Hennart, J.-F./Roehl, T./Zietlow, D.S. (1999): ‚Trojan horse' or ‚workhorse'? The evolution of U.S.-Japanese joint ventures in the United States. In: Strategic Management Journal, 20(1): 15-29.

Hippel, E. von (1988): The sources of innovations. New York: Oxford University Press.

Hoopes, D.G./Madsen, T.L./Walker, G. (2003): Guest editor's introduction to the special issue: Why is there a resource-based view? Toward a theory of competitive heterogeneity. In: Strategic Management Journal, 24, Special Issue, October: 889-902.

Inkpen, A.C. (2000): A note on the dynamics of learning alliances: Competition, cooperation, and relative scope. In: Strategic Management Journal, 21(7): 775-779.

Ireland, R.D./Hitt, M.A./Vaidyanath, D. (2002): Alliance management as a source of competitive advantage. In: Journal of Management, 28(3), 423-446.

Kale, P./Singh, H./Perlmutter, H. (2000): Learning and protection of proprietary assets in strategic alliances: Building relational capital. In: Strategic Management Journal, 21, Special Issue, March: 217-237.

Kern, H. (1998): Lack of trust, surfeit of trust: Some causes of the innovation crises in Germany. In: Lane, C./Bachmann, R. (eds.): Trust within and between organizations. Oxford: Oxford University Press: 203-213.

Khanna, T./Gulati, R./Nohria, N. (1998): The dynamics of learning alliances: Competition, cooperation and relative scope. In: Strategic Management Journal, 19(3): 193-210.

Klein, B./Crawford, R.G./Alchian, A.A. (1978): Vertical integration, appropriable rents, and the competitive contracting process. In: Journal of Economics and Law, 21(2): 297-325.

Kogut, B. (2000): The network as knowledge: Generative rules and the emergence of structure. In: Strategic Management Journal, 21, Special Issue, March: 405-425.

Koza, M.P./Lewin, A.Y. (1998): The co-evolution of strategic alliances. In: Organization Science, 9(2): 255-264.

Lee, C./Lee, K./Pennings, J.M. (2001): Internal capabilities, external networks, and performance: A study on technology-based ventures. In: Strategic Management Journal, 22: 615-640.

https://doi.org/10.5771/0935-9915-2004-1-53, am 28.08.2024, 14:23:55
Open Access – (cc) BY - https://www.nomos-elibrary.de/agb

Lei, D. (1993): Offensive and defensive uses of alliances. In: Long Range Planning, 26(4): 32-41.

Leonard-Barton, D. (1995): Wellsprings of knowledge: Building and sustaining the sources of innovation. Boston, MA: Harvard Business School Press.

Lofstrom, S.M. (2000): Absorptive capacity in strategic alliances: Investigating the effects of individuals' social and human capital of inter-firm learning. Paper presented at the Organization Science Winter Conference in Keystone/Colorado.

Madhok, A. (1997): Cost, value and foreign market entry mode: The transaction and the firm. In: Strategic Management Journal, 18: 39-61.

Madhok, A./Tallman, S.B. (1998): Resources, transactions and rents: Managing value through interfirm collaborative relationships. In: Organization Science, 9(3): 326-339.

Mahoney, J.T./Pandian, J.R. (1992): The resource-based view within the conversation of strategic management. In: Strategic Management Journal, 13(5) 363-380.

March, J.G. (1991): Exploration and exploitation in organizational learning. In: Organization Science, 2(1): 71-87.

Marshall, A. (1982): Principles of economics. 8. eds., Philadelphia: Porcupine Press.

Mathews, J. (1994): The governance of interorganizational networks. In: Corporate Governance, 1: 903-918.

Mattsson, L.-G. (1987): Management of strategic change in a 'market-as-networks' perspective. In: Pettigrew, A.H. (eds.): The management of strategic change. Oxford: Blackwell Publishers: 234-260.

McEvily, B./Zaheer, A. (1999): Bridging ties: A source of firm heterogeneity in competitive capabilities. In: Strategic Management Journal, 20(12): 1133-1156.

Mildenberger, U. (2001): Systemische Kompetenzen und deren Einfluss auf das Kompetenzentwicklungspotenzial in Produktionsnetzwerken. [Systemic competencies and their influence on the evolution potential of competencies in production networks] In: Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung, 53: 705-722.

Montgomery, C.A. (1995): Of diamonds and rust: A new look at resources. In: Montgomery, C.A. (eds.): Resource-based and evolutionary theories of the firm: Towards a synthesis. Boston: Kluwer Academic Publishers: 251-278.

Moran, P./Ghoshal, S. (1999): Markets, firms, and the process of economic development. In: Academy of Management Review, 24(3): 390-412.

Mowery, D.C./Oxley, J.E./Silverman, B.S. (2002): The two faces of partner-specific absorptive capacity: Learning and cospecialization in strategic alliances. In: Contractor, F.J./Lorange, P. (eds.): Cooperative strategies and alliances. Amsterdam: Elsevier Science: 291-319.

Oliver, C. (1997): Sustainable competitive advantages: Combining institutional and resource-based views. In: Strategic Management Journal, 18(9): 697-713.

Park, S.H./Ungson, G.R. (2001): Interfirm rivalry and managerial complexity: A conceptual framework of alliance failure. In: Organization Science, 12(1): 37-55.

Peteraf, M.A. (1993): The cornerstones of competitive advantage: A resource-based view. In: Strategic Management Journal, 14: 179-191.

Pfeffer, J./Salancik, G.R. (1978): The external control of organizations. New York: Harper & Row.

Porter, M.E. (1985): Competitive advantage. New York: Free Press.

Porter, M.E. (1991): Towards a dynamic theory of strategy. In: Strategic Management Journal, 12, Special Issue: 95-117.

Powell, W.W./Koput, K.W./Smith-Doerr, L. (1996): Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. In: Administrative Science Quarterly, 41(1): 116-145.

Prahalad, C.K./Hamel, G. (1990): The core competence of the corporation. In: Harvard Business Review, 68(3): 79-91.

Rasche, C. (1994): Wettbewerbsvorteile durch Kernkompetenzen: Ein ressourcenbasierter Ansatz. [Competitive advantage through core competencies: A resource-based approach] Wiesbaden: Gabler.

Reed, R./DeFillippi, R.J. (1990): Causal ambiguity, barriers to imitation, and sustainable competitive advantage. In: Academy of Management Review, 15(1): 88-102.

https://doi.org/10.5771/0935-9915-2004-1-53, am 28.08.2024, 14:23:55
Open Access – (cc) BY - https://www.nomos-elibrary.de/agb

Reich, R./Markin, E. (1986): Joint ventures with Japan give away our future. In: Harvard Business Review, 64(2): 78-86.

Reve, T. (1990): The firm as a nexus of internal and external contracts. In: Aoki, M./Gustafsson, B./Williamson, O.E. (eds.): The firm as a nexus of treaties. London: Sage Publications: 133-161.

Rumelt, R.P./Schendel, D./Teece, D.J. (1991): Strategic management and economics. In: Strategic Management Journal, 12: 5-29.

Rumelt, R.P./Schendel, D./Teece, D.J. (1994): Fundamental issues in strategy. In: Rumelt, R.P./Schendel, D./Teece, D.J. (eds.): Fundamental issues in strategy: A research agenda. Boston, MA: Harvard Business School Press: 9-47.

Sabel, C.F. (1989) The reemergence of regional economics. In: Hirts, P./Zeitlin, J. (eds.): Reversing industrial decline. Leamington Spa: Berg Publishers: 17-70.

Scarbrough, H. (1998): Path(ological) dependency? Core competencies from an organizational perspective. In: British Journal of Management, 9: 219-232.

Schulze, W.S. (1994): The two schools of thought in resource-based theory: Definitions and implications for research. In: Advances in Strategic Management, 10: 127-151.

Teece, D.J./Pisano, G./Shuen, A. (1997): Dynamic capabilities and strategic management. In: Strategic Management Journal, 18(7): 509-533.

Tsang, E.W.K (2000): Transaction cost and resource-based explanations of joint ventures: A comparison and synthesis. In: Organization Studies, 21(1): 215-242.

Tidd, J./Bessant, J./Pavitt, K. (2001): Managing innovation: Integrating technological, market and organizational change. 2. ed., Chichester, New York: Wiley.

Uzzi, B. (1997): Social structure and competition in interfirm networks: The paradox of embeddedness. In: Administrative Science Quarterly, 42(1): 35-67.

Wernerfelt, B. (1984): A resource-based view of the firm. In: Strategic Management Journal, 5(2):171-180.

Westney, D.E. (1988): Domestic and foreign learning curves in managing international cooperative strategies. In: Contractor, F.J./Lorange, P. (eds.): Cooperative strategies in international business. Lexington, MA.: Lexington Books: 339-346.

Williamson, O.E. (1985): The economic institutions of capitalism: Firms, markets, relational contracting. New York: Free Press.

Williamson, O.E. (1991): Comparative economic organization: The analysis of discrete structural alternatives. In: Administrative Science Quarterly, 36(2): 269-296.

Williamson, O.E. (1999): Strategy research: Governance and competitive perspectives. In: Strategic Management Journal, 20(12): 1087-1108.

Zajac, E.J./Olsen, C.P. (1993): From transaction cost to transactional value analysis: Implications for the study of interorganizational strategies. In: Journal of Management Studies, 30(1): 131-145.

Zeng, M./Hennart, J.-F. (2002): From learning races to cooperative specialization: Towards a new framework for alliance management. In: Contractor, F.J./Lorange, P. (eds.): Cooperative strategies and alliances. Amsterdam: Elsevier Science: 189-210.

https://doi.org/10.5771/0935-9915-2004-1-53, am 28.08.2024, 14:23:55
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