

Development of the competitive advantages of the enterprise based on the network cooperation

Natalia Meshkova¹, and Nataly Sergievskaya^{2,*}

¹Lugansk Vladimir Dahl State University, 20a, Molodyozhny Kvartal, Lugansk, Ukraine

²Moscow State University of Civil Engineering, 26, Yaroslavskoye Shosse, Moscow, 129337, Russia

Abstract. The article deals with the issues of ensuring the competitiveness of enterprises by means of the network interactions. The aim of the research is to study the problem of choosing the effective toolkit for managing the development of the manufacturing enterprises based on the inter-organizational integration processes. The issues of integration with other market participants, which is a prerequisite for ensuring the strategic competitive advantages of the enterprises in the context of globalization, are discussed in the article. The simplified algorithm has been developed to substantiate the feasibility of the method of integrating a business entity with other market participants. As a result of the research, the logic of cross-sectoral integration of the enterprises was substantiated through the creation of the networked business systems. They are characterized by flexibility and ability by their nature to adapt to the market space. As a result, the main stages of creating the business network were identified, which presuppose the presence of the key components of its forming. They are missions, goals, resources.

1 Introduction

Integration with other participants is often an objective prerequisite for ensuring the strategic competitive advantages of the enterprises in the context of globalization. This conclusion follows from many modern concepts of managing the socio-economic development of the society and economy. Particular attention should be paid to the concept of the "post-industrial society" by D. Bell [1] and A. Toffler [2], the theory of "information society" by F. Machlup and T. Umesao [3], the theory of economic development by J. Schumpeter [4], the theory of "global networks and flows" M. Castells [5] and others.

The modern business environment is constantly changing. The pace of these changes is faster than ever. The enterprises face the impact of the global megatrends in their industries and must adapt to them both in terms of their organizational culture and business models to meet the global needs and requirements. The modern megatrends influencing the development of the industrial enterprises are the following [6]:

- dynamic cooperation. It is an effective and secure cooperation between different the different stakeholders, co-production, management services and interaction with the customers through the social media and other Internet tools to create the added value;
- corporate mobility. These are new opportunities for the users and businesses thanks to the mobile world;
- the introduction of the intelligent embedded systems. They interact with the objects of the real world on a global scale smoothly and directly;

- production of intelligence analysis in real time with the significant amount of data from the processes, products and business systems.

The world economy creates the new forms of interaction between the enterprises, which provide for the withdrawal of the certain types of work outside the enterprise on the basis of specialization and outsourcing [7]. It allows the manufacturers to acquire flexibility and sustainability in their functioning. Therefore, the new integration ties are being created. They are provided with the new way of human labor (creativity and Internet partnership).

2 Materials and Methods

The essence of economic integration in the modern world is to deepen and to expand the production and technological ties, to create a favorable business climate both at the level of the national economies and directly at the level of the individual enterprises, corporations, companies, etc. [8]. It allows some participants of the integration formation to use the resources of other participants, including unique (specific) ones. These resources usually form the competitive advantages in the production and sale of products. The world practice of dealing business indicates that cooperation and integration through the creation of the new relationships act as a locomotive of the economic development for the small, medium and large enterprises. Such conditions as the development of the information society and the intensification of the competition between the manufacturers, the growing role of innovations induce

* Corresponding author: nadina2350@mail.ru

interaction between the entrepreneurial structures, regardless of their size. They cause the changes in the internal environment of such organizations, namely, in structural restructuring, values and basic tasks of activity.

The use of the organizational innovations based on the integration of business entities can ensure the competitiveness of both the entire association and each of its members. However, it is necessary to pay attention to the following facts in order to solve this problem. We must lay stress on the lack of the theoretical foundations and little practical experience in the implementation of effective integration of the domestic enterprises, the lack of the system for assessing the effectiveness of their interaction, and, consequently, the lack of the sufficient motivation of their owners to participate in the interorganizational integration processes.

Thus, the problem of choosing an effective toolkit for managing the development of the industrial enterprises on the basis of interorganizational integration processes remains relevant and requires a solution.

The integration of the economic entities can be carried out according to the different scenarios. It can provide for the different management mechanisms. These differences are reflected in the approaches to the construction of integration formations, which may provide for the unification on a corporate basis. Most of the domestic associations belong to the holding structures, which are least adapted to operate in the conditions of the high market dynamics. The holdings operate mainly with the financial information, and they intervene in the management of the individual structural units only for the deterioration of their ability to provide the positive financial results. It is a response to deteriorating competitiveness with a significant delay, and the global economic space requires more flexibility from the large companies.

3 Results and Discussion

The integration is based on the amalgamation of the industrial, credit and financial sectors. Depending on the degree of the control over the capital of the companies, one can differentiate [9]:

- an open American model, where the basis is the own financial resources of the participants in the association, and the borrowed ones occupy a small share;
- a closed Japanese-German model, which provides for the attraction of the portfolio investments with the high investment risks.

However, such integration processes are primarily focused on the joint-stock companies and on the horizontal integration. The integration itself is used as a tool of control. The tools are more rigid (a corporation) or the tools are softer (a holding).

The main reasons for the integration associations are consistency of production, financial and sales policies, consolidation of the resources, government and legislative lobbying. The participants of the integration process receive the following opportunities [10,11]:

- access to the specific (unique) resources of the partners;
- expansion of the geographical and operational boundaries of financial and economic activities;
- increasing competitive potential and performance indicators;
- creation of the additional barriers for the competitors who do not work within the associations.

The general and simplified algorithm for justifying the feasibility of the method of integrating the business entity with other market participants is shown in Fig. 1.

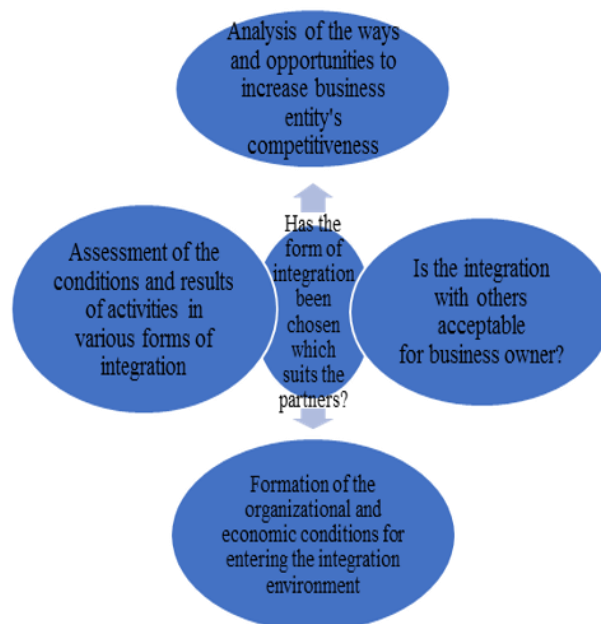


Fig. 1. The simplified algorithm for justifying the feasibility of the method of integrating the business entity with other market participants.

The process of integration of business entities (merger or amalgamation of a certain type) is preceded by the organizational and analytical stage. It is required to assess the advantages and disadvantages of functioning in the new organizational form at this stage.

The market conditions are directly analyzed, and the activities of the potential participants are assessed. Their selection is carried out. The criteria and scheme of financing and profit distribution, motivational and infrastructural components, regulation of property rights between the participants are determined. Since the integration participants are guided by purely economic motives, their implementation is accompanied by competitiveness increase and by gaining advantages in the long term. Therefore, the effectiveness assessment of integration formation can be carried out by comparing costs and benefits, mainly based on the commercial nature. The social effects also accompany the integration processes. These effects are the creation of the new jobs, the improvement of the company's image, and the removal of social tension in the team. The economic studies show that the technological changes in the value chain have significantly strengthened the integration processes in industry [12]. The growth in the number of links between the participants in such chains "from top

to bottom" in the form of the rigid contractual relations for the supply of products negatively affects their activities. The concluded contracts do not allow timely response to the changes in the external factors, such as market prices.

Only structures that are flexible and able to adapt to changing conditions of the external environment quickly can successfully survive in the rapidly changing environment. This is achieved by the development of the network interaction of business entities.

The unification of the participants in the business environment is carried out based on the network approach. This approach has become widely used in the world business practice. Its main feature in the modern interpretation is sectoral and territorial integration combined with the ability to change the network configuration (replacement or attachment of the elements).

To obtain the competitive advantages, the modern enterprises use not only the internal advantages (introduction of the new technologies, cheap energy and labor), but also external ones. The external advantages represent the process of building of the special relationships with the partners. The traditional factors (capital, labor, material resources) are losing their decisive influence on business in the new economic conditions. They become only its prerequisite.

The partners' ability to unite their efforts to create the entrepreneurial network comes to the fore. M. Castells emphasizes that „The network economy is one of the variants of the „new economy”, it is a new, effective form of organization of production, distribution and management” [13,14]. It provides a significant increase in the rate of productivity growth in the United States and in other countries. These countries adopt the new forms of economic organization. The networking is important today as the process of vertically integrating production in the large organizations of the industrial era.

The large corporations have recently decentralized themselves into networks of semi-autonomous units. The small and medium-sized firms form business networks to create a critical mass of resources to compete in the market, while maintaining their autonomy and flexibility. In addition, the networks from the small and medium-sized enterprises become suppliers and subcontractors of the various large corporations. Thus, at a certain point in time, any economic activity is supported by the networks around the networks, which in turn are built around the specific business projects. The firm continues to be a legal entity and a capital accumulation unit, but it also continues to be an operating unit of the business network, which is the basis for the implementation of the project. Since capital accumulation takes place in the global financial market, which is also a network, the firm acts as a connecting node between production networks built around the business projects and accumulation networks organized around the global finance.

The search for the opportunities lies in the fact that a business entity understands specific opportunities better than others and, unlike others, has better access to

information about the existence of such an opportunity. The factors of experience, knowledge and information have a great influence in the networks at this stage. Business networks increase the likelihood of exploiting opportunities by accessing networked information and resources. The empirical results indicate that the strongly connected network has a higher survival capacity compared to the weakly connected network [15].

The success of online business depends on obtaining information and resources from other participants. Obtaining resources, in turn, depends on interaction. This position is supported by American economists' scientific findings [16,17]. According to them, the new firms, which received significant support from the strong interorganizational ties, showed higher growth rates compared to those which supported the strong interorganizational ties less.

Business entities are based on business processes in the act of creating the added value. Each of them needs access to the various resources. These are the resources of capital, knowledge and the like. Despite the fact that the individual entrepreneurial units have a certain list of resources, it becomes necessary to supplement them with network resources in the modern market environment. They increase the possibilities for innovative development of some network participants. These participants cannot obtain the necessary resources independently. Thus, networking can be used by the industrial enterprises to access resources. These resources are essential for creating innovation and for increasing value added in the business processes of such firms.

Business networks can be the foundation for organizing and running a business. The small businesses are inherently prone to engaging in the entrepreneurial networks due to the high demand for information and resources. Their presence for small businesses is important due to the creation of a kind of buffer. They can use it in the unfavorable market conditions. It will increase their chances of survival and profitable work. It will also contribute to more dynamic development and growth due to the investment opportunities, transition to the category of the large firms [18]. Interorganizational relationships are more fundamental for small businesses than for large businesses. They can reduce costs and gain additional resources, knowledge, capital, and improve their competitiveness and profitability with the help of the networking models.

In accordance with the provisions of the network theory [19,20], the strategy of the firm depends on the possibilities based on the relationships in the network, and not exclusively on the strategic decisions of an individual enterprise. Thus, enterprise strategies are built using business connections in the network. Instead, the role of the enterprise in the network and the presence of strong business relationships with other participants can significantly influence its strategic decisions.

The cross-sectoral integration of the enterprises through the creation of networked business systems should become a promising model for the development of the construction complex. The business systems are

characterized by flexibility and the ability to adapt to the market space.

The creation of the business network assumes the presence of the key components of its formation. They are mission, goals, and resources. The main stages of network formation are shown in Fig. 2.

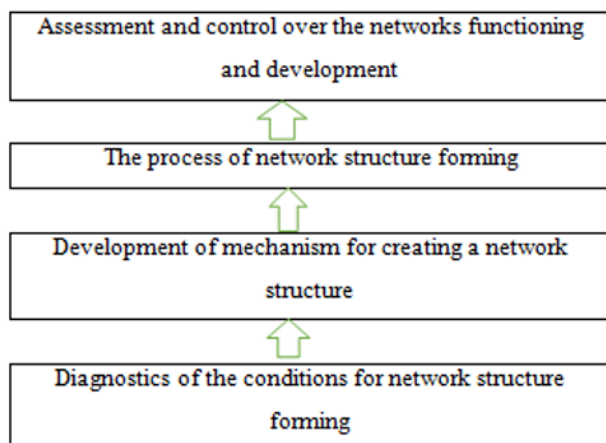


Fig. 2. The main stages of network forming.

Let's take a closer look at each stage of network forming. At the stage of diagnosing the conditions for the network structure forming, the following occurs:

- analysis of the external environment and the market in order to search for the network participants;
- informing the potential network participants about its creation, motivation and coordination of interests;
- analysis of the participants' resources (financial, material, technological, image, etc.);
- assessment of the opportunities, threats and prospects for the creation and existence of the network based on the analysis of its potential participants.

At the stage of developing the mechanism for creating a network structure the following occurs:

- determination of interested and selected candidates on the basis of certain criteria network participants;
- determination of the principles, rules and conditions of the network functioning;
- development of the rules for interaction and subordination of the participants;
- development of the network management system and its staff.

At the stage of the process of the network structure forming the following occurs:

- definition of the network management model;
- determination of the scope of joint activities;
- development of the plan for the implementation of the network functioning strategy.

At the stage of assessing and monitoring the functioning and development of the network the following occurs:

- evaluation of the network activity in accordance with certain criteria and results;
- adjusting the conditions for the functioning of the network based on the assessment of the contribution of each of its participants;
- adjusting the conditions of the network, the composition of participants in accordance with the

results of activities and the influence of the external environment.

4 Conclusions

Consequently, the integration processes as the components of sustainable development of the business entities should be substantiated comprehensively. They should take into account the development of the market opportunities for each of the participants and building the competitiveness potential of the industrial sector of the national economy.

The interfirm integration is carried out on the basis of the vertical and horizontal interaction of business entities. Their dependence is determined and formed on the principles of synergy. The basis for the creation of the network structures can be taken either by business processes or projects. Business processes are aimed at the results. Projects are created in the favorable market conditions and they are of a short-term nature. The complexity of building a rational model of the interfirm relations requires a special interaction of the participants. This interaction would simultaneously allow avoiding conflicts of interest and responding to environmental changes.

Each business unit, when entering the entrepreneurial network, reveals its economic potential. It gives impetus to the emergence of the new management ideas and solutions, which provide a synergistic effect. All the participants' resources are combined. At the same time, networking allows its participants to pursue their own, often unrelated goals. However, they can become achievable through the network interaction. Increasing the competitiveness of a business unit due to entering the network is possible only if its independence is preserved. Under other conditions, there is a high probability of ignoring the interests of the enterprise in favor of other participants. The advantages in favor of joining the enterprise network is that it has problems. These problems can be most effectively solved only with the help of the network partners if there is an effective networking mechanism.

It should be noted that the use of one or another mechanism for managing network interaction depends on the nature of the integration of the individual participants in the network. The mechanism of business network functioning is determined by the concept and is characterized by the sequence of actions. In turn, the concept of the business network assumes a balance of all its main elements. Development configuration, resources, tools and criteria are determined by the goals and objectives of the network, as well as by the company itself and its links between the structural divisions. In turn, the attracted resources of the business unit should correspond to the selected toolkit in quality, quantity and content. The tools and network configuration should also correspond to each other.

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