

THE FOOD NETWORKS AS ONE OF THE COOPETITION FORMS

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Abstract

The article aims to explain the concept of co-opetition and its significance for inter-organizational networks and to illustrate this concept on the selected examples. The article is of a demonstrative character. The author used literature studies, own observations and the Internet query. For theoretical exposure of the defined concept case studies of networks operating in the food sector have been used. In the light of the observations should be assumed that co-opetition is an inherent feature of network relationships, regardless of their size, maturity or sector in which they operate.

Key words: coopetition, cluster, organizational network, food sector.

Introduction

Conditions for companies operation in developed economies, have become more and more complicated from decade to decade. The remarks on environmental turbulence and the need for a continuous search of the effective forms of business have become obvious. For many authors, a network organization is such a solution. According to Pietruszka-Ortyl (2007: 54), this structure is becoming almost a symbol of XXI century.

1. The concept and essence of inter-organizational networks

Origins of the network organizations can be traced in cooperative systems and systems theory. They are combined with the first concept by the idea of partnership, but with an emphasis on its strategic not tactical or operational character (Łobos 2005: 161), whereas with the second one by a holistic and logical-mathematical approach. Moving the systems theory on the ground of management science, an organization can be considered as uniform and targeted system composed of interconnected parts which contribute to the success of the whole (Dryl 2010: 245). Inter-organizational

network can be defined as a system of cooperation between independent, in terms of organizational and legal aspects, entities based on the synergistic potential of members and wider than a single-time cooperation. Mutual coordination processes are characteristic for networks (Łobos 2005: 161). The significance of cooperation is also emphasized by other authors, especially by Grandori and Soda (1995: 184-185) writing about the need to support network “cooperative game”. This symbolic formula reflects what is nowadays often referred to as co-opetition. If we go back to the theory of games, we come to the conclusion that it is not a pure cooperation but cooperation and competition whose co-existence result in a kind of game in the market. As explained by Lozano-Platonoff et al. (2014: 312) co-opetition is almost inherent in network organizations, because it reconciles three theories: games, resources and networks.

2. Co-opetition as an inherent feature of the network organization

The word “co-opetition” derives from the English language and reflects the simultaneity of *cooperation* and *competition* (Lozano-Platonoff et al. 2014: 312). The apparent contradiction of these two behaviors ceases to shock today, becoming one of the core competencies of enterprises. Even companies which are in direct competition are increasingly choosing to co-operate instead of wasting time and money for rivalry. Competing in some areas, they work in others and achieve synergies. Some kind of a prize to win is a condition for cooperation of competitors, which may be unobtainable in the case of an individual operation (Łobos 2005: 185).

Lozano-Platonoff et al. (2014: 318) even treat co-opetition as an inherent feature of the network systems. In their opinion similarly to these system co-opetition constitutes the answer of managers to contemporary challenges. According to Brol and Rzońca (2006: 20), it arises – as the networking – from an increase in global competition, the development of communication technology, shortening product life cycles, and other “mega-trends” of the modern world. Also, comparing the key success factors of co-opetition diagnosed by Kwai-Sang et al. (2008: 439) brings to mind immediately the inter-organizational networks. The two most recognized factors are: committed leadership and development of trust; the value considered by many authors as determinants of the effectiveness of network systems (Wiatrak 2003: 7-18; Mikuła, Pietruszka-Ortyl 2006: 113-130).

The role of co-opetition is particularly strongly emphasized by Michael Porter, referring to clusters, which are a special case of inter-organizational networks. He defines its essence even in reference to this concept: a cluster

is a geographical proximate group of interconnected companies and specialized suppliers, service providers, companies operating in related sectors and associated institutions competing and cooperating with each other. He stresses at the same time not only the positive role of cooperation, which is a *sine qua non* for understanding the cluster, but also of competition, which according to him, is the motivating force for organizations to maintain high standards of performance and innovation stimulant in the cluster (Porter 2001: 193). Co-opetition should, therefore, contribute to the achievement of extraordinary results of participants in inter-organizational networks, since it allows to benefit from the cooperation, as well as from the competing (Bengtsson, Kock 2000: 415).

The presence of benefits from co-opetition in network systems is confirmed by test results by Lachniewicz and Zakrzewska-Bielawska conducted among fifty Polish companies operating in ten organizations network. They show that, despite noticeable shortcomings, such as reluctance to co-operation between partners in the network, autonomation thinking focused on own interests and conflicts between the control authorities and members of the network, network partners can count on mutual support and benefit from the exchange of resources. The cooperation also results in greater market expansion and a more favorable position in relations with economic and administrative environment (Lachiewicz 2012: 34). Despite natural aspirations to compete, the area of the potential benefits raises partners' cooperation and co-opetition carries greater effects than working alone.

Also, research conducted in 2012 by Zakrzewska-Bielawska (2013: 423-426) in the high-tech sector proves the ultimate benefit of simultaneous competition and cooperation. Respondents surveyed by the author pointed at access to resources (67.2% companies) and cost reduction (63.2%) as the primary benefit of co-opetition. Significant benefits, as indicated by more than half of the surveyed companies, include: strengthening of market position against competitors, wider use of market opportunities, expanding the scale of operations and acquisition of unique knowledge.

The advantages of cooperation in alliances networks in the Polish steel sector, in turn, were shown by Sroka. Managers surveyed by him regarded as the most beneficial profits the followings: reduced risk and uncertainties (mean value of 3,60 points in a scale of 1-5, where 1 means "little importance" and 5 "very important") and an access to resources (3,52). At the same time Sroka also highlights threats noticed by the respondents. The most important of them are: the need to subordinate the interests of the company to the interests of alliances (4,04) and loss of a part of autonomy of the company (3,48) (Sroka 2012: 159-160).

The explanation of the simultaneous benefits generation and threats in network systems can be, among others, explained by Nash's game theory. In this context, it was analyzed by Brandenburger and Nalebuff (1996: 62) who found that co-opetition is a non-zero-sum game. Borczuch and Czakon (2005) start from the prisoner's dilemma and prove that players (participants in the network) receive the highest payouts when choosing the strategy of bilateral cooperation, rather than a natural competition for market systems. Benefits of cooperation (even competitive) grow when the relationship between the parties are long-lasting, due to the tested by R. Axelrod "*shadow of the future*". The shadow of the future can be extended by increasing the frequency and persistence of interaction and the introduction of penalties for opportunistic behavior (Cygler 2014: 329).

Co-opetition occurring in network systems is also explained by the theory of transaction costs. It situates the organizational form between the market and the integrated enterprise. Economic networks are, therefore, an indirect form of exchange organizations, and members of the network include in its operation usually only a certain part of their business, leaving the rest outside the network (Borczuch, Czakon 2005).

3. Polish examples of network organizations in the agri-food sector

Co-opetition effect is universal and the potential of its implementation can be realized in any industry. The examples of cooperative-competitive relation, occurring in inter-organizational networks can be found in all sectors of the economy, including the agri-food industry.

3.1. Organic Food Valley - supra-regional network

The network is open and brings together actors cooperating to promote and develop organic food in the following provinces: Lublin, Subcarpathian, Świętokrzyskie, Warmian - Masurian and Podlaskie (DolinaEko 2015).

The cluster initiative was established in 2004 as a pilot project of the Regional Innovation Strategy of the Lublin province. The aim was to build the cooperation network centered around organic agricultural production and its marketing. It was to connect the supply and the demand of organic market, with the participation of supporting institutions (EkoLubelszczyzna 2015).

The finally developed idea waited for finalization until 2010 and then it returned to boost so-called Eastern Wall. The objective was to build in the area of Eastern Poland supra-regional cooperation platform for the development and promotion of organic food products. The network coordinator

was the Institute of Soil Science and Plant Cultivation – National Research Institute based in Puławy¹.

As part of a general plan the network realizes specific objectives, including: improving competitiveness and innovation of cluster members, the introduction of new or improved products and services, increasing production volume and the number of jobs in the organic food sector, strengthening cooperation and common promotion cluster members' offer, the improvement of participants access to knowledge of production, processing and marketing, increasing demand for organic products (DolinaEko 2015).

In April of 2015 the network counted 23 bodies from the following provinces: Lublin (17), Subcarpathian (5) and Podlaskie (1) (DolinaEko 2015). Among them there are producers, organic farms, processing plants as well as three research organizations and three business support institutions (Onet.pl 2013).

At the current stage of development, the network offers to its participants (Onet.pl 2013):

1. Support for promotion, including: marketing and PR support, promotion on the websites: www.dolinaeko.pl page and fan page "I live fast, eat healthy" and campaigns on the portals, social media and e-mailing ones.
2. Training and education activities, including workshops organized in the framework of the monthly Eco-Forums.
3. Support in research and development activity.
4. Participation in promotional events and business missions (e.g. fairs: "BioFach", "Polagra Food", "Nature Food", "Ekogala", "Organic Marketing Forum").

Thanks to the cooperation of network members, it was possible to launch 23 new products and services, improve 15 and implement the next 26 innovations (Jończyk 2015). Eco-bazaar² was brought into life, 35 Eco-Forums were held in 5 provinces, a web platform for the exchange of knowledge and the promotion of the cluster was created (DolinaEko 2015) and the cooperation with foreign partners from Finland, Germany and Sweden started (PARP 2015). At the same time, along with the development of cooperation, producers and processors compete for the same customers, raw materials and resources, including human capital, as well as run competitive promotional actions or individual advertising. However, despite the areas where

¹ The number of organic farms in five provinces of Eastern Poland is 12119, which represents 47% of all farms of its kind in the country, and the number of companies involved in the organic processing accounts for 26% of the national potential (Jończyk 2015).

² Eco-bazaar was formed in August 2012 and since then it has been a place of Saturday meetings of local producers and their market offer for the inhabitants of the Lublin region.

their interests are in conflict, an important area remains in which they can cooperate effectively and achieve measurable benefits that have been mentioned above.

3.2. Southern Food Cluster of Greater Poland – regional network

The network was established in 2009 from the initiative of the Regional Chamber of Commerce in Kalisz, in response to the expectations of the food industry to deepen and extend cooperative relations and development of promotional activities, consultancy and research. It includes companies from the Kalisz and Konin subregion, and is focusing now 42 players, including 31 economic, 6 research units, 4 business support institutions and local government (PARP 2011: 53-54). Total employment in the cluster is over 4,200 people and annual revenue exceeding 1 300 million zł (PARP 2012: 106).

Manufacturers in the cluster offer: meat and its products, milk and dairy items, sweets and drinks, lyophilized and pro-health articles, food additives, herbs, spices, tea and sweetmeats. In addition, the network involves companies engaged in the packaging and distribution of food products and manufacture of machinery and equipment for the food processing industry.

Entities producing competitive or substitutable products are, therefore, in direct competition for each other. However, to find an area of common interests and define a cluster in accordance with the Triple Helix model, or invite to cooperation representatives of related industries who are offering complementary goods, as well as research institutes and representatives of the authorities, makes that, despite the obvious competitive behavior, this form of economic activity gives them the ability to conduct a positive-sum game.

Network members are involved in common promotional activities and development (fairs, workshops, research projects, cooperation with R&D units, inter-laboratory cooperation, exchange of interns, etc.). There are also realized joint purchases of equipment and raw materials as well as projects for participation in the electronic platforms and e-services, B2B (PARP 2011: 57).

The author's solution is the implementation of Virtual Commodity Exchange, which is a web platform that enables efficient flow of information and gives the cluster members the possibility of common procurement auction, the distribution of raw materials and products, as well as promotion and marketing in virtual reality (PARP 2011: 57-58). Currently developing R&D Center is to provide services in the areas of research, analysis and expertise for the benefit of the cluster members and others in the region. The Center will be also an area of in-depth cooperation with local universities,

participating in the education of students for the needs of the region (Koszela 2012: 4-5).

The network also aims to establish new contacts with companies and clusters in the world food industry and wider exchange of good practices (PARP 2012: 107). At the moment, the group members are cooperating with entities from France, Spain, Germany and Portugal (PARP2015).

Conclusions

Co-opetition is a strategic action of syncretic character that becomes another contemporary strategic option, equal in relation to monopolistic behavior, competitive and cooperative (Lado 1997: 117). With time this phenomenon can be expected to take strength and frequency of occurrence. This assumption is based on the one hand on co-opetition sources which include constantly increasing complexity of the globalizing world, on the other hand on its relation with network forms of economic activity. The growing interest in clustering and other forms of inter-organizational networks leads to a strengthening of their potential through the development of cooperative-competitive relations of their members. The benefits of this type of competitive cooperation show the analysis results of the effects of networking of various sectors and industries (in Poland implemented, i.a. by A. Zakrzewska-Bielawska in the high technology sector), as well as the case study analysis. The quality and durability of the network organizations will be conditional, inter alia, by an ability to manage and to build trust in partnerships. These two factors will determine also whether Polish food sectors, which are just at the predevelopment stage, can handle a dynamic European and global market and become a source of competitiveness of their regions. According to the game theory durable an long-term cooperation, with a growing number and intensity of executed transactions should give also an increase of the likelihood of achieving the benefits of cooperation.

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