Chapter 16
Dynamics and the Dynamism of Strategy in Inter-organizational Network—Research Project Assumptions

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Abstract The main conceptual goal of this article is to present the preliminary assumptions of the planned research project focused on the influence of strategy dynamics and dynamism of inter-organizational network strategies on the overall development of network systems. Primary focus was put on the comparative aspects of centralized and decentralized networks (considering decisional centralization). The elaboration defines basic conceptual categories, i.e., dynamics and dynamism of strategy, as well as the results of these inter-organizational network activities in the form of their development. The main research assumptions and research questions were indicated in the text, as well as the main goal of the planned research was determined. This main research goal is formulated as the detailed analysis of relations between the strategy dynamics of inter-organizational networks (centralized or decentralized) and network development in the sense of increasing the effectiveness of activities within the considered systems. Moreover, the article presents fundamental, theoretical backgrounds of main categories, which are dynamics and the dynamism of strategy, analyzed within inter-organizational networks. The paper includes also main information about future research methodology, based on quantitative methods with the use of research questionnaire created with the focus on the scale of semantic potential. Issues described in the paper are mostly located within the evolutionary trend, in which the strategy takes the form of adaptation to widely understand variability of the organizational environment. The article is a part of a studies series on the dynamics of inter-organizational networks and a conceptual approach to analyzed issues.

Keywords Strategy dynamics · Dynamism of strategy · Inter-organizational networks

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16.1 Introduction

One of the main strategic management research areas is the notion of strategy, understood as a specific planning formula, an element of a larger venture, which is a strategic management process,[1] striving to achieve the organization's objectives [68, p. 9]. Despite being the most studied and analyzed area of management, paradoxically it is still one of the least understood. The reason is twofold: a significant number of definitions and considerable variability of conditions that organizations have to operate in [28, pp. 43–61]. As a consequence, there are difficulties in clearly defining the range of factors determining the concrete definition of the essence of strategy.

Defining the strategy[2] emphasizes the relevance of factors coming from the environment, and their impact on company's strategic activities [4], focus on resources [8] necessary to achieve strategic objectives [30, 67], the impact of sector elements on strategy effectiveness [44, 45], effects of strategy realization in the form of gaining competitive advantage [31, 46], and organizational development [5, 60]. Nevertheless, still few theoretical approaches take into account variability of strategy in real time. Therefore, it is assumed that the strategy is rather a piece of information about the company's plans for interested entities or determining the main strategic directions than the active and dynamic path of the company's strategic activity. It seems nowadays that the most accurate definition of strategy will include in its implementation (and thus in defining) its process character, which consists in its automatic emergence from phenomena that occur in the environment. This is in line with the evolutionary approach. The main difference between deliberate and emergent strategy is the fact that the first one focuses on guidance and control, while the other on the process of strategic learning [33, p. 270].

The emergent strategy does not really mean chaos, but an unintended order, which often means deliberate, considerable change. The essence of this strategy lies in adapting the organization's internal area to changes taking place in the environment. Such a strategy does not mean that management is out of control, but rather that it is open and responsive to change, and is flexible and strives for organizational learning. These features provoke managers to act before they fully understand the nature of undergoing change [33, p. 271]. According to H. Mintzberg, a purely deliberate strategy prevents strategic learning due to the fact that it is formulated on the basis of historical experience and data from the current period, in contrast to the emergent strategy, which is the organization's active response to the transformation of its environment. In practice, both strategies occur simultaneously, and therefore, strategic learning is combined with control [32, p. 79].

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[1] I. Ansoff was the first to outline differences between strategic planning and management. The author added to the management area: internal elements of the organization, implementation and control in the strategy formulation process, social and political aspects of the environment and the adaptive approach, thus creating the so-called "planned learning" of the organization [24, p. 382].

[2] A comprehensive analysis of "strategy" category definitions that appeared during the years 1962–2008 was presented by: Ronda-Pupu and Guerras-Martin [53, pp. 162–188].

Therefore, analyzing historical conditions, real needs of enterprises and lack of consensus in the understanding of "strategy" category, there was a need for an unambiguous definition of modern strategy, in the context of dynamic changes that enterprises undergo. Therefore, the considerations relate not so much to the definition of the strategy itself (although the points of its dynamics evaluation result from this analysis), but rather expressing the strategy dynamics and its dynamism. It is worth to explain that in the remaining part of the article, the term **dynamics** is understood as forces or properties which stimulate growth, development, or change of an organization. **Dynamism** is understood as an organization's quality of being dynamic.

In turn, the main subject of planned research is enterprises entangled in inter-organizational networks, due to the growing importance of these relationship systems in the modern business world. In addition to the definitional considerations, the article attempts to identify main discriminants of strategy dynamics and formulate future-oriented research proposals. **Therefore, the main research goal for the planned research process is the detailed analysis of relations between the strategy dynamics of centralized and decentralized inter-organizational networks and network development in the sense of increasing the effectiveness of activities within the considered network systems**. According to the authors' subjective opinion, the indicated strategy dynamics is strongly conditioned by the influence of internal and external factors (generated inside and outside the considered network system), as well as the dynamism—understood as overall potential to be dynamic, represented by the triad of chosen factors: propensity to risk, skills of identification, creation and exploitation of opportunities, as well as leadership skills of managers.

Above-mentioned theoretical elements create the field for further research. The authors plan to use quantitative methods to realize the formulated goal. It is assumed to prepare two stages of research—a pilot study (with strongly targeted choice of research objects) and a final study (after adapting research tools basing on the results of pilot phase, as well as defining a representative research sample). During both mentioned stages, research questionnaires will be created mostly with the use of the scale of semantic potential.

The article is the continuation of the previously chosen topic, which is dynamic strategic management in inter-organizational networks. The article is a part of conceptual framework creation (in the initial stage), preceding the empirical research process in mentioned areas.

16.2 Dynamics and the Dynamism of the Strategy—Theoretical Assumptions

Continuing the topic of H. Mintzberg's approach to the strategy, it should be emphasized that he was the first researcher who gave the strategy a procedural character. What is more, the dynamics of this category can be analyzed only in the strictly functional sense, non-factual form. This conclusion becomes particularly important

at the stage of refining research proposals—in the form of questions and research hypotheses. Therefore, the general assumptions are the conclusions derived from empirical studies proposed by Quinn [50, p. 36], which include:

(a) effectiveness of strategic processes depends on balancing between formal planning systems and irrational factors resulting from individual characteristics of decision-makers (propensity to experiment and risk, creativity, and intuition);
(b) effective strategy emerges from series of strategic subsystems, each of which involves specific strategic decisions made and realized by the organization's representatives (acquisition of new companies, sale of existing activities, structural reorganization of the company, and relations with environment), through formal activities, but emerging incrementally and opportunistically;
(c) efficacy of each subsystem's logic is, to some extent, based on the normative approach when formulating key elements of large organizations' strategies;
(d) due to cognitive and procedural limitations, almost all of these subsystems (including formal planning) must be managed and combined together as a result of a specific approach, described by the so-called logical incrementalism;
(e) mentioned approach is not chaotic, but rather a purposeful, effective and proactive technique of improving and integrating rational (analytical) and irrational (behavioral) aspects of the strategy formulation process.

Contrary to common belief, strategy is a product of target plans and emergent changes being the result of learning processes and gaining experience—both by managers and organizations. The process of building strategy is determined by cultural, political, and historical factors as well as by the influence of the environment—therefore, it cannot be fully rational [37, p. 84].

As a consequence, the strategy takes on the adaptation form—in a detailed view the form of coevolution (coevolving), i.e., symbiosis between the participants of the organization, resulting in forming strong bonds that are crucial for undertaking joint activities. These ties determine self-organization, which means spontaneous transformations of the organization as a result of entities cooperation.

The main goal of these activities is to improve efficiency of their cooperation within the organization's changing environment (variable context). The foundation of strategy is, therefore, an incremental decision-making model, with the primary objective stated as obtaining the consent for adopted solutions declared by these process participants, and not its optimization due to adopted criteria (games of interests). The strategy arises as a result of minor and piecemeal comparisons, specific proposals, which are often slightly different from each other, without astute insight into the overall company's situation, due to lacking information. In the literature of the presented topic, this model is known as disjointed incrementalism, a term coined by the political scientist C. Linblom [54, pp. 459–460]. In turn, in the theory of organization and management, the model—based on political and social relations—is called the organic model.[3] In this approach, an organization is influenced by a

[3] An important feature of the organic approach is interdisciplinarity and integrity of strategy in the form of knowledge accumulation and stimuli from the social, economic and legal environment,

variety of groups, none of which is able to push through its solution. As a result, negotiations and power are main mechanisms for making decisions [2, p. 509].

Therefore, the strategy arises in a growing manner, as the experience is gained and based on proven patterns, being a combination of intuition, logic, and empirical approach [57, p. 37].

If the strategy is created in a rational-intuitive manner (what means that during the implementation of the strategic plan, specific situations can be additionally included—those that were previously ignored or omitted), it is necessary to consider antecedents and consequences of the strategy. For this purpose, considerations of M. A. Peteraf and W. J. Ferrier can be utilized. The authors present a matrix of the most important theoretical, phenomenological, and empirical similarities of strategies bearing dynamic signs. Strategy dynamics is described in the language of its changes in shaping competitive skills, focused on strategic change (adaptation). The authors, analyzing the literature of the subject, pointed out that the category that appears in adaptive strategic processes is the strategic change. This, in turn, results from the variability of the environment [42, p. 23]. Changes within the organizations' environment and internal area create opportunities, the use of which or resignation from their application—makes a solid foundation for organizational development. Excessive risk-taking, capturing opportunities that are not part of the company's mission can lead to a reverse situation, i.e., a business failure. Therefore, not only control tasks must be carried out over these processes, but in a broader sense—leadership activities. The triad: "propensity to risk–opportunities–leadership" becomes then the key foundation for the dynamism of strategic activities, leading to a dynamic strategy in inter-organizational networks (Fig. 16.1).

The term "dynamic strategy" in the literature of the topic usually appears in the relation between strategic capabilities and dynamic capabilities [66]. Considerations contained in this study focus, however, not only on the company's ability to integrate, build, and reconfigure owned resources [59], which are the foundation for this concept, according to the authors of dynamic capabilities. Thus, they are the company's mechanisms to achieve a new competitive advantage, based upon specific path dependencies and market positions [58, p. 516].

Dynamics in physics is identified with relationships between factors that cause motion and properties of this movement. The state of stable equilibrium is described by the first principle of dynamics (Newton's first law), according to which if forces are not exerted on the body or forces are balanced (in the context of the network: forces coming from the inside and surroundings), the state of the body movement does not change (the body remains at rest or moves with uniformly rectilinear movement). In turn, the state of volatility will be understood as the degree of instability of factors that affect the process (in the context of the network: the decision-making process and

as well as other elements. Besides, its important distinguishing feature is relevance, which means existence of a consistent, logical connection with the organization's situational context. The organic approach accentuates functioning of the organization in time and space. Time is characterized by continuity and diachronism, or consequences of realized processes. In this approach, the organization is not constans, but rather dynamically transformed as a result of social phenomena changes [25, pp. 36–37].

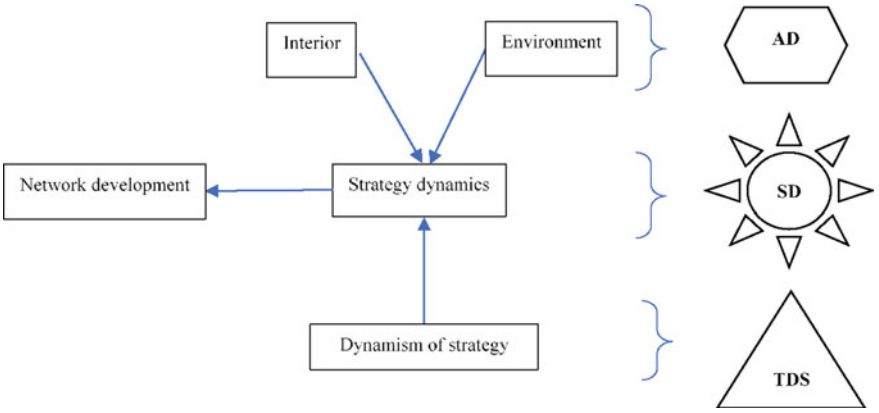

Fig. 16.1 Research concept of strategy dynamics and dynamism of strategy in inter-organizational networks. *Source* Own elaboration

effects of choices made by planners and decision-makers). The more diverse they are (the degree of diversity), the more difficult this decision-making situation becomes, and its potential speculative effects. Various factors can also lead to different types of tensions between members of inter-organizational networks—they are especially probable in case of competitive relationships [10, pp. 26–27, 18, pp. 70–71]. Such tension could then automatically increase the strategy dynamics within a specific network. In the view of conducted considerations, it is also worth to emphasize that described dynamics regards both the organizations-members within the network, but also significantly affects every involved person. This network dynamics imprints a mark on every human being; people change themselves by their relationships with others [63, p. 59].

16.2.1 Strategy Dynamics

Dynamics is usually understood as a form of various types of single or cumulated changes. It is worth to indicate that strategic changes introduced by companies are nowadays not an extraordinary phenomenon but rather ordinary and frequent issues (see Pangarkar [39, pp. 295–296]). In turn, strategy dynamics (SD) means the entity's activities related to changes of strategies implemented so far in the following ranges:

1. total—refers to cyclical, profound changes of strategy in the scope of implemented activities; in characterized areas, changes in following strategies will be analyzed: using opportunities, creating innovation, focusing on key competencies, investing in risky industries with high potential, etc.;

2. partial—implementation of the previous decision trajectory according to the set plan, but using special abilities to monitor both—the internal area and the environment of an organization in order to choose the most appropriate options for further development. Then it seems especially important to adjust to new circumstances and to create work attitudes and methods dedicated to them. The environmental unpredictability and the network-oriented and knowledge-oriented nature of organizations in which considered actions must be taken, make anticipating and matching the most vital issues [15, p. 21].
3. zero—zero-level dynamics means a lack of identification, creation, and use of opportunities by the company, a lack of risky activities and a lack of a human factor (the leader) that controls levels of dynamic activities inside an enterprise. This is a pure form of implementation of adopted strategic assumptions.

The access condition to the analyzed research database will be inter-organizational networks in the total and partial ranges of the dynamics of the strategy.

16.2.2 Dynamism of the Strategy

This is the category determined by the Triangle of Dynamics Factors (TDF). While the concept is not synonymous with the strategy dynamics, it should be considered as antecedent. The mentioned factors include[4]:

1. propensity to take risk and real ability to assess opportunities, i.e., formal and informal risk-taking strategies adopted in the company, recovery programs, dealing in conflict situations, conflicts and crises, as well as emphasis on achieving results, pace of company expansion, lack of experienced employees, internal competition, rewards for daring risk-taking, management's resistance to negative information, complexity of transactions, lack of performance indicators, and degree of decentralization of decisions[5];
2. skills and processes of identification, creation, and exploitation of opportunities, including: vigilance [7, 6, p. 9], prior knowledge, creativity, self-efficacy, social networks [3, 55], entrepreneurial skills [34, p. 26], learning through experiments [12, p. 22], and human capital [62, p. 24];
3. leadership skills of managers—due to the multiplicity and variety of factors determining leadership, it was decided to choose those that directly affect the dynamics of the strategy in the context of leadership. To the most important following can be included: motivating to take risks, but also due to decision-making caution when using and generating opportunities, ability to coordinate activities of many independent entities connected by common goals within the conditions of complex network systems. Nowadays, the last of listed factors seems to have

[4]This is the first layer of antecedences. Perhaps during the research additional results will be obtained that testify to the remaining critical elements affecting the dynamism of the occasion.

[5]Elements of the risk exposure calculator [56].

undeniable significance, especially in reference to the so-called network myopia phenomenon, causing that "managers may be narrowing the number and diversity of relevant actors to manageable levels, making their extended network largely invisible" [14, p. 116]. Therefore, leadership is seen here not only in the perspective of formal authority but primarily in the view of complexity leadership theory, as the emergent and interactive category focused on complex interactions during common actions and introduction of changes, generation of new behaviors patterns, as well as new methods of work. The authors perceive leadership within inter-organizational networks as a dynamic category, which changes along with the phases (or stages) of its development. This is reflected mainly by the variability of leadership manifestations in the subsequent phases of networks' life cycles. The TDF forms the basis for creation of research assumptions and questions presented in the research part of this article.

16.2.3 Interior and Environment

The internal area of the organization and its environment are the main determinants of strategic changes, which can generate both threats and opportunities for inter-organizational networks. Depending on a load of innovation and the degree of uncertainty (ambiguity), strategic activities of allocating, constructive, imitating, and revealing character have been identified, which constitute a range of actions determining the strategy dynamics. These activities are planned to correlate with specific strategic activities located in specific network strategies.

In turn, the intensity of an environment's variability may depend on two basic factors, namely a) the nature of environment's elements variability affecting the transformation of strategic decisions (static vs. dynamic) and b) the number and variety of factors affecting the decision processes (simple versus complex). These dependencies are presented in Fig. 16.2.

The dynamic strategy will be located within the fourth quarter as a result of the complexity and variability of surrounding elements. It applies to entities that are able to identify key changes in the context of their core business, use opportunities or create opportunities and can minimize the risk of strategic changes.

16.2.4 Network Development—Results of the Dynamic Strategy

The network's development, which was interpreted as increasing the value of the net, is considered as the primary effect of the inter-organizational network strategy dynamics. Thus, it will be conducted an attempt to determine the exact percentage increase in the network revenues within the assumed period, as well as to analyze its

nature of environment's elements variability	number and variety of factors affecting the decision processes: simple	number and variety of factors affecting the decision processes: complex
static	**I: low level of uncertainty** – a small number of factors and components in the environment; – environmental characteristics are homogeneous; – factors and components remain the same and do not change or change slowly, and this change is predictable;	**II: low or medium level of uncertainty** – a large number of factors and components of the environment; – environmental characteristics are homogeneous; – factors and components remain the same or change in a predictable way;
dynamic	**III: high or medium level of uncertainty** – a small number of factors and components in the environment; – environmental characteristics are homogeneous; – factors and components change quickly and unpredictably or difficult to predict;	**IV: high level of uncertainty** – a large number of factors and components of the environment; – the environmental characteristics are diverse; – factors and components change in an unpredictable way or are difficult to predict;

Fig. 16.2 Dimensions of the organization's environment in the context of decision uncertainty. *Source* Own elaboration based on Duncan [17, p. 320]

market shares. In addition to financial values, network development was defined in the context of the network stakeholders' satisfaction.

The new logic of the inter-organizational network's dynamic strategy allows to formulate conclusions, which are presented in the next part of the article.

16.3 Dynamics and the Dynamism of the Strategy—Research Assumptions

The accumulation of strategic thoughts and related theories, as well as various definitions of strategy, provokes simplification of existing descriptions of reality. Using existing attempts to classify evolution of strategy, the simplest one was chosen, which positions theories in three major eras. The first era is the strategy of the portfolio of businesses (circa the 1970s), which is based on gaining an advantage based on economies of scale, and strategic thinking uses the concept of learning and the curves of experience [19, pp. 197–203]. In this period, the concept of the BCG curve is created, which emphasizes the needs of enterprises in the scope of seizing the dominant market position and thus generating the competitive advantage [22, pp. 12–13]. This is also the period of physical assets significance for rivalry deterrence [16, pp. 187–195], positioning business for competitive advantage [20, pp. 329–343, 44],

and broader environmental analysis for strategy [1, 43]. The second era is called the era of strategy as a portfolio of capabilities (ca. mid-1980s). This is the foundation of a resource-based view to the company, where the concept of key competencies arises [23, pp. 273–294, 48, pp. 79–91], and also leveraging relatedness across business [29, pp. 149–166, 47, pp. 485–502] and leveraging intangible resources [69, pp. 76–92]. The evolution of strategy concepts based on subsequent perspectives with the emphasis on the most important concentration points was presented in the paper by Venkatraman and Subramaniam. These authors identified the three eras of the strategy evolution, which are [65, p. 462]:

1. Era 1—focused on the portfolio of business and economies of scale, where key resources were physical assets and the key concept leverage industry imperfections; in that era, dominant view was concentrated on positioning the company in the environment;
2. Era 2—emphasized the portfolio of capabilities, where key resources were organizing skills for managing relatedness across businesses, and the key concept relies on leverage intangible resources; the second era focused on inimitability of processes and resources;
3. Era 3—underlined the portfolio of relationships, where the key resource is a position in the network of expertise, and the key concept is to leverage intellectual capital; the third era's dominant view was network centrality.

In the third era, the attention of enterprises focuses on generating a portfolio of relationships that can be standard outsourcing or be a more sophisticated form of creating capabilities between partners, using complex forms of cooperation. In this approach, cooperation arises as a result of a lack of required skills, know-how and the need to reconfigure complementary capabilities, necessary and relevant in the changing circumstances of the business environment. Expertise era is characterized by the creation of a network of relationships, the aim of which, as opposed to reducing transaction costs, is to develop mechanisms to identify, create, and use a broader range of expertise necessary for strategic adaptation. These processes go beyond the boundaries of traditional industrial branches, and the portfolio of established relationships significantly differentiates companies in terms of intellectual property, resulting in the evolution of corporate strategies involved in these systems and the generation of the so-called economies of expertise [65, pp. 466–467].

During expertise era, which should be treated as the most current and compatible with actual conditions of the business environment, the fundamental emphasis in relation to the formulation and implementation of the strategy was put on the creation of relationships between organizations. For this reason, the authors of this article focus on inter-organizational networks as the main subject of planned future scientific research in a more detailed approach to the issues of strategy dynamics. It is necessary here to clarify the indicated concept of inter-organizational network, due to the fact that there are plenty of different definitions developed so far. According to K. G. Provan, A. Fish, and J. Sydow, inter-training networks are presently a commonly understood phenomenon in the area of the organization's activity, while it is sometimes difficult to clearly identify what types of objects are written by scientists

dealing with the subject matter. Often, the term "network" is replaced by some similar expressions, e.g., partnerships, strategic alliances, inter-organizational relationships, coalitions, cooperative arrangements, or collaborative agreements. However, it is possible to indicate some immanent elements—social interactions, relationships and trust, as well as connectedness, collaboration, collective actions, and cooperation [49, pp. 2–3]—despite different interpretations and perspectives present in various definitions. The question, however, is whether it is necessary to formulate a universal definition of an inter-organizational network. According to the authors, this type of aspiration should be considered pointless. It seems that instead of specifying the category being characterized, it would lead to even greater theoretical and conceptual confusion, due to the fact that the essence of the network cannot be simply defined, but should rather be described in detail [36, p. 9]. In relation to the above, the authors of this article adopted a specific perspective for interpretation of inter-organizational networks through the selection of available definitions, presented in further parts of the article.

The term "network" can be used to define the set of two or more organizations connected by a long-term relationship [61, p. 37]. Other important elements of the network are informal contacts that accompany them, interdependence (in terms of resources, entities, and activities) and the simultaneous absence of clear boundaries and structure [51, p. 29]. According to G. Müller-Seitz, the network is a social system in which joint actions of at least three independent legal entities are coordinated in a repetitive manner. The important thing is that the benefits apply to all interested parties [35, p. 429]. As it is seen, just clarifying the exact minimum number of entities forming the network can be problematic.

Referring to the characteristics of the era expertise (indicated previously), special attention should be paid to the centrality aspect in the case of analyzed inter-organizational networks. It can be assumed that nodes with the highest centrality level will show the greatest impact on other participants of chosen systems. For this reason, many organizations focus on obtaining the central position in a network to which they belong or plan to belong. In turn, centrality itself, as one of the key categories of inter-organizational networks' characteristics "can be defined on the basis of local occurrence in the fragment of the analyzed network, e.g., as the number of direct relations or relations with a certain degree of remoteness" [70, p. 38]. In connection with the above, authors of the article assume selection of a research sample based on the affiliation of network interaction systems to two main types of networks distinguished in relation to the aforementioned measure/category—namely centralized and decentralized inter-organizational networks.

The main difference between discussed types of networks concerns the presence of the main, central (dominant) entity, supervising activities, managing the network, coordinating the creation of its strategy—the so-called network leader able to initiate connections and select the most appropriate partners for the implementation of common goals [52, pp. 19–20]. In centralized inter-organizational networks, in which, according to the name, the mentioned central entity will appear, the strategic business intention will be strongly dependent on that particular node. In the case of decentralized networks, the responsibility for creating the strategy and its joint

implementation—at least theoretically—should apply to all participants of a given co-operation system. The distinction between centralized and decentralized networks is related to other typologies of inter-organizational networks, among which are indicated opposite each other, for example, dominated (star) networks versus network of peers [9, p. 120], unsymmetrical networks[6] versus symmetrical networks [13, p. 49], or monocentric and polycentric networks versus not centralized networks [13, p. 49].

The analysis of selected definitions has made it possible to clarify the final definition of a centralized network, which will be understood as a system of cooperation of at least two organizations, independent and legally involved in long-term relationships based on their potential, in which a company acting as a decision-making center initiating and activating activities of other entities can be identified [38, pp. 72–73]. In order to emphasize the specific role of the central entity, one more definition—by K. Perechuda—should be given: "a network enterprise is a set of independent in the legal sense economic units implementing various ventures and projects coordinated by the integrator company, which has distinctive (key, basic) competences" [41, p. 55]. The node integrating activities of other participants in the network of relations, because of own developed key competencies in this area, can efficiently control the dynamics of the strategy of the entire network system—perhaps much more effectively than in the case of network systems without such a focusing node. This perspective seems particularly valuable because it transfers the interpretive pressure of the central node's role from the category of domination to integration. In turn, decentralized networks can be considered as so-called nodal connection networks in which all participants are equal [26, p. 20] or as "systems that are built on a strong market position of individual nodes included in the network" [11, pp. 49–50].

The authors of this article will, therefore, use the concept of centrality to determine the strategic nature of the cooperation type undertaken within a given inter-organizational network. Centralized cooperation systems are, therefore, based on the clearly dominant position of the central node (the network leader), which has real possibilities (both formal and informal) to impact activities undertaken by other (non-central) entities. In practice, this will involve strategic decision-making capabilities (which can be identified with the network leadership role), but also with the assumption of total responsibility for wrong decisions assigned to the central entity. In turn, in decentralized inter-organizational networks, the dominant entity will generally not exist, which should be interpreted as the equal or partner positions of all other nodes forming the network. Responsibility for successes and failures will, therefore, fall to all participants of a given network system. Analyzing the above information, the selection of research entities for the planned research process will be carried out in terms of belonging to a specific type of inter-organizational network—centralized versus decentralized.

The planned research will have a retrospective character, which means it will cover the period from the establishment of chosen inter-organizational networks under

[6] In an asymmetrical network, one entity (in relation to the power criterion) has a dominant position over other participants in the inter-organizational network.

review to the present time, including the period of the strategic forecast (proposed horizons of three, five, or seven years).

Guided by the theoretical assumptions presented in the article, the general goal of future empirical research is set, based on the analysis of the dynamics and dynamism of centralized versus decentralized network strategies juxtaposed with the category of network development understood as increasing the effectiveness activities realized by the chosen network as a whole. In addition, a research model was adopted for the purposes of the work (Fig. 16.1—presented previously), which allowed to identify the following research assumptions and questions:

Research assumption 1. The strategy dynamics depends on the type of the network system.
Research question 1. Which of the network systems—centralized or decentralized—show a higher strategy dynamics?
Research assumption 2. The higher strategy dynamics results in a greater development of the inter-organizational network.
Research question 2. Does the higher strategy dynamics cause higher development of the network?
Research assumption 3. Changes occurring in the network environment, as well as changes in its individual internal components, cause an increase in network dynamics.
Research question 3A: Are strategic activities of a constructive and revealing nature or those of an allocation and imitation character more important for the development of the network?
Research question 3B: To what extent do the variability and complexity of the environment determine the strategy dynamics?
Research assumption 4. The dynamism of the network strategy depends on the processes of dealing with risk, the use of opportunities and leadership skills of managers.
Research question 4A: What is the difference between the tendency to take risks through the elements of a centralized network and the elements of a decentralized network?
Research question 4B: What is the difference in identifying, creating, and using opportunities in decentralized and centralized networks?
Research question 4C: What are the differences between managerial leadership skills in decentralized and centralized networks?

The adopted research assumptions and research questions are the introductions of the empirical research. Due to their complexity, affiliation to industries will not be taken into account, hence potential research directions are clarified. Concerning the research methodology, it is planned to utilize a quantitative procedure. Statistical surveys will be based on a questionnaire using the scale of semantic potential. With such a high degree of complexity, pilot studies are recommended; therefore, the authors will conduct the preliminary research. The planned selection of the pilot test sample will be based on a purposeful approach. The selection of networks to be included in the planned research will be focused on two main groups of such

systems—centralized and decentralized (in the sense of decisional centrality). The main criterion for the selection of research units in the case of pilot studies is the availability of the analyzed networks while maintaining the homogeneity of the industry in which the networks function. The next stage of the research procedure will be adapting the research tool to the changes resulting from the pilot study and defining the population, as well as a representative research sample. The size of the planned research sample is not yet known.

16.4 Summary and Conclusions

Mechanisms of strategy improvement as a result of evolution and learning are rather criticized in the literature of the subject. K. Obłój, using the garden's metaphor, stated that evolution is a natural process, but as such there are no goals—in contrast to the organization. The costs of trial and error of evolution bear nature, in the case of companies—people: employees, customers, suppliers, and recipients. The immanent organization's ability to learn is also an act of faith rather than a reality—as evidenced by the numerous cases of companies that were not able to learn, neither on their own nor on others' mistakes [37, pp. 97–98]. Also, the way of exemplifying the strategy raises many objections from researchers in this area of management. The authors emphasize the lack of integration of strategic planning with the entire management process, the lack of influence of lower levels of management on the process of strategy creation, without taking into account the comments of those who directly operate in the environment closer to the organization. In addition, an exaggerated application of quantitative indicators of strategy implementation arouses frustrations and misunderstanding among its contractors [27, p. 30]. Concentrations on numbers—and not on qualitative factors, adjusting companies to market conditions and separating thinking from action—these factors also underline Urbanowska-Sojkin et al. [64, p. 41].

The general goal of the planned empirical research (mentioned before) was formulated as the detailed analysis of relations between the strategy dynamics of centralized and decentralized inter-organizational networks and network development in the sense of increasing the effectiveness of activities within the considered network systems. Categories of great importance to diagnose will be then components of dynamism of strategies realized by considered networks, thus defining the possibility of eliminating basic errors related to the strategy implementation seems especially important, i.e., [21]:

1. the lack of strategic goals flexibility. Although they are becoming obsolete, they are still maintained due to the very idea of strategic management and due to the already implemented plan,
2. discontinue minor improvements and initiatives important from the perspective of short-term interests due to the rigid mechanisms of actions related to long-term goals,

3. narrowing thinking horizons only to the strategy provisions, thus limiting the opportunities to seize opportunities.

Problems related to rapid changes in the organization's environment—especially into technologically advanced markets—are becoming equally important. In such cases, the adopted strategy may significantly limit the innovativeness of the organization as well as inhibit the processes related to learning. It is an excuse for not taking innovative actions [40, pp. 21–26].

Barriers to an effective strategy become determinants of its dynamic approach. The importance of strategic improvisation still grows—it requires constant attention and immediate strategic actions within the scope of determined strategic intentions. Because every organization is limited in the use of resources, the speed of strategic movements and their intensity will vary depending on the level of resource redundancy. The goal of strategic improvisation is the accumulation of maximum knowledge and, consequently, instant understanding of changes within the environment—especially their causes and consequences for the organization [40, pp. 6–7].

The article is a description of initial assumptions for planned empirical research. It is a part of a studies series in the area of strategy dynamics and dynamism of inter-organizational networks strategy. This conceptual paper presents then the wide field of author's interest with reference to planned research focused on two various types of inter-organizational networks—centralized and decentralized, distinguished based on the decisional centrality criterion.

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