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## IMPROVING THE EFFICIENCY OF THE INDUSTRIAL ENTERPRISE PLANNING SYSTEM

# ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ СИСТЕМИ ПЛАНУВАННЯ ПРОМИСЛОВОГО ПІДПРИЄМСТВА

The article is devoted to the problem of effective functioning of the planning system in the general system of industrial enterprise management in modern economic conditions. The study established the current state and development of methods and tools for planning the activities of economic entities of Ukraine. The components of the planning system at industrial enterprises are determined and negative tendencies in the sphere of functioning of the planning system and management of the enterprise as a whole are revealed. The result of the study are proposals to increase the efficiency of the planning system of industrial enterprises by expanding its regulatory framework and planning processes. Approaches to the development of the economic mechanism in the direction of increasing the efficiency of the enterprise planning system taking into account changes in their economic activity are formulated.

Keywords: planning, planning system, planning process, management, industrial enterprises.

Стаття присвячена проблемі ефективного функціонування системи планування в загальній системі управління промисловим підприємством в сучасних умовах господарювання. Підкреслюється, що планування є найважливішим елементом господарювання, який має забезпечувати раціональне використання всіх його ресурсів, незважаючи на негативний вплив факторів зовнішнього середовища. Ефективне функціонування системи планування підприємства потребує чітко визначеної функціональної структури, відповідного інформаційного забезпечення цього процесу та важелів впливу. Основним завданням сучасної системи планування є забезпечення виконання цільових показників, тобто пошук ефективних шляхів поєднання планових показників з оптимальними результатами.

Система планування, яка дісталася нам у спадок від системи централізованого планування, не передбачала необхідності розвитку функції, пов'язаної з вивченням ринку та попиту та їх впливу на результати діяльності підприємства. Тривалий час зміст і форми планування істотно не змінювалися. Сучасні умови економіки вимагають переведення планування на нові принципи організації.

У ході дослідження встановлено, що на даний час процес планування діяльності промислового підприємства не передбачає функції контролю за результатами його виконання, є недостатьо організованим, скоординованим та керованим. Складові планування не можуть бути чинниками підвищення конкурентоспроможності підприємства. Резервом підвищення ефективності системи планування можна вважати посилення ролі процесу нормування, який в умовах, що змінюються, стає методом організаційно-стабілізуючого впливу шляхом встановлення нормативів як орієнтирів дій.

Визначення ролі та значення нормування в системі планування та управління дозволило виділити основні напрямки перегляду змісту та об'єктів нормування. Доведено, що забезпечення ефективності економічних процесів потребує визначення та обтрунтування вартісних або відносних норм і нормативів ефективності цих процесів. Основними системоутворюючими характеристиками планування слід вважати економічні нормативи процесів.

Проведене дослідження дало можливість створити таку модель формування нормативної бази системи планування підприємства, яка ґрунтується на системному обґрунтуванні методології нормування, що полягає у комплексній системній оцінці кількох варіантів та оптимізованій процедурі адаптації внутрішніх факторів до навколишнього середовища. Це підвищить ефективність системи планування підприємства та дасть можливість впливати на вирішення проблем стабільної діяльності підприємства. Впровадження запропонованого підходу до підвищення ефективності системи планування шляхом удосконалення її нормативної бази та процесів планування в практику діяльності підприємств, надасть можливість вирішити завдання, спрямовані на підвищення їх конкурентоспроможності.

**Ключові слова**: планування, система планування, процес планування, управління, промислові підприємства.

#### JEL Classification: M21, O12

**Formulation of the problem.** In modern business conditions, the responsibility of enterprises for the results of their work increases significantly. Therefore, enterprise management as a function and type of activity acquires special significance. The most important element of management is planning, which should be considered not only as the ability to identify all necessary actions, but also as the ability to anticipate possible changes that may occur in the future and be able to cope with them. minimizing the associated losses. Therefore, the modern planning system, despite the changing environmental factors, must ensure the rational use of internal resources of the enterprise.

Analysis of recent research and publications. Such foreign scientists as R. Akoff, I. Ansoff, P. Drucker, B. Karloff, and G. Mitzberg paid considerable attention to the planning of economic entities. Among domestic scientists are: Z. Shershneva, G. Tarasyuk, M. Danilyuk, O. Orlov, and others

At the same time, the works of most scientists do not pay enough attention to the search for new approaches to planning, construction and operation of the planning system in changing economic conditions.

**Formulation of the goals of the article (task setting).** The purpose of the article is to assess the functioning of the planning system at industrial enterprises; to define and formulate features of planning of activity of the enterprise in modern conditions; to study the impact of the planning process on the results of activities and to outline the directions of improving the information and organizational support of the planning system at the enterprise.

**Presenting main material.** In general, planning is represented as: future-oriented decision-making activities [1]; activities within which development takes place [2, p. 82]; "Formalized procedure aimed at obtaining a clearly defined result, which takes the form of an integrated system of decisions" [3, p. 11]; "The process of choosing goals and decisions necessary to achieve them" [4, p. 690]. Analysis of scientific sources suggests that the essence of planning, as a function of management of economic entities, is a reasonable choice of goals and ways to achieve them based on a set of tasks and works, as well as effective methods, methods and resources needed to perform these tasks, and establishing their relationship. Planning is the first organizational unit of the whole process of realization of the goals of the enterprise.

The planning system, in general, is considered as a set of structural elements that provide planning activities in the form of different types of plans and targets. In the work [5, p. 9] team of authors, enterprise planning system is presented as goals, principles, methods, process, organizational structure and targets. However, this approach does not provide a function of monitoring the results of

its implementation. However, in practice, an important aspect is to ensure the implementation of the plan. In order to achieve the planned indicators, it is necessary to provide appropriate information support for this process with a clearly defined functional structure and levers of influence.

There is also an opinion that the planning system is a purposeful set of subjects and planning processes in the case if the elements of the system are considered planning subjects [6, p. 309]. And it is the interaction of the elements of the planning system provides the desired results of its operation, corresponding to the goal. G.M. Tarasyuk notes that the interaction of elements of the planning system "generates a synergistic effect from the results of planning" [7, p. 12].

For the planned tasks to be implemented, management needs to find effective ways to combine them with the optimal result. This task is able to perform such a system, the action of which consists of a number of techniques, methods, their rational combination, and the relationships of the system in time and space [8, p.87–88]. In this sense, modern industrial enterprises should be considered as complex production and resource complexes and the results of their activities depend, firstly, on the efficient use of available internal resources, and secondly – timely response to changing environmental factors [9, p. 24]. In addition, it should be borne in mind that all the resources of the enterprise are used in production and commercial cycles together. Therefore, the rational use of all production resources in total, involves establishing the levels of their costs, interchangeability in mixtures (recipes), and their combinations in the product. That is, the stability of enterprises depends, to some extent, on rational resource consumption.

The system of centralized planning provided for a strict allocation of resources and a single policy for the development of the whole economy, so the need to develop a function related to market research and demand was not. This created a crisis of the concept of socialist planning and management of economic systems based on its principles. At present, planning needs to be translated into new principles of organization. Its content and forms must be significantly changed. According to economists [10, p. 32], due to the lack of accurate and systematic planning and control of their activities, companies lose up to one-fifth of profits.

Modern enterprise, as an element of the economic system, operates in a specific environment and is under its influence. It is an open system embedded in the outside world. At the entrance it receives resources from the external environment, at the exit – gives the manufactured product. The enterprise (organization), based on information about the state of the market in which it operates, business conditions, from the external environment receives the resources that best meet the requirements for the manufacture of a product that will be in demand. By using these resources in the production process, the company receives a finished product upon completion.

All types of resources used in industrial production have a quantitative and qualitative dimension, and their involvement in the production process requires appropriate costs and in some way affects the efficiency of the enterprise. Therefore, the production process should be considered not only as a process of transforming resources into a finished product, but also as a process of increasing costs and results. And the resources of the enterprise are the subject of planning taking into account the planned economically acceptable and technologically sound level of their costs and requires the use of appropriate economic regulators. The purpose of resource planning is to optimize their use. In practice, the assessment of resource use is carried out separately for different types and only after the completion of the process of their consumption. The end-to-end process of resource consumption at all its stages, starting with logging in, is not considered. That is, those responsible for the use of resources, both in business processes and in the aggregate are absent. As a result, in the process of production the formation of competitive advantages and competitiveness of enterprise products has no leverage.

This circumstance necessitates thorough research to identify the main trends, the relationship between the dynamics of the volume and composition of resources involved in production processes with efficiency, methods of optimizing the planning and use of production resources, which requires appropriate changes, as in tactics, and planning strategies based on the search for new approaches to the mechanism of action of economic factors of optimal use of resources and their savings.

Solving this problem requires the development of a mechanism for applying innovative approaches, primarily to the process of rationing the cost of production resources. Because, rationing,

in changing conditions, becomes a method of organizational and stabilizing influence, which, as a lever of influence, involves the establishment of progressive standards as guidelines for an efficient process of resource consumption by the enterprise.

Acting as a link between production and its efficiency, norms play an economic role. And as economic indicators, economic standards reflect the relationship between the elements of financial, production and other activities, as well as the requirements for the ratio of costs and results of production activities and the allocation of resources to regulate economic relations.

But, at present, the impact of the level of existing standards on production efficiency is not assessed. Thus, very often, there is a trend: when lowering the norms for energy resources at the same time increases their value in the cost of production, which can be explained by the growth of commercial prices of processes. Therefore, the rationing of physical resources of enterprises is insufficient to ensure their efficient use and requires the definition of new approaches. Generalized norms of resource costs, such as average and marginal costs, which were proposed with the transition to market relations, without being represented structurally, also do not allow to determine the reserves of efficient use of individual types of resources or their totality. In addition, scientists who solved the problem of efficient use of resources did not take into account their interdependence in the production process. The latter does not allow to predict the most favorable ratio between resource costs and economic performance.

The above suggests that the rationing of enterprise resources, as one of the main levers of their effective use, does not play a significant role in improving the efficiency of their use and is not aimed at achieving high economic results. It is not subject to a single goal, does not take into account the relationship between the processes of formation of norms and standards and changes in economic activity of enterprises. Modern economic conditions require the purposefulness of new approaches to regulating the cost of enterprise resources by improving approaches to their rationing. Rationing should be used as a method of organizational and stabilizing influence, which involves the establishment of standards as guidelines for activities [11, p. 93].

The main features of economic resources are that interacting with each other, they are in quantitative and qualitative functional dependence. And, this circumstance is not taken into account in the current norms and standards. Therefore, in changing economic conditions, in our opinion, the rules should take into account and reflect the interdependence of economic resources in their use in production processes. These circumstances require a review of the content and objects of regulation, based on market factors, in use to be flexible and capable of transformation, integration or differentiation. However, depending on the conditions or purposes of application, norms and standards should contribute to: improving the organization and remuneration; streamlining production technology; improving the organizational and technical level and quality of management of production (technological) processes.

This is possible if, in parallel with the revision of the norms of consumption of production resources of enterprises will be determined and justified cost or relative norms and standards of efficiency of certain processes (especially – economic). Thus, the main object is the processes as a whole, rather than their individual parts or operations, which will improve the quality of management of economic processes of enterprises. Indicators of the use of each of the resources used in the enterprise, cannot meet the overall needs of enterprise performance management. There is a need for a holistic comprehensive assessment of resource use in the enterprise. That is, the stabilization of the economy of the enterprise requires increasing the role of rationing the cost of its resources, expanding the objects of rationing and changing approaches to rationing processes. The rationing of enterprise resources should perform a number of functions: the basics of planning and economic calculations of various kinds; the initial base of accounting for resource costs for the product (process) and production results; basics of rational organization of both labor (production) and operational management of the enterprise; an effective means of ensuring the optimal ratio between resource costs and economic performance of the enterprise.

The basis for creating the latest model of formation of the regulatory framework of enterprise planning system should be a systematic justification of rationing methodology, which is a

comprehensive systematic assessment of several options of regulatory values and optimized procedure for adapting internal factors to environmental variability.

The development of methodological support for the definition of norms and standards, taking into account their formation by levels is an important principle for creating a regulatory framework for planning. This will help to consider the mechanism of normalization of production costs as an important component of the planning system and an important element of the economic system, which makes it possible to use different types of production resources in a harmonious structural relationship with each other, which would ensure economic stability and development. In our opinion, the optimal use of resources can be achieved by setting limits on the efficiency of enterprise resources, taking into account the integrated capacity of each type of resource and their totality as a whole to ensure a balanced relationship between their cost levels. This approach will allow norms and standards to act as a regulator of the efficiency of the enterprise and become the basis for managing all processes.

In our opinion, taking into account the interdependence of economic resources when using them in the production process is possible if in parallel with the norms of costs for individual production resources will be used norms and standards for individual processes. That is, the main system-forming characteristics of planning should be considered economic standards of processes. In this case, it is advisable to take into account the basic principles of a systematic approach. Standards should cover the whole set of elements of the production system, summarizing all processes, be integrated and able to assess the impact of possible changes in it on the performance of the enterprise, ie measured, for example, in value units.

The use of these approaches becomes a prerequisite for the creation of process cost standards that can sensitively respond to changes in the market, internal business conditions, characterized by flexibility of parameters under the influence of external and internal environments. They should be the basis for effective information support of the enterprise planning system and management of all areas of its activities.

Solving the problems of improving the efficiency of economic process management in enterprises requires the transition to the use of process-oriented planning of resource costs using cost norms and efficiency standards. The cost of production resources of the enterprise to ensure organizational, economic and other processes should be considered together, which necessitates the establishment of comprehensive standards of resource consumption for individual business processes. In addition, the cost of a resource such as engineering and management, which cannot be considered in its pure form must also be included in the complex standards.

The transition to complex norms, along with the difficulties of rationing, will provide certain advantages and priorities in management decision-making and planning. It is a comprehensive approach to rationing will provide an opportunity to assess the level of resource intensity of the enterprise, which should be understood as a simultaneous consideration of all costs of all resources per unit of income from sales and other types of cash involved in generating profits. project management, able to meet the needs of effective enterprise management. At the same time, a number of no less important factors should be considered and the use of scientifically sound methods of their joint use, and technological, and organizational, and others. Conditions for the use of regulatory factors depend on the level of compliance with technological development, manufacturability of products and a number of other characteristics and parameters, which motivates the revision of the mechanism of efficient use of all resources.

The need for such an approach is based on the fact that based on the interchangeability of certain types of resources and the ability to maneuver resources, it will rationally balance their costs at all stages of resource consumption. This circumstance encourages us to consider the construction and improvement of the existing regulatory framework as a priority area for reforming the planning system of the enterprise.

A qualitatively new approach to rationing processes can be presented as a step-by-step process of establishing the normative value of resource costs for each stage of their formation and use, followed by analysis of their compliance with the objectives of effective use. The criterion for the effective choice of areas of rational use of enterprise resources is the minimization of total costs throughout the technological chain and the overall resource intensity of production and sales. The

above substantiates the feasibility of using in the planning system a process approach to the rationing of resource costs, which can significantly affect the solution of efficiency problems of the enterprise.

This approach to planning provides additional opportunities for diagnostics, which should be carried out by cost centers – structural units that are responsible for rationing a particular type of resources and provide support for the established regulatory level for a long time and form tactics and strategies for their consumption.

Conclusions. The functioning of the planning system, which meets the modern requirements of management, can significantly affect the competitiveness of products and enterprises as a whole [12, p.63]. Achieving this goal requires: increasing the role of rationing of resource costs; improvement of existing methods of rationing by directing them to the rationing of the process as a whole, not just individual types of resources, which will allow, along with natural standards to use cost, compare resource costs with economic efficiency of economic entities; creating conditions for improving the cost planning mechanism and the mechanism for assessing the overall efficiency of production activities. The latter becomes possible if the rationing of resources is separated into a separate service subsystem with the definition of rationing as a specific planning function.

Objectivity of the established planned normative indicators of control of the planning process, successful organization of technological processes, analysis of their flow will ensure comparability of actual indicators with planned, reported indicators for previous periods, the possibility of automating these procedures, quality information collection and processing.

The introduction of these indicators in the planning system will qualitatively improve the processes of strategic planning, namely, to set the level of resource intensity at the "entrance" and in all processes. The indicator of total resource intensity will provide an opportunity to set the appropriate level of costs for all types of resources for each structural unit. Given that the cost of resources used in the production process are different types of costs (direct or indirect), their management can be based on elements of the direct costing system. That is, the separation of resource costs in the amount of overhead costs, will establish a balanced system of ways to optimize the level of resource use and determine the standard (management indicator) for employees who are involved in the relevant decisions.

The system of enterprise planning, which is formed on logistical principles and works on the basis of the established total indicator of resource intensity of production in general and its stages, will allow more informed management decisions, strengthen the role of planning, directing all management processes to ensure efficient, cost-effective level. his activities.

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