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This paper adopts a dominant logic perspective, i.e. conceptualization of business and critical resource allocation, in order to provide a network strategies typology. The first type is based on structural logic and seeks positional, configuration and relational rents. The second logic is resource-based and views networks as a resource access structure, a critical resource per se and a competence development challenge. Third, the value-creation and value-appropriation logic opens ways to exploit coopetition or ecosystems in firms' strategies.

Keywords: dominant logic, network, strategy, structural, resource, value creation.

Logika strategii sieciowych

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Artykuł przyjmuje perspektywę logiki dominującej, tj. konceptualizacji biznesu oraz krytycznych decyzji alokacyjnych, by zaproponować typologię strategii sieciowych. Pierwszy typ opiera się na logice strukturalnej i zmierza do uzyskania renty pozycyjnej, konfiguracyjnej lub relacyjnej. Drugi typ to zasobowa logika sieciowa, w której sieć staje się sposobem dostępu do zasobów, kluczowym zasobem oraz wyzwaniem kompetencyjnym dla organizacji. Trzecia logika postrzega sieć jako układ tworzenia i zawłaszczania wartości przez koopetycję oraz ekosystemy.

Słowa kluczowe: logika dominująca, sieć, strategia, strukturalne, zasoby, tworzenie wartości.

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1. Introduction

Strategic developments in economic, political, social and many other environments are reflected in the evolution of a firm's dominant logic¹. As noted by Vargo and Lusch (2004), increased importance of intangible resources, value co-creation and inter-organizational relationships leads towards a new dominant logic. The notion of dominant logic is rooted in strategic management and expresses the way in which managers "conceptualize the business and make critical resource allocation decisions" (Prahalad and Bettis, 1986). This is thus a way of perceiving the reality, or a mental model that is reflected in business models and processes implemented by a company (Obloj, Obloj and Pratt, 2010). Despite being criticized as a cognitive category with a loose connection with practice (Grant, 1988), this concept offers a valuable opportunity to typologize corporate strategies.

The dominant logic assumes limited rationality of managers that is manifested by restricted ability to concentrate attention and analyse data, and thus selective understanding of their companies' surroundings (Walsh, 1995). It, therefore, creates a cognitive framework that determines what is noticed, how it is interpreted and what action is taken (Bogner and Barr, 2000). Although networks have become both the context for strategy development and strategy content (Czakon, 2012), theoretical studies on the network strategies logic are missing. Meanwhile, the interest in strategic management within networks has revealed an array of network perceptions among not only researchers but also managers. Current network strategies can be typologized depending on the way in which networks are viewed and on the related sources of a competitive advantage. All these strategies seek to develop organizations by facilitating the achievement of their strategic goals by means of networks.

The article presents the network strategies logic. The arguments are based on network perceptions outlined in the literature, i.e. sequentially: structural, resource-based, and value-creation views. The adoption of these three axes of reflection can highlight various network advantages sought by managers. As such, a network is of no strategic value. Besides, interorganizational relationships and interdependences existed much earlier than they were noted in the literature (Pfeffer and Salancik, 1978; Håkansson and Snehota, 1989). It is only by intentionally and efficiently exploiting networks that strategists can contribute to generating additional benefits and appropriate them. This is because the dominant logic unfolds when network-related advantages are actually gained through allocation decisions and business models. It depends on how aware managers are of the existence of networks (Kawa and Pierański, 2015). This article may help to develop this awareness and provide some guidelines for strategic management practice in respect of the dominant strategy logic. It casts light on network perceptions and resulting sources of advantages, and indicates resource allocations necessary to gain these advantages.

2. Network Strategies

Pointing out that no business is an island, the seminal paper by Håkansson and Snehota (1989) also identifies the distinctive features of management within networks, namely:

- company operations conditioned by a limited number of major counterparts;
- continuous interactions with those counterparts;
- development of distinctive competences in the relationships with those parties;
- performance conditioned by the network as a context, encompassing even interactions among third parties.

Accordingly, a network is the space where strategic processes unfold. Researchers distinguish several possible roles to be played by companies within networks: network structuring agent, coordinator; advisor, information broker, relationship broker, innovation sponsor (Harland and Knight, 2001). This implies that, in a network environment, there are challenges that are incomprehensible since they are invisible in the light of the extant strategic management contributions. Meeting these challenges is the way to gain an advantage over rivals and develop the organization.

Simultaneously, managers clearly feel that their companies' success depends upon the health, relationships and collective actions of all organizations that influence product creation and delivery (Iansiti and Levien, 2004). Therefore, organizations' behaviour and performance can be better understood when they are considered as embedded within networks (Gulati, Nohria and Zaheer, 2000). Numerous research streams described previously (Czakon, 2012) lead towards revealing network strategies understood as methods for companies to gain a competitive advantage by means of a network. I propound a narrower definition of network strategies than Niemczyk (2013; p. 141), who construes a strategy under the network approach as "a set of actions aimed at contract management that optimum is from the point of view of stakeholders". The first limitation of the notion applies to a network user as I adopt the perspective of a single company vis-à-vis a particular system of ties with other organizations, rather than focusing on the aggregated network level. The second limitation concerns a competitive advantage instead of an optimal system of contracts, setting the considerations within neo-institutional economics, and thus in a much broader context than in the sub-discipline of management science. The third limitation, which is key to this study, applies to strategy logic, namely the pair of perception-allocation rather than observable actions or behaviours of organizations. By proposing a narrow definition of network strategies, I leave aside several topics such as collective strategies, optimization and contracts.

Despite the growing interest in social (Granovetter, 1995), business (Håkansson and Ford, 2002) and strategic (Möller and Rajala, 2007) net-

works, the network theory is developing slowly in strategic management. The main problem that the network theory faces, namely explaining how interaction structures allow coordinated collaboration to achieve individual and collective benefits (Salancik, 1995), is still to be solved. As regards applied network strategies, strategies for network research (Fombrun, 1982) and supply network strategies (Gadde et al., 2010) have been proposed, yet the types of strategies used within networks have been studied for a short time, hence only fragmentary empirical research results are available (Ozcan and Eisenhardt, 2009). A cognitive gap exists in the network strategies typology. This study addresses this deficiency.

The existing literature (Czakon, 2012) may be organized around three axes that are clearly distinct in terms of network perception and the consequent resource allocation (Tab. 1):

- 1. The structural axis, which by treating networks as systems of nodes and links between them opens up scope for pursuit of advantage through taking up certain positions within a network, developing specific network configurations and creating privileged relations in order to gain a competitive advantage. It is worthwhile noting that, in contrast to the classical positioning view in strategic management, the network's structural logic contains dynamic elements, for example a firm's competitive response to the formation of strategic blocks (Garcia-Pont and Nohria, 2002), alliance networks of its rivals (Gimeno, 2004) and learning races (Hamel, 1991). Hence, rents appear that are not available in traditional approaches to strategies (Niemczyk, 2013, p. 150).
- 2. The resource-based axis, which recognizes a network as a way to access resources, a strategic resource, and a bundle of specific competences required for exploring the network environment. According to the resource-based logic, the pursuit of advantage may be viewed narrowly, where establishing or joining a network allows access to strategic resources. A typical case is technological standards (Garud and Kumaraswamy, 1993) that play many simultaneous roles, ranging from knowledge, through the network effect, to barriers to entry into the sector. In addition, managers treat networks as products of strategic decisions and a long-term formation process, which makes networks a unique resource that is quasi-impossible to replicate (Dyer and Hatch, 2004). Finally, not all companies can operate equally well within a network. This very ability opens the door to a wide variety of competitive advantages. Again, what is noticeable is the complexity of the network rent compared to conventional approaches.
- 3. The value-creation axis, which instrumentally views a network as an environment offering unique value creation and appropriation opportunities that cannot open up when a company acts alone or in bilateral cooperation. The network logic of value creation, therefore, takes into account the interdependences among manifold companies and engages

them to act collectively, regardless of whether they are rivals (Brandenburger and Nalebuff, 1995), in order to generate a collective perception (Håkansson, 2010) based on cognitive proximity (Klimas, 2011), leading to a common identity of the network participants (Boner et al., 2005). This view of network interdependences is expressed by the concept of ecosystem (Moore, 1993), which offers possibilities for the search of new strategies (Stańczyk-Hugiet, 2015).

Strategy type	Source of advantage	Туре	Examples
Structural	Position in the network	Central actor Structural hole Periphery	Koka and Prescott, 2008 Burt, 1992 Hamel, 1991
	Network configuration	Concentration Centralization Partner selection	Garcia-Pont and Nohria, 2002 Gimeno, 2004 George et al., 2001
	Relations in the network	Strong ties Trust	Dyer and Singh, 1997
Resource-based	Resources	Access Appropriation Network-resource	Gulati, Nohria and Zaheer, 2000 Garud and Kumaraswamy, 1993 Dyer and Hatch, 2004
	Competence	Collaboration Network Orchestration	Blomqvist and Levy, 2006 Capaldo, 2007 Dhanaraj and Parkhe, 2006
Value-creation	Coopetition	Integrator Estranger Partner Contender	Luo, 2004
	Ecosystem	Niche Keystone Dominator Commodity	Iansiti and Levien, 2004

Tab. 1. Network strategies. Source: the author's own work.

3. Structural Logic

The basic and chronologically first definition of "network" refers to network structures, i.e. nodes representing companies and ties among them. It led to the emergence of the concepts of business (Håkansson and Ford, 2002) and strategic (Möller and Rajala, 2007) networks.

An advantage that can be gained within structures involves the deliberate shaping of a position, configuration or ties with other network members. The positional logic involves the observation of position properties within networks and the intention to exploit the positions that offer opportunities consistent with the strategist's objectives. In turn, the configuration

logic views the features of entire networks as more or less consistent with the strategist's objectives. Accordingly, it requires a whole network to be shaped in order to get the fit leading to a competitive advantage. Finally, the relational logic sees privileges in individual relationships – privileges that are mutually granted by the parties and that cannot be enjoyed by other entities.

The **positional logic** is rooted in the analysis of social networks (Światowiec-Szczepańska et al., 2015). The strategy that has been most thoroughly studied is that of a central actor who builds a dense surrounding network of relations through formal ties, participation in consortia, cooperation platforms and multi-stakeholder projects, but also deliberately develops a network of informal relations. The central position offers the privilege of faster and broader access to information than that enjoyed by any other entity, hence it may be a good structural solution for sectors requiring agility (e.g. finance, fashion), but also for companies operating in knowledge-based economy.

A privilege is also achievable in the structural hole position, namely the node that is the only link between two or more networks or their internal clusters (Burt, 1992). This privilege essentially involves control of the information flow between independent networks. This gives the monopoly of access to otherwise unrelated sets of information and makes the node necessary for the establishment of a possible cooperation between these networks.

The peripheral position – i.e. nodes that are weakly connected with others – is, on the other hand, poorly researched. Yet peripherality provides protection against crises, prevents the spread of shocks, and gives more time to react. Moreover, the network's periphery is indispensable for this network. Although structural periphery may seem disadvantaged as regards access to other actors and distant from the central node, the interdependence relation may make it necessary for the entire network. This can be said, for example, for suppliers of single components in global supply chains of the automotive industry.

The **configuration logic** was developed in the research on supplier (Harland and Knight, 2001) and alliance (Gulati, Zaheer and Nohria, 2000) networks. Indeed, a structural advantage may be gained also through the formation of a network of relations that facilitate the achievement of their members' strategic objectives. The automotive industry recognized Toyota's strategy, whereby the development of relations between suppliers is supported in order to facilitate quality control, learning and development processes (Dyer and Hatch, 2004). Such relations are fostered by dense networks of ties. It is this structural feature that underlies the popularity of clusters and various associations as it allows knowledge to be exchanged and global-scale advantages to be gained. Globally, networking and rivals' response in the form of building competing networks have become the

basis of the competitive dynamics of airlines (Gimeno, 2004). The opposite strategy, i.e. mutual isolation of nodes and centralization of the entire network, makes it possible to control intellectual property and access to customers. As a result, building and using the network architecture around a company in order to strengthen its innovation (Capaldo, 2007) appears to be a deliberate strategic move necessary to gain a competitive advantage.

Aside from the shaping of the density of ties among the network nodes, selection of network members forms a strategic field of decisions. Selectivity in this respect is manifested by certification programmes aimed at strict control over participation in the network (George et al., 2001), associations, or even loyalty programmes. By joining such a selective network, its members receive economic benefits through the exclusivity, or at least prestige, effect.

The **relational logic** means using the characteristics of relations, in particular creating the ties that offer mutual benefits. Network structures are composed of identical ties only in simplified graphic illustrations. In fact, each and every enterprise is surrounded by specific relationships that are the source of various privileges and that are intentionally established for these privileges. They are collectively referred to as the relational rent (Dyer and Singh, 1997), which is reflected as improved efficiency, enhanced innovation and strategic benefits ensuing from the disposal of unique resources. Therefore, many companies use relational strategies apart from positional and configuration strategies in networks.

When the strategist sees the network as a structure, specific strategic options open up that are expressed as resource allocation to acquire a particular position, create a network configuration and develop privileged relations. Further research in this respect may cover a comparative evaluation of the results achieved by means of these structural network strategies.

4. Resource-Based Logic

The resource-based logic directs strategists' attention toward obtaining resources, restricting competitors' access to critical resources, and using resources and competences related to these strategic measures. Networks offer completely new opportunities not otherwise available to companies, because resource-based advantages cannot be sought jointly with many other companies if the company is viewed as an independent entity and resources are seen as freely available. A distinctive feature of the resource-based logic is, therefore, the perception of the entire system of interconnected entities as the operator and exploiter of resources, as opposed to a single actor or a pair of allied actors.

The basic manifestation of the resource-based logic corresponds to the notion of social capital understood as **the sum of resources** available to individuals due to their relations with others (Lin, 2002). In a network environment, the pool of available human, intellectual (Håkanson, 2010),

physical and financial resources is much bigger than the pool that would be possible to obtain by any single company. This is, on the one hand, a natural extension of the reception field in the resource-based theory of the firm and, on the other, this perception as such poses managerial challenges absent from the classical strategic management schools (Niemczyk, 2013). There is a vast body of literature on network research and development leading to the establishment of technological standards (Garuda and Kumaraswamy, 1993). Companies form consortia that acquire ownership rights to developed technologies, and thus can strive for the network effect (Haigu and Yoffie, 2009) and isolate the technologies from their competitors. Franchising is a typical form of mobilizing a network's financial and human resources to achieve strategic objectives of a single company. Franchising significantly reduces the need for a company's own financial or human resources, yet allows economies of scale and brisk acceleration of growth.

The resource-based logic also has its roots in strategic management, where it is proposed to view the network as a resource, namely a system of privileged relations that meets all the requirements in respect of strategic resources (Czakon, 2012). It is worth emphasizing that such a system is unique because it reflects not only the firm-specific factors but also the entire path of dependences, i.e. prior choices, resource allocation and a mutual adjustment effort undertaken by the parties concerned in order to develop mutually beneficial relations. In addition to the typical resource-based rent, synergies occur in this case (Niemczyk, 2013). The creation of this resource is best researched in the automotive industry, in particular Toyota (Dyer and Hatch, 2004), which sees suppliers as a source of a mutually attainable current and future advantage. To this end, it is necessary to allocate financial, physical and human resources to support the transfer of knowledge between suppliers through: the establishment of joint teams and associations as well as organization of meetings. Thus, the need arises that is absent in the case of management concentrated on a single organization, namely the need to develop the competence of managing a network as a strategic resource (Johnson, 1999).

The resource-based logic has focused the greatest attention of researchers on **network competences** in recent years (Ritter and Gemunden, 2003). I suggest that this category can be understood as a set of competences that occur solely in a network environment, being a prerequisite for a competitive advantage. Most attention is attracted by the following network competences:

1. Network management involving a complex skill of economic relations management at each stage of their life cycle (Mitręga et al., 2012). This approach allows for distinguishing the competences associated with individual inter-organizational relationships, namely with creating, developing and breaking off relations. These competences are integrated by the ability to establish and use the relational architecture (Capaldo, 2007).

- In order for a network to be perceived as a strategic leverage, organizational routines related to inter-organizational transfer of knowledge and delivery of inter-organizational synergies must be developed.
- 2. Orchestration, meaning a set of actions taken by the central company within the network to create and appropriate value in the network (Dhanaraj and Parkhe, 2006). The actions are distinguished that are focused on the network structure, including member selection, tie configuration and positioning, combined with knowledge flow management, innovation appropriation and network stability management. Orchestration is only apparently similar to network management as this competence is typical to innovation networks, whereas the former is manifested in value-creation or supply networks.
- 3. Network collaboration involving mutual learning from the parties to inter-organizational relationships, investment in the resources necessary for a specific relation, and development of mutual trust (Blomqvist and Levy, 2006). In contrast to network management, the collaboration competence concerns individual non-central actors. It expresses their network awareness (Kawa and Pietrasiński, 2015) and perception of a particular tie as strategically significant, resulting in allocation of resources specific to that particular tie. It thus represents the logic of network interdependence.

The resource-based logic has been developed by researchers who, assuming the perspective of the resource-based theory of the firm, focus on the conditions for gaining a competitive advantage arising out of resources owned, exploited and isolated. In each of these elements, networks play a unique, otherwise unattainable, role. It should be highlighted, however, that managers, while perceiving the importance of networks, are not limited to the resource-based logic, but also resort to the structural logic. Thus, the separation of the structural and resource-based logics indicates key elements rather than elements present solely in each of these logics.

5. Value-Creation Logic

A strategic network is not only a structure, because an organization provides its managers with tools for shaping structures in order to effectively achieve organizational objectives. Neither is it the only way to achieve a resource-based advantage. Defining strategic objectives is focused around the value that should be created and appropriated (Hurmelinna-Laukkanen and Puumalainen, 2007). In this view, the network has a specific task, i.e. value creation. It thus becomes a tool, a fabric used by strategists to achieve what is impossible to attain by companies viewed as atomic entities or even by alliances. Two strands of literature elaborate on this specificity, focusing on network relations or on the network separation from the environment.

A value-creation network is a central concept in Brandenburger and Nalebuff (1995). They postulate a shift from the logic of market competition to the logic of value co-creation, even with competitors. Coopetition is an expression of the logic of network value creation for the customer, jointly with suppliers, customers, complementors but also with competitors. Although researchers concentrated on the tensions that arise in the course of cooperation with a competitor (Fernandez et al., 2014), the games theory can be used to easily demonstrate that cooperation within a value-creation network is the best solution for all parties involved. This is because this cooperation leads to an increase in value available to all participants, opening up a new field of competition – appropriation of this additional value.

A few strategies used by value-creation network members have been distinguished depending on the intensity of cooperation and competition between them (Luo, 2004). When both relations are strong, such a strategy is called an integrator, meaning the pursuit of intensive exploration of the network and involvement in its co-creation. If both relations are weak, we deal with an estranger – a strategy of distancing oneself from others, avoiding collaboration and confrontation alike. Strategies dominated by cooperation are called partnership-based, while those dominated by rivalry are viewed as a strategic behaviour of contender. Although this typology is simplified and further research is needed, it clearly identifies possible ways of perceiving value-creation networks and one's own role within them, reflected further as resource allocation for cooperation and competition.

The objective existence of interdependences among companies is also captured by the notion of **ecosystem**, which encompasses a variety of sectors together providing value to customers (Moore, 1993). Such a broad approach makes it difficult to identify the entities that belong to the ecosystem, because today's economy is a densely tangled system (Czakon, 2013). Therefore, researchers suggest focusing on the entities that are critical to a company (Iansiti and Levien, 2004). In this case, it is easy to notice a modus operandi similar to the relational logic, but the identification criterion for an ecosystem is not the quality of ties as an outcome of the strategy but rather an objectively existing interdependence.

The perception of interdependences results in different strategies proposed within a simple matrix spanned on a changing environment and complex interdependences (Iansiti and Levien, 2004). In the case of low changeability and weak interdependence, the category of ecosystem it is not useful. In this instance, we talk about commoditized industries. On the other hand, high changeability combined with a strong interdependence should manifest itself as the keystone strategy, meaning a company that facilitates value creation by providing a technology platform helping others to carry out complex tasks. If the interdependence is strong but environment changeability is weak, a dominator strategy emerges that integrates the network vertically or horizontally in order for the company to assert direct control

within the network. In fact, this thus contributes to network contraction at the expense of the company's own growth. Finally, when changeability is high and interdependence is weak, a niche strategy may provide significant benefits. Indeed, most companies within ecosystems adopt a niche strategy. Due to their narrow specialization, they achieve a privileged position visà-vis others and the whole ecosystem. It is clear that many niches require a keystone in order to benefit from specialization and vice versa: a keystone needs niche companies to improve the ecosystem.

The various strategies in an ecosystem are dependent on the changing environment and innovation pace. Therefore, they are characterized by dynamics and adaptation (Stańczyk-Hugiet, 2015). While some companies do influence the entire ecosystem more than others, the interdependence systems leave no entity or strategy beyond the adaptation processes. The strength and viability of an ecosystem will be determined not by an independent, singular strategy, but by co-evolution of strategies.

The view of a network as an environment for value creation and appropriation materially changes the scope and method of company strategy development. This is because it includes thus far absent actors in value creation, setting new boundaries of strategy influence. While not excluding each other, both modi operandi offer an unprecedented leverage to strategic managers.

6. Conclusion

Strategic success depends on many factors – so many that even attributing success exclusively to strategists' decisions raises debate in literature. There is no doubt, however, that the lack of strategy leads to much worse results than could be achieved by implementing any strategy (Miller and Friesen, 1986). The strive for advantage is challenging to strategists, also in terms of thinking, conceptualization and perception of business. While the existence of a network paradigm (Czakon, 2011) within strategic management research generates the ongoing discussion, the existence of a network environment becomes a characteristic feature of the present times, a next step in strategy development (Niemczyk, 2013).

It is, therefore, essential not only to identify different perceptions of networks by strategists but also to raise network awareness. This paves the way for implementation of the dominant network logic, which becomes a prerequisite for success in the tangled economy (Czakon, 2013). The axes proposed herein for distinguishing network logics (structural, resource-based and value-creation) reflect the perception of the network within a strategy. Their sequential order indicates the increasing complexity of network logics that are characterized by concepts and managerial challenges absent outside networks. If a network is viewed as a mere structure, it is necessary to allocate resources and undertake adequate actions so that this structure

serves the strategist's purpose. If a network is seen as a company's resource leverage, it gives room for development of organizational competences necessary for using this leverage successfully. If a network is understood as a system of interdependences, it is interdependencies that become the space of strategic decisions.

Whichever network strategy logic the manager chooses, his/her scope of influence expands considerably, strategic options multiply and fields of development open up. The proposed typology of network strategy logics calls for empirical tests, as much as do strategies proposed in extant literature. The resulting material will bridge the gap between managers and researchers as regards the perception of networks, and will enable an analysis of the results achieved by companies implementing the different strategies.

Endnotes

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