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Organizational Support for Industrial Restructuring at Metallurgical Enterprises

Abstract. Introduction. *The scientific provisions concerning the management and coordination of structural changes, the reformation and restructuring of domestic industrial enterprises are sufficiently substantiated in the scientific works of well-known foreign and domestic scientists. In addition to the transformational models that offer a specific sequence of restructuring steps aimed at adjusting the enterprise, in the theory and practice of management, in recent years, many approaches have been developed to provide restructuring aimed at the development of the enterprise. However, the theoretical basis for the emergence of the need for industrial restructuring, in particular in the metallurgical industry, has certain gaps. To date, the problem of the modernization of production, restructuring of the industrial, organizational, managerial structures of metallurgical enterprises has become extremely acute. The solution of problematic issues requires the introduction of changes to the tools for ensuring priority directions of transformation transformations, construction of models for the development of the metallurgical enterprise. The research focused on the problem of ensuring the industrial restructuring of the metallurgical enterprise from the point of view of determining the organizational efficiency.*

The purpose of the study is to improve the methodology for determining the effectiveness of industrial restructuring, aimed at the development of metallurgical enterprises. In order to achieve this goal, the scientific works of domestic scientists on the mentioned problem were analyzed. The statistical data of the State Statistics Service of Ukraine served as the basis for analysis. Theoretical and methodological basis of work is a set of principles and methods of scientific research: the principle of systematization and theoretical generalization, methods of comparative analysis, structural and functional analysis.

Results of the influence of factors hindering the implementation of transformational transformations in metallurgical enterprises are analyzed. The indicators of activity of industrial enterprises, in particular, enterprises of the metallurgical industry, are investigated and systematized; the indicators of the dynamics of transformation and structural changes of industrial enterprises of Ukraine are determined. The methodical approach to modeling the development of an industrial enterprise based on the provision of restructuring is proposed.

Conclusions. *The development of the metallurgical industry is the basis for increasing the sustainability of the national economy and the quality of life of the population of the industrial regions of the country. Scientific research shows that one of the main factors in the development of industrial enterprises is the reduction of resistance to changes and the implementation of restructuring mechanisms for industrial enterprises. Accordingly, there are many approaches to implementing transformational changes that involve the use of tools and methods for organizing activities in order to ensure optimization of economic activity. In this study, the degree of activity of metallurgical enterprises in terms of the transformation transformations carried out was analyzed. The analysis show that the share of industrial enterprises, where the processes of reorganization took place, remain low. The implementation of the methodological approach to modeling the development of an industrial enterprise on the basis of the restructuring provided in this study will increase the competitiveness of the steel enterprise.*

Keywords: metallurgical industry; industrial enterprise; restructuring; efficiency; development.

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Організаційне забезпечення промислової реструктуризації на металургійних підприємствах

Анотація. *Координація структурних змін, реформування вітчизняних промислових підприємств надзвичайно цікавить сучасних вчених та практиків. На сьогодні гострою є проблема реструктуризації металургійних підприємств. Рішення щодо впровадження трансформаційних моделей реструктуризації мають важливе значення для підвищення конкурентоспроможності підприємства. Вирішення проблемних питань потребує внесення змін до інструментарію забезпечення пріоритетних напрямів трансформаційних перетворень, побудови моделей розвитку металургійного підприємства. В цьому дослідженні актуалізовано проблему забезпечення промислової реструктуризації металургійного підприємства з позиції визначення організаційної ефективності. Метою дослідження є удосконалення методики визначення ефективності*

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промислової реструктуризації, спрямованої на розвиток металургійного підприємства. При аналізі використовувалися наукові праці вчених, статистичні дані Державної служби статистики України. Результати дослідження показали, що питома вага промислових підприємств, де відбувалися процеси реорганізації, залишається невисокою, одним із основних факторів розвитку промислових підприємств є зниження опору змінам та реалізація механізмів реструктуризації. Доведено, що реалізація методичного підходу щодо моделювання розвитку промислового підприємства на основі забезпечення реструктуризації, який розроблено в цьому дослідженні, дозволить підвищити рівень конкурентоспроможності металургійного підприємства.

Ключові слова: металургійна промисловість; промислове підприємство; реструктуризація; ефективність; розвиток.

Introduction. The metallurgy industry is extremely important for Ukraine, it is one of the main donors of the budget and has a sufficiently high export potential [14; 17; 21]. Its development directly depends on the approaches related to the implementation of organizational and economic changes. As well as the process of implementation of appropriate organizational and managerial transformations, which involves the use of new technologies, tools and methods for organizing activities and enterprise management systems, in order to ensure optimization of economic activity. Ukraine is a country with a favorable territorial location, resource, production and infrastructure capacity [9]. The main task of the development of metallurgical enterprises is the dynamic growth and integration into the world metallurgy.

However, today the problem of the modernization of production, restructuring of production, technological, organizational, and management structures of enterprises has become extremely acute. The solution of problematic issues requires the introduction of changes to the tools for ensuring priority directions of transformation transformations, construction of models for the development of the metallurgical enterprise.

Short literature review. Major contributions to the study of various aspects of enterprise development management under the conditions of economic reforms were made by M. Aistova [1], B. Andrushkiv [2],

V. Kondratiev [8], E. Utkin [22]. Problems of preparation and implementation of restructuring of industrial enterprises and development of mechanisms for managing their development are devoted to the research of O. Zborovskaya [24], O. Viknianskaya [23], I. Mazur [12], V. Chenasha [4].

They scientifically argued that each business entity has its own peculiarities in their scholarly works. Accordingly, they proposed approaches to implement appropriate transformational changes that involve the use of tools and methods of organization of activities in order to ensure optimization of economic activity. Thanks to their development, the development of governance and reduction of resistance to change, the formation of a mechanism for restructuring industrial enterprises.

The research objective. The purpose of the article is to improve the methodological approach to modeling the development of an industrial enterprise on the basis of providing restructuring. In order to achieve this goal, the scientific works of domestic scientists on the mentioned problem were analyzed. The statistical data of the State Statistics Service of Ukraine served as the basis for analysis.

The statement of basic materials. Metallurgical enterprises of Ukraine are not always ready for a clear definition of the necessity of transformations, and the factors that, above all, negatively influenced their implementation by 2017, can be determined (fig. 1).

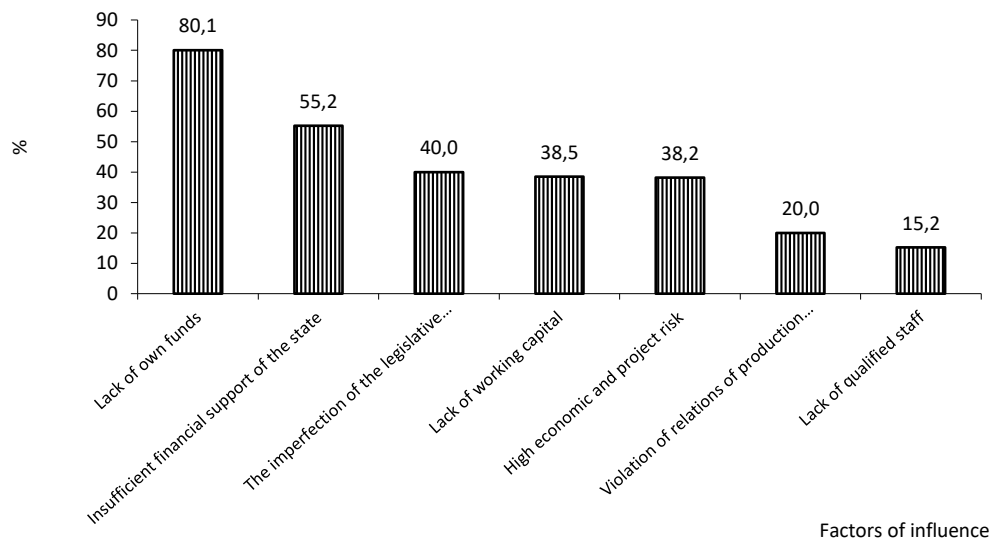


Figure 1 – Frequency of impediments to the transformation at metallurgical enterprises

Source: compiled by the author according to [17-21]

The activity of metallurgical enterprises according to the directions of transformation transformations carried out can be determined according to the data of Table 1. As can be seen from table. 1, metallurgical enterprises are very cautious approach to the issue of initiation and

implementation of transformation processes, especially this is noticeable in the organizational sphere, sphere of development of production, new technologies of management.

Table 1 Activity of metallurgical enterprises in the directions of transformational transformations carried out in the period 2015-2017

Indicator	2015	2017
	as a percentage of the total number of industrial enterprises	
Number of enterprises engaged in change	12,0	10,8
<i>of them in the areas of research, development, management technologies</i>	3,5	3,1
introduction of new technologies	1,4	1,3
of them: the purchase of machinery, equipment, installations, other fixed assets and capital costs associated with the change	6,0	5,2
industrial design, other types of production development, introduction of new methods of production management	5,6	4,8
transformed into communication and marketing activities	3,1	3,0

Source: [17; 19; 21]

Results of research in the sphere of introduction of transformation processes in the metallurgical industry of Ukraine [11; 13] show rather low activity of enterprises in terms of updating of technologies and methods of management, development of production of new metallurgical products, and the practical use of scientific and technological achievements in the field of economic

activity management as well as its heterogeneity (almost 80% of organizationally active enterprises of Ukraine are concentrated in Kyiv, Lviv, Dnipropetrovsk, Kharkiv and Zaporozhye regions). The analytical data (table 2) testify to the high level of relevance of the transformation processes in the organizational and managerial sphere of activity of metallurgical enterprises.

Table 2 Activity of metallurgical enterprises in the directions of transformational transformations carried out in the period 2015-2017

Indicator	The analyzed period			
	2014	2015	2016	2017
Number of active metallurgical enterprises, units	341	343	306	341
The share of active enterprises in the total number of metallurgical enterprises, %	18,2	22,3	20,2	24,8
The share of active metallurgical enterprises in the structure of industrial enterprises, %	1,4	1,8	1,8	1,9

Source: [17; 19; 21]

The dynamics of transformational and structural changes in industrial enterprises of Ukraine is given in the generalized form in table 3. Total number of industrial enterprises, their share, where there were processes of reorganization, with the change of status of legal entity, during 2014-2017 tended to decrease from 7.5 to 2.4%. The main transformational component is the reorganization of enterprises through the formation of a new enterprise (2017 – 1,8%), mainly due to the renewal of activities of previously existing enterprises, remains at

a low level – 0,4-0,5%, the division of enterprises into several and others the reasons are insignificant – (by 0,1-0,2%). The number of newly created enterprises amounted to 3.1%, of which 2.2% – through the creation of new enterprises and 0.1% – by resuming operations of previously existing enterprises in 2017. It should be noted that the number of enterprises that have suspended their activities prevails in the formation of new and is 4.3%.

Table 3 Dynamics of organizational and managerial changes in industrial enterprises of Ukraine, 2014-2017

Demography of enterprises	Year				including medium and large enterprises
	2014	2015	2016	2017	
	all enterprises				
Number of enterprises, units, %, including	341000 100,0%	343440 100,0%	306369 100,0%	338254 100,0%	18942 100,0%
created in the reported year, of them	7,5	8,2	2,1	2,4	3,1
- formation of a new enterprise	7,4	7,3	2,5	1,8	2,2
- renewal of an earlier existing enterprise	0,5	0,5	0,5	0,4	0,1
- others	0,1	0,2	0,2	0,2	0,2

Source: [17; 19; 21]

The main reasons for this are the processes of total or partial liquidation (2.2%) and temporary suspension of production (1.7%), where transactions such as legal contracts for the creation of a portfolio of orders and execution of contracts exceeded the possibility of compromises and concessions for enterprises that leads to the loss of their legal independence.

Of course, there are other factors here. Practice shows that in the process of occurrence and resolution of corporate conflicts in Ukraine, different tools are used: from the use of insider lobbying schemes to the use of official position to provide the required solution.

Metallurgical enterprises are not financially able to use modern foreign technology of transformation because of their significant cost and incomplete adequacy to national economic conditions. However, according to data [14], the volume of new foreign orders for the production of metallurgical products is 61.4% to the volume of new orders in metallurgy. That far exceeds the percentage of foreign orders for the production of other types of industrial products. The volume of metallurgical products also sold abroad is 228692.7 million UAH, which is 59% in the structure of industrial production sold (fig. 2).

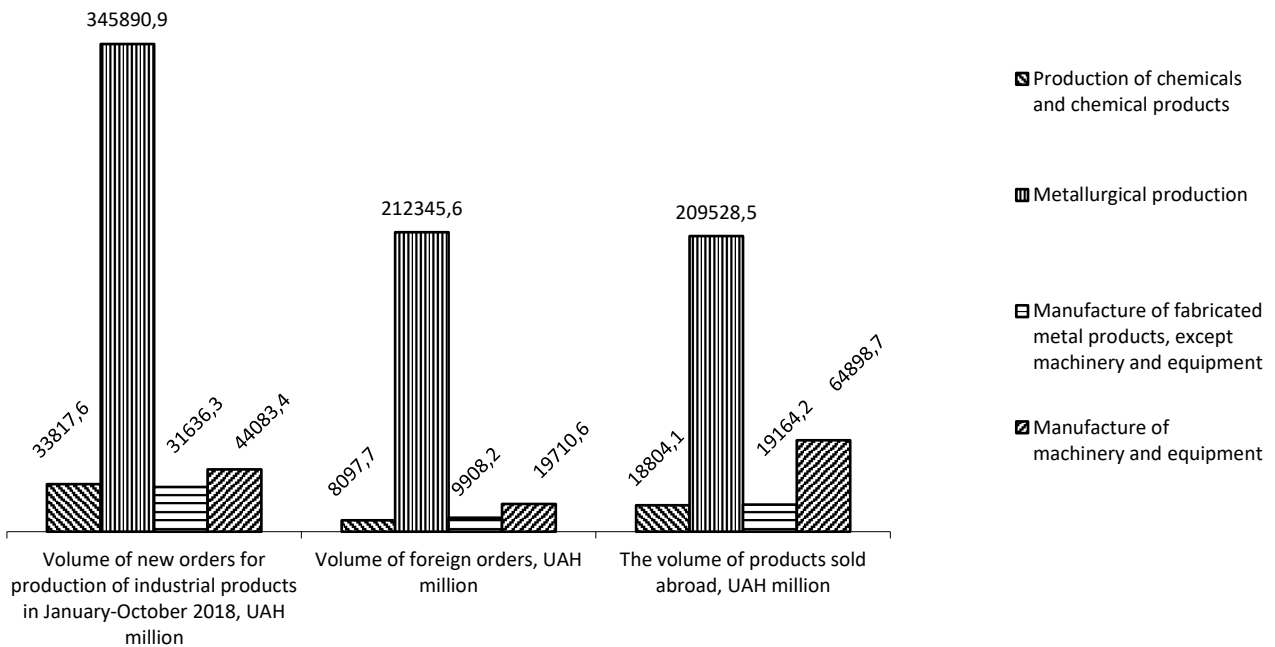


Figure 2 – Indicators of certain types of industrial products for January-October 2018

Source: compiled by the author according to the data [14]

Each metallurgical enterprise, having regard to its capabilities, should develop an optimal strategy for

financing and introducing technological innovations and transformational transformations into their activities.

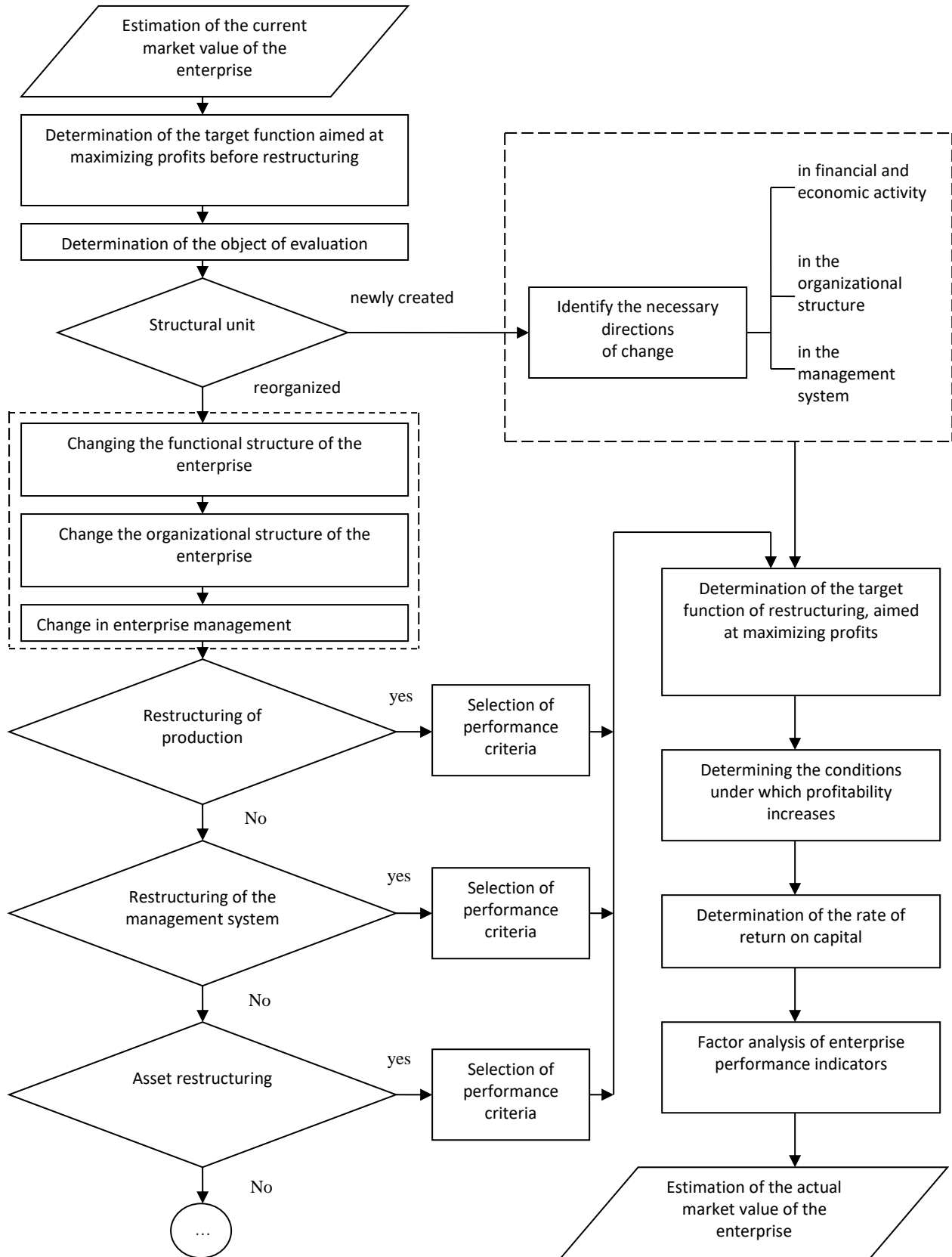


Figure 3 – Algorithm for modeling the development of an industrial enterprise on the basis of restructuring

In previous years and till now Ukrainian metallurgical enterprises, in the vast majority, do not pay enough attention and do not allocate necessary funds for measures on modernization, reconstruction, restructuring, etc. [7; 13].

The lack of a mass character of the restructuring of metallurgical enterprises, allows us to choose a limited number of approaches to assess the effectiveness of this process [10; 15; 16]. In work [5] the approach to the estimation of the effectiveness of industrial restructuring aimed at the development of the enterprise is substantiated, which is based on the comparison of the current market value of the enterprise to the restructuring and actual after the restructuring. According to this approach, the effectiveness of restructuring is determined by the rationality of the use of key elements and evaluation criteria.

The system of organizational support for industrial restructuring contains three directions of transformational change:

- financial and economic activity;
- organizational structure;
- control system.

In each of the areas we choose the types of restructuring, namely restructuring:

- equity capital;
- production;
- control systems;
- obligations;
- assets and so on.

We distinguish the following elements:

- assessment of current market value before restructuring (conducted at the preparatory stage of the development of a restructuring project);
- assessment of the actual market value (conducted after the completion of the restructuring project);

– calculation of the effect of the implementation of the restructuring project.

The proposed approach of organizational support for industrial restructuring contains a mechanism for evaluating its effectiveness [3; 6]. It makes it possible to build a model for the development of an industrial enterprise on the basis of restructuring, taking into account a certain set of elements, which is represented in the form of a scheme (fig. 3).

It is possible to determine the necessary directions of change with the help of the model, to make a reasonable decision on the implementation of the project. It also provides an opportunity to assess the market value of the enterprise at the stage of pre-project preparation and after the implementation of the restructuring project. This approach allows the company to develop a restructuring project, minimizing the degree of uncertainty.

Conclusions. The development of the metallurgical industry is the basis for increasing the sustainability of the national economy and the quality of life of the population of the industrial regions of the country. Scientific research shows that one of the main factors in the development of industrial enterprises is the reduction of resistance to changes and the implementation of restructuring mechanisms for industrial enterprises. In this study, the degree of activity of metallurgical enterprises in terms of the transformation transformations carried out was analyzed. The analysis show that the share of industrial enterprises, where the processes of reorganization took place, remain low. Elements of scientific novelty are, developed in this research, a methodical approach to modeling the development of an industrial enterprise. Its realization can have a beneficial effect, which will lead to an increase in the competitiveness of the metallurgical enterprise.

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