THE SYSTEM AND NETWORK IN THE PROCESSES OF COMPANY VALUE CREATION AND DESTRUCTION

Adam Jabłoński*

Abstract

Background. The functioning of contemporary business often undermines management paradigms, regarded as leading so far. Some paradigms are replaced with new dimensions of company management, more appropriate to the new reality. The background for the discussion is related to defining the fundamental determinants of the use of the systemic and network approach in the processes of company value management.

Research aims. The purpose of the paper is to discuss the place and role of the systemic and network paradigm in the processes of company value creation and destruction.

Method. Using a dialectical approach, the author proposes a thesis that the skilful use of premises of the systemic and network paradigm has a positive impact on the company's ability to create company value. The author proposes an antithesis that an incompetent use of premises of the systemic and network paradigm has an influence on the company's ability to destroy value. Consequently, the author defines a synthesis that the proper / improper use of premises of the systemic and network paradigm impacts the company's ability / inability to create/destroy company's value.

Key findings. In view of the continuous market changes occurring in the business environment, it is important to skilfully use theoretical presentations of management sciences, considered in the form of existing paradigms. Multi-paradigmness in management results in different approaches to the contextual look at the company. Such a situation occurs when the systemic and network paradigms are used in the processes of creation and destruction of company value. Both the systemic and network approaches have their advantages and disadvantages. Managers are required to possess knowledge of this issue, important in management. It is particularly important to use these approaches to create value in the long and short term. It seems that the systemic approach will be more effective in the long-term, value-based management processes, while the network approach would be better in the short-term processes of company value creation.

Keywords: System, Network, Business model, Company value

INTRODUCTION

The functioning of contemporary business often undermines management paradigms, regarded as leading so far. Some paradigms are replaced with new dimensions of company management, more appropriate to the new reality. This applies both to the source, original assumptions, determining the concept of the company and its attributes, as well as assumptions of an application nature, related to the management practice and research verifying this practice. Therefore, two key paradigms now play an important role, which are a form of a mega-paradigm (a systemic paradigm), and

^{*} Dr Adam Jabłoński, Wyższa Szkoła Biznesu w Dąbrowie Górniczej.

a new network paradigm, perhaps aspiring to be a mega-paradigm. If we want to consider the operation of the business in terms of purpose, a value-based paradigm will be important, including the mechanisms of company value creation and destruction. Combining these issues together, a coherent interpretation is formed, designed to manage the company effectively and efficiently. Using a dialectical approach, the author proposes a thesis that the skilful use of premises of the systemic and network paradigm has a positive impact on the company's ability to create company value. The author proposes an antithesis that an incompetent use of premises of the systemic and network paradigm has an influence on the company's ability to destroy value. Consequently, the author defines a synthesis that the proper/improper use of premises of the systemic and network paradigm impacts the company's ability/inability to create/destroy companu's value. The purpose of the paper is to present the place and role of the systemic and network paradigm in the processes of company value creation and destruction. As a research instrument, one basic method was used, i.e. a critical analysis of the literature devoted to value based management, system approach, network approach, and networked business models. The author adopted an interpretative approach as the methodology of scientific research, based on the literature studies and systematic retrospective assessment of strategic management of companies in the course of conducting own business activity and during his consulting practice.

REVIEW

The System and Network in Company Strategic Management

According to Rummler and Brache (2000), organizations behave like adaptive systems. Systemic thinking is not is linear, on a straight line. It takes place in cycles, loops, and outlines. All system components are mutually linked, directly or indirectly, and therefore, a change in one part generates waves of changes in other parts (Krzakiewicz, 2012, pp.41-42). The system is multi-level. The levels differ in the type of components and relationships. Components at the lower level are subordinate to components at a higher level. The proper operation of the higher levels depends on the proper operation of the lower levels (Cabała, 2012, p.53). As Gospodarek (2012) shows, the systemic approach contains a very important feature, often overlooked in the discussion. It is the desire to maintain balance in the long term. When defining the system, the principle of Le Chatelier is often referred to (a rule of defiance, which is the most common example of feedback, a negative one) in discussions about its interactions with the environment. Internal functions of the system are subject to optimization rules, leading to its high stability and functionality. The fact that the system generating value aims to appropriate the largest possible area of

effects does not mean that it resigns from maintaining the micro-macro balance. It can, at most, disrupt the balance of the competitive systems with the environment and take over their functionality in favourable conditions. Thus, the systemic approaches are supported with concepts stabilizing the micro-macro balance, also explaining the catastrophic behaviour properly (Gospodarek, 2012, p.89). In system approach important is their dynamics. The principles of the system dynamics paradigm have been presented by Polowczyk (2012), based on the relevant literature:

- 1. The behaviour of the system is endogenous, i.e. it results primarily from its internal structure (the microstructure determines macro-behaviour).
- 2. The fundamental element of the system structure is feedback. There are two types of feedback: positive and negative.
- 3. Positive feedback destabilizes the system. It reinforces upward or downward trends.
- Negative feedback brings stability. It offsets the effect of positive feedback and gives variables sinusoidal fluctuations.
- 5. The behaviour of systems is non-linear, which results from, inter alia, delays in reactions, and the so-called sensitivity thresholds.
- 6. Different systems may have a similar structure (isomorphism).
- 7. Systems of the similar structure behave similarly, i.e. they have similar dynamics and similar patterns of behaviour.
- Decisions are made in the conditions of the so-called limited rationality.
- The sources of information are: intuition (experience of experts), scientific theories and figures.
- The complexity of systems makes it hard to predict their behaviour as they are anti-intuitive.

According to Niemczyk, a network is a set of bonds and relationships, it should also be a periodic being, so that the most reliable action is to check and analyse the level of profit made from a single contract from the perspective of the parties to this contract. In the context of network solutions, a problem that very often occurs, however, is the problem of generating added value from a broader perspective than the perspective of the individual parties to the contract. The experience of the resource-based approach shows that pointing at stakeholders other than shareholders was too early a solution (Niemczyk, 2013, p.143). Hakanson and Snehota (2005, p.26) define the network as three interrelated categories: network participants, resources that they have at their disposal, and actions they take. Jarillo (1995, p.6) understands the network as such a grouping of the organization where at least one of them controls the flow of material and non-material resources (including knowledge) between other organizations.

Ghauri et al. (2003) makes a major distinction between vertical and horizontal interfirm networks, defining the first as cooperative relationships between suppliers, producers and buyers, aiming at a solution for marketing problems, improved production efficiency, or the exploitation of market opportunities, while horizontal networks are cooperative network relationships among manufacturers who want to solve a common marketing problem, improve production efficiency, or exploit a market opportunity through resource mobilization and sharing.

Watts (1999) defines four key elements of understanding the network:

- 1. The network has a significant size in the sense that as regards people, it is counted in billions, and as for companies in millions,
- The network is distributed in the sense that each entity has only a few hundred links, much less than the size of the entire population,
- 3. The network is decentralized, i.e. there is no central point, which all the units, or most of them, would be connected with,
- 4. The network is highly clustered and most networks overlap. This means that our friends are likely to be friends with each other, and the companies we cooperate with, cooperate with each other.

In the systemic approach, strategy is an implemented and pursued, comprehensive system of creative mechanisms based on objectives, initiatives and projects designed in correlation with the adopted business model, monitored through a set of multi-criteria indicators grouped in thematic, non-financial and financial measurement streams. Only the strategy designed in this way ensures the continuity of business, funded with cash from the market, and at the same time the long-term value of the company increases (Jabłoński, 2012, p.293).

In the network approach, strategy is a set of actions aimed at management of contracts, optimal from the point of view of stakeholders (Niemczyk, 2013, p.141).

Dyduch (2013) presents the attributes of centralized and decentralized structures for the development of creativity and innovation, where, for example, he finds a centralized organization structure appropriate for the long-term strategy, in which it is important, among other things, to ensure the coordinated operation of the company as a whole. In contrast, he believes that an entrepreneur structure is the most optimal for the network structure, in which the organization wants to support growth in new markets or develop bold projects related to new products (Dyduch, 2013, p.101).

According to Amit and Zott (2012), a business model in the systemic approach is a system of interconnected and interdependent actions, determining the manner of doing business with customers, partners and suppliers. De Witt and Meyer (2007) regard a business model as a business system used by the company to arrange resources (input), operations (pro-

cessing), and products or services offered (the final product), used to create value for customers.

According to Jabłoński and Jabłoński (2013), a network business model goes beyond its own company and is a model, where some of its components are formed as a result of activity of other business models. Their presence in the market stimulates and conditions the existence of this model (Jabłoński; Jabłoński, 2013, p.30).

Perechuda (2013) believes that the network business models are models in which:

- 1. The nature and content of the phases of the organization life cycle change;
- A product life cycle changes radically;
- The value delivered to customers and business partners is understood differently;
- 4. Competitive advantage is gained by developing own original key competences;
- 5. Increases in knowledge are circular, spiral, asymmetric and irregular;
- There is a need to reject the elements and instruments of classical marketing and to use postmodern techniques creating long-term relationships with internal customers (co-operators) and external ones instead.

Voelpel, Leibold, Tekie, and von Krogh (2005) believe that the business model is the concept of core values offered to customers and a network configuration of delivering value consisting of own strategic capabilities and other values in the network (for example outsourcing, alliances) and the company's constant goal to change and fulfil the objectives of stakeholders.

The stages of the design and implementation of the company's business model embedded in the network present Table 1.

Table 1. The Stages of the Design and Implementation of the Company's Business Model Embedded in the Network

No.	The stages of the design and implementation of the company's business
	model embedded in the network
1	Defining key markets in which the company intends to operate
2	Defining key products offered in key markets
3	Defining the attributes of the network environment in which the company intends
	to operate
4	Treating attributes as key success factors of the networked business model
5	Linking the company's networked business model with the company's strategy
	and business processes
6	Scaling the networked business model
7	Implementing the networked business model through the implementation of the
	strategy and business processes
8	Evaluating the effectiveness and efficiency of the implementation of the networked
	business model regularly.

Source: Own study.

The System and Network as a Source of Company Value Creation

Company value management can be considered, among other things, as a system of managerial control in the sense given to this concept by management accounting, that is, as an integrated system designed to measure performance in order to evaluate, reward and motivate based on it. A key feature of such a control system is its focus on developing a desired decision-making model, and thus on achieving the assumed performance by using a mechanism ensuring the internalisation of the company's objectives (Cwynar, 2010, p.40). Copeland, Koller, and Murrin (1997) formulated six conditions significant to the creation of company value: (a) basing on results, (b) basing on value, (c) bottom-up, top-down and horizontal management, (d) two-way communication, (e) a strong system strengthening the organization, (f) thrift.

Managers are required to have a special ability to create value through business models and protect these models from wear or being imitated by competitors and this directly translates into the destruction of company value. Protection of company value from its loss or destruction should have a system dimension (Jabłoński & Jabłoński, 2013, p.171). Malmi and Jkaheimo (2003) argue that the key elements distinguishing company value management from other approaches to management, include inter alia:

- 1. The scope of value creation for shareholders,
- 2. Recognition of value drives
- Combining performance measurement systems, determining the value targets (value of target objectives), a reward system for creating value,
- 4. Combining decision-making systems and action plans.

In the context of the system and network, there is so-called appropriation. Appropriation refers to the acquisition by the company of part of the value created, equal to or greater than own contribution. In contrast, there is expropriation, when the company receives less than it should. The two opposing concepts are specific to the conditions of the network interaction (Czakon, 2012, p. 91).

A system as a source of company value creation complies with the following rules:

- The system strives for balance in the long term, thus underpinning the company's ability to build long-term value;
- 2. The system supports an evolutionary approach that works in a situation of economic crisis;
- The system defines cause-effect relationships between individual elements determining the development and growth of the company;

- The system shapes holistic presentation of the company, business model and its attributes;
- 5. The system organizes the enormous complexity of mechanisms and processes, focusing around the company;
- 6. The system tries to tame the chaos occurring in the business environment;
- 7. The system supports the ensuring of the business continuity;
- 8. The system provides stability of the business and the company business model:
- 9. system is based on the synergy strengthening the company's ability to build value;
- 10. The system defines the company's business boundary, and as a result, a scope of value creation is clearly defined;
- 11. By using feedback, the system enables continuous, permanent growth of the company;
- 12. The system supports an evolutionary approach, which may result in stabilizing the business in the long term;
- 13. The system will turn out to be better in building the long-term creation of company value.

A network as a source of company value creation complies with the following rules:

- 1. The network evokes creative thinking of the enterprising nature,
- The network supports a revolutionary approach, which may result in innovations in various forms.
- 3. The network creates stakeholder value centred around the company,
- 4. The network establishes a symbiotic relationship with the company stakeholders,
- 5. The network changes the boundaries of the company's business,
- 6. The network is also a communication platform, a place of doing business and a source of relationship dynamics,
- 7. The network will turn out to be better in the context of creating company value in the short term.

The System and Network as a Source of Company Value Destruction

The systemic approach to management can also cause side effects. This approach may formalize and stiffen organizational behaviour in the company. It may also make the company bureaucratic, which may result in reducing the potential of innovation. It may also obstruct the effective management of change, because the awareness that this change has to be introduced into the formal system may evoke general reluctance to change. This may result in the lack of action, which in turn may lead to the destruction of company value. In the network approach, destruction

may be caused by other factors. The area just emerging as a research subject is harmful effects of the network operation (Cook, 2005, pp. 4-14) and threats that this form of links may cause (Mesguita, 2007, pp.72-91). Under certain conditions, networks of links may inhibit innovation and impede learning, as well as limit possibilities of action and narrow the choice for its participants. Moreover, it should be noted that networks of links may also provide a basis for the existence of systems that, from a social point of view, are considered to be pathological, such as mafia structures (Gambetta, 1988) or corruption relationships (Rose-Ackerman, 2001, pp.526-570; Koźminski & Latusek-Jurczak, 2011, p.135).

A system as a source of company value destruction results in:

- 1. The formation of inflexible management structures
- 2. Focusing on the whole, which may cause serious threats arising inside invisible partial elements,
- 3. Extending the decision-making process because of the complexity of factors influencing the system,
- 4. Excessive formalization of management processes resulting from controlling most of the elements that define the system,
- 5. Extending the time of decision-making in the system.

A network as a source of company value destruction results in:

- 1. The formation of corruption relationships,
- 2. The emergence of informal criminal groups,
- 3. The formation of market restrictions established only in one, often secured, network.
- 4. The competition between networks and values that they define.
- 5. Losses due to a non-privileged position in the network,
- 6. An influence and personal gain not necessarily compatible with the needs of the entire network.

Prospects for further scientific research may include:

- The development of strategic management with system and network approach.
- The search for the optimal solutions of value creation with system and network approach.

CONCLUSIONS

In view of the continuous market changes occurring in the business environment, it is important to skilfully use theoretical presentations of management sciences, considered in the form of existing paradigms. Multiparadigms in management result in different approaches to the contextual look at the company. Such a situation occurs when the system and network paradigms are used in the processes of creation and destruction of company value. Both the systemic and network approaches have their advantages

and disadvantages. Managers are required to possess knowledge of this issue, important in management. It is particularly important to use these approaches to create value in the long and short term. It seems that the systemic approach will be more effective in the long-term value-based management processes, while the network approach would be better in the short-term processes of company value creation.

REFERENCES

- Amit, R., & Zott, C. (2012). Creating Value Throught Business Model Innovation. MIT Sloan Management Review, 53(3).
- Cabała, P. (2012). Planowanie scenariuszowe w zarządzaniu bezpieczeństwem strategicznym przedsiębiorstwa. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
- Cook, K.S. (2005). Networks, norms, and trust: The social psychology of social capital 2004 Cooley Mead Award address. Social Psychology Quarterly, 68.
- Copeland, T., Kolller, T., & Murrin, J. (1997). Wycena: mierzenie i kształtowanie wartości firm. Warszawa: WIG-Press.
- Cwynar, A. (2010). VBM jako system kontroli menedżerskiej geneza, istota, kondycja. In: A. Cwynara (Ed.), Systemy VBM i zysk ekonomiczny, projektowanie, wdrażanie, stosowanie. Warszawa: Wydawnictwo Poltext.
- Czakon, W. (2012). Sieci w zarządzaniu strategicznym. Warszawa: Oficyna a Wolters Kluwer business.
- De Witt, B., & Meyer, R. (2007). Synteza strategii, Tworzenie strategii konkurencyjnej przez tworzenie paradoksów. Warszawa: Polskie Wydawnictwo Ekonomiczne.
- Dyduch, W. (2013). *Twórcza strategia Organizacji*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.
- Gambetta, D. (1988). Trust: Making and Breaking Cooperative Relations. New York: Basil Blackwell.
- Ghauri, P., Lutz, C., & Tesfom, G. (2003). Using networks to solve export-marketing problems of small and medium-sized firms from developing countries. European Journal of Marketing, 37(5/6).
- Gospodarek, T. (2012). *Aspekty złożoności i filozofii nauki o zarządzaniu*. Wałbrzych: Wydawnictwo Wałbrzyskiej Wyższej Szkoły Zarządzania i Przedsiębiorczości.
- Håkansson, H., & Snehota, I. (1995). Developing relationships in business networks. London: Routledge.
- Jabłoński, A. (2012). Badania modeli biznesu kreujących wartość. In: R. Krupski (Ed.), Prace Naukowe Wałbrzyskiej Wyższej Szkoły Zarządzania i Przedsiębiorczości, Metody badań problemów zarządzania strategicznego, 17. Wałbrzych: Wydawnictwo WWSZiP.
- Jabłoński, A. (2013). Modele zrównoważonego biznesu w budowie długoterminowej wartości przedsiębiorstw z uwzględnieniem ich społecznej odpowiedzialności. Warszawa: Difin.
- Jabłoński, A., & Jabłoński, M. (2013). Projektowanie sieciowych modeli biznesu. Ekonomika i organizacja przedsiębiorstwa, 12.
- Jarillo, J.C. (1993). Strategic networks: Creating the borderless organization. Oxford: Oxford University Press.
- Koźmiński, A.K., & Latusek-Jurczak, D. (2011). *Rozwój teorii organizacji, Od systemu do sieci.* Warszawa: Oficyna Wolters Kluwer business.
- Krzakiewicz, K. (2012). Relacje przyczynowo skutkowe i mentalne modele w myśleniu systemowym. In: K. Krzakiewicz, S. Cyfert (Eds.), Metodologiczne aspekty nauk o zarządzaniu, Zeszyty Naukowe 238. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- Malmi, T., & Jkaheimo, S. (2003). Value Based Management practices some evidence from the field. Management Accounting Research, 14.
- Mesquita, L.F. (2007). Starting over when the bickering never ends: Rebuilding aggregate trust among clustered firms through trust facilitators. *Academy of Management Review, 32.*

- Niemczyk, J. (2013). Strategia, od planu do sieci. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- Perechuda, K. (2013). *Dyfuzja wiedzy w przedsiębiorstwie sieciowym, wizualizacja i kompo- zycja*. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- Polowczyk, J. (2012), Zarządzanie strategiczne w przedsiębiorstwie w ujęciu behawioralnym. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- Rose-Ackerman, S. (2001). Trust, honesty and corruption: Reflection on the state-building process. *European Journal of Sociology, 42.*
- Rummler, A., & Brache, A.P. (2000). Podnoszenie efektywności organizacji. Jak zarządzać" białymi plamami" w strukturze organizacyjnej, Warszawa.
- Voelpel, S., Leibold, M., Tekie, E., & Von Krogh, G. (2005). Escaping the Red Queen Effect in Competitive Strategy: Sense-testing Business Models. European Management Journal, 23.
- Watts, D. (1999). Networks Dynamics and the Small-World Phenomenon. The American Journal of Sociology, 105(2).

SYSTEM ORAZ SIECI W PROCESIE TWORZENIA I NISZCZENIA WARTOŚCI PRZEDSIEBIORSTWA

Abstrakt

Tło badań. Funkcjonowanie współczesnego biznesu często podważa paradygmaty zarządzania, dotychczas uważane za wiodące. Niektóre paradygmaty są zastępowane nowymi aspektami zarządzania przedsiębiorstwem, które bardziej odpowiadają wymogom nowej rzeczywistości. Tło rozważań jest związane z określeniem podstawowych czynników warunkujących zastosowanie systemowego oraz sieciowego podejścia w procesie zarządzania wartościami przedsiębiorstwa.

Cel badań. Celem artykułu jest omówienie miejsca oraz roli systemowego i sieciowego paradygmatu w procesie tworzenia wartości przedsiębiorstwa oraz ich niszczenia.

Metodyka. Wykorzystując dialektyczne podejście, autor proponuje tezę, iż umiejętne zastosowanie założeń systemowego oraz sieciowego paradygmatu pozytywnie wpływa na zdolność przedsiębiorstwa do tworzenia wartości przedsiębiorstwa. Autor przedstawia antytezę, iż niekompetentne zastosowanie założeń systemowego oraz sieciowego paradygmatu ma wpływ na zdolność przedsiębiorstwa do niszczenia wartości. W związku z tym autor definiuje syntezę, iż właściwe / niewłaściwe zastosowanie założeń systemowego oraz sieciowego paradygmatu oddziałuje na zdolność / brak zdolności przedsiębiorstwa do tworzenia / niszczenia wartości przedsiębiorstwa.

Kluczowe wnioski. W związku z ciągłymi zmianami występującymi w otoczeniu biznesowym, duże znaczenie ma umiejętne wykorzystanie teoretycznych prezentacji nauk o zarządzaniu, uwzględnionych w formie istniejących paradygmatów. Wielo-paradygmatyzm w zarządzaniu prowadzi do odmiennych podejść do kontekstowego spojrzenia na przedsiębiorstwo. Taka sytuacja ma miejsce, gdy systemowe oraz sieciowe paradygmaty są wykorzystywane w procesie tworzenia i niszczenia wartości przedsiębiorstwa. Zarówno systemowe jak i sieciowe podejście ma swoje zalety i wady. Menadżerowie muszą posiadać wiedzę dotyczącą tych zagadnień, które są istotne w zarządzaniu. Szczególnie ważne jest zastosowanie tych podejść do tworzenia wartości w dłuższej i krótszej perspektywie. Wydaje się, iż podejście systemowe będzie bardziej skuteczne w dłuższej perspektywie, w procesie zarządzania opartego na wartościach, zaś podejście sieciowe będzie korzystniejsze w krótkookresowym procesie tworzenia wartości przedsiębiorstwa.

Słowa kluczowe: System, sieć, model biznesowy, wartość przedsiębiorstwa