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PRIORITIES FOR THE FORMATION OF AN INDICATIVE BASE FOR EDUCATIONAL METHODS OF SUSTAINABLE DEVELOPMENT OF INDUSTRIAL ENTERPRISES

PRIORIDADES PARA LA FORMACIÓN DE UNA BASE INDICATIVA DE MÉTODOS EDUCATIVOS DE DESARROLLO SOSTENIBLE DE EMPRESAS INDUSTRIALES

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ABSTRACT: The modern organization of the strategic management system at industrial enterprises focuses on the prevention of negative instability trends, which, of course, involves the formation of a new methodology that reveals the new qualities for the system of principles, methods and tools of institutional regulation and planning of instability factors. Using a systematic approach as the basis for the development of a methodology for managing business entities allows us to consider any process as a separate economic phenomenon, positioning it as a system, or as a set of many interconnected elements, each of which is able to influence the development of the system in different directions. This situation requires a detailed study of an enterprise, the development of a comprehensive vision by modelling the cause-effect relationships of its components. In recent years, many different approaches have been developed that form the methodology of strategic management of enterprises, including those that are implemented in the form of a concept. The essence of a concept lays in the formation of a certain way of understanding, or interpreting a phenomenon or a process under study. The process of managing an economic entity must be directly investigated from the perspective of a mechanism characterizing the means of influence. The experience of two recent economic crises showed that most of the traditional management tools used were ineffective in the crisis.

Keywords: Economic crisis, industrial enterprises, decline in production, instability, factors of economic instability, analysis and diagnostics, formation of an indicative base, sustainable development.

RESUMEN: La organización moderna del sistema de gestión estratégica en las empresas industriales se centra en la prevención de tendencias negativas de inestabilidad, lo que, por supuesto, implica la formación de una nueva metodología que revele las nuevas cualidades para el sistema de principios, métodos y herramientas de regulación institucional y planificación de factores de inestabilidad. Utilizar un enfoque sistemático como base para el desarrollo de una metodología de gestión de entidades comerciales nos permite considerar cualquier proceso como un fenómeno económico separado, posicionándolo como un sistema, o como un conjunto de muchos elementos interconectados, cada uno de los cuales es capaz de influir en el desarrollo del sistema en diferentes direcciones. Esta situación requiere un estudio detallado de una empresa, el desarrollo de una visión integral modelando las relaciones causa-efecto de sus componentes. En los últimos años, se han desarrollado muchos enfoques diferentes que forman la metodología de la gestión estratégica de empresas, incluidos los que se implementan en forma de concepto. La esencia de un concepto radica en la formación de una determinada forma de comprender, o interpretar un fenómeno o un proceso en estudio. El proceso de gestión de una entidad económica debe investigarse directamente desde la perspectiva de un mecanismo que caracterice los medios de influencia. La experiencia de dos crisis económicas recientes mostró que la mayoría de las herramientas de gestión tradicionales utilizadas resultaron ineficaces durante la crisis.

Palabras clave: Crisis económica, empresas industriales, declive de la producción, inestabilidad, factores de inestabilidad económica, análisis y diagnóstico, formación de una base indicativa, desarrollo sostenible.

INTRODUCTION

Globalization, increasing competition and the uncertainty of business development raise the importance of instability factors in the production and financial activities of business entities in any sphere of production, regardless of ownership. All this requires a more detailed study and rethinking of the “sustainable development” category.

In accordance with the set topic goal of our study, we analysed the main trends and reviewed the state of industrial enterprises of the Russian Federation. So, in the period from 2010 to 2018, almost 250 thousand industrial enterprises received bankrupt status, and the index of entrepreneurial confidence in the industry core - manufacturing industry - ranged from 0 to 10% over this period.

There has been an avalanche decline in the use of production capacities in many sectors of the Russian industrial complex, and the condition of fixed assets has actually worsened there, too. In other words, we are talking about the loss of competitive positions, reducing the sustainability of economic development.

Perhaps the most depressing trend that accompanies the instability in the development of industrial complex enterprises is the manifestation of the growing negative dynamic of human capital: more than 2 million people have been laid off over the past ten years.

All this will allow us to talk about the existence of a distinct tendency of deindustrialization and the real threat to the economic security of the industrial complex.

The formation and diagnosis of sustainable development indicators for the industrial complex at various hierarchical levels of management was the subject of many works by foreign and Russian researchers.

In the course of our entry into the research problem, we studied the works of the founders of the economic development theory (A. Smith, D. Ricardo, J. Mill, K. Marx, F. Engels, A. Marshall, and others). This allowed us to explore the possibilities and inevitability of the onset of economic crises, to consider the cause-effect relationships between the sources of business crises formation and their consequences.

The work of Russian researchers regarding the theory of business crises and cycles, including such scientists as M.N. Tugan-Baranovsky, V.A. Chayanov, A.A. Bogdanov, N.I. Kondratyev and others, were of no less interest to us. They examined the patterns of economic instability and the possibility of neutralizing crises.

The development of a post-industrial economy requires new approaches to addressing the sustainable

development of enterprises from various perspectives, including the organization of labour and the quality of life; investment and innovation; as well as substantiation of the priorities for the formation of an indicative base for ensuring the sustainable development of business entities.

METHODOLOGY

The theoretical and methodological basis of the study was made up of the relevant provisions of economic theory, the concepts of classical and modern scientific schools, and the works of Russian and foreign scientists devoted to the problems of sustainable development of industrial enterprises.

Methodological research tools were built on the basis of system analysis. To obtain scientific results, we used a number of methods based on universal scientific (dialectics) and general scientific methods, including systemic, complex, method of scientific abstractions, logical analysis, analysis and synthesis, comparison and generalization.

The informational basis of the study was the data from the Federal State Statistics Service of the Russian Federation, materials of scientific and practical research, as well as the practical experience of the authors in the crisis management system.

DEVELOPMENT

A feature of the development of modern civilization is the building up of complex and intractable problems of a socio-ecological and economic nature. The result of many scientific discussions on sustainable development issues was the “Declaration on Environment and Development” [6], in accordance with which the concept under consideration involves ensuring a balance between the economy, social sphere and the environment. It should be noted that such an interpretation was legislatively fixed practically in the concept in all countries, including in Russia.

Researchers note the dualism of the components of this concept is unity of sustainability and development, which, at first glance, seem to be mutually exclusive. Indeed, it is customary to understand stability as not subject to fluctuations, constancy, etc (Sashina, 2012).

The concept of “development” has a completely different meaning: it means a (regular) change, a transition from one state to another (Sashina, 2012).

At the same time, it should be emphasized that this category has an interdisciplinary nature and it can be used both in relation to the analysis of the state of national economy, and in relation to business entities. It is appropriate

to recall the expression “Detroit is a bankrupt city,” which indicates the presence of other objects of study.

We share the approach by Korotkov (2014), that the enterprise development sustainability indicates its ability to *“maintain positive trends in the conditions of instability of the external environment, increasing competition and the uncertainty of the situation”*. In almost all the works of the last decades, sustainable development is considered, among other things, from the standpoint of ecology, i.e. as a process of change, consistent without fail with current and future needs (Akimova, 2009).

Various aspects of stability are noted in the analysis of sustainable development problems (Sashina, 2012): *“on the one hand, the stability of the economy is objective; on the other, it is also the unpredictability of economic development”*.

The positions of other authors can also be cited; their analysis and generalization allows the concept under consideration to be perceived as a special process of resource management, which allows not only preventing and eliminating the extreme degree of instability of an economic entity itself, but also contributing to the observance of growth rates and increase in all indicators of its activity.

The establishing of the information era has contributed to the construction of a new paradigm of strategic enterprise management. So, if the industrial enterprises of an industrial society maintained their competitiveness due to availability of lower costs than their competitors, then the differentiation strategy is more often used in modern realities. Digitalization of the economy forces the development of integrated business processes that are conceptually different from traditional ones (the principle of functional specialization, a combination of high professionalism of personnel, etc.)

The growing importance of intangible assets should be noted: this has become no less important than investment and management of real assets. [2, 8] Foreign experience convincingly shows that ignoring the significance of intangible assets, their insufficient accounting, and even more so, the lack of an appropriate strategy for their involvement, significantly reduces the effectiveness of crisis management of enterprises.

We can note the construction of a modern indicative base and planning among the relevant factors for increasing the efficiency of industrial enterprise management; this allows us to objectively formalize a set of management measures. Planning allows us to mentally anticipate and evaluate our future actions through logical analysis and comparison of possible options for events and choosing

the best option for development. Moreover, it is very important that the team of an enterprise clearly understands the idea of the strategy, because only in this case it can be successfully implemented.

Experts note that in those enterprises where anti-crisis planning is actively used, the consequences of the crisis are less painfully overcome (Body, 2008). This is understandable: at such enterprises, a large number of managers, analysts and other specialists are involved in the development of the strategic plan, which allows for better working out in bottlenecks offering more ideas and more actualizing their obligations to implement the plan.

Based on the scope of the planned actions, strategic planning is carried out regarding the general strategic, tactical and operational-thematic levels. The construction of a holistic system of an indicative base and strategic planning of the production and financial activities of an economic entity requires the need for mutually coordinated plans of all levels (mission, strategy, actions, landmarks, budget, etc.).

In the course of our study, we found that the decisive factor in adapting an enterprise to environmental changes is its organizational structure, as well as the level of development of an entrepreneurial culture that ensures the effectiveness of the communication strategy and management structure. The absence of the latter, unequivocally, leads to the bankruptcy of the enterprise (Ozhegov, 1990; Bobyleva, 2010).

The priority direction of the strategic planning of a crisis enterprise is to determine the opportunities for accelerated development based on the use of Ryakhovsky (2012), promising forms of business processes.

In a market economy, strategic planning is characterized by non-rigid predictive and indicative features.

It should be noted that the strategic plans are less formalized; they have a multivariate character and, in general, reflect only guidelines that must be followed in conditions of increasing uncertainty.

A very effective tool for increasing the flexibility of strategic planning is budgeting. Its study allows us to quickly coordinate the complex of various financial parameters of the enterprise with the corresponding indicators of operating activity, to increase the current stability of the movement of resource flows of the economic entity.

In enterprises, a wide range of planning documentation is involved in the management process in the form of business plans, programs, budgets, estimates and projects. Each of these planning documents has its own target

load. For example, a business plan focuses mainly on individual projects; the restructuring program is focused on the development of budgets and schedules for the implementation of restructuring measures, etc.

Analysis and generalization of special literature made it possible to single out the basic principles of the planned economic sustainability of development:

1. Analysis and diagnosis of the developed anti-crisis measures of an enterprise.
2. Elaboration of leading and urgent indicators for the early identification of possible threats to bankruptcy of an enterprise.
3. An analysis of the adequacy of the measures being developed to threats and expected losses.
4. Mobilization and balanced distribution of various types of resources to neutralize and response risks (Deming, 2009; Kushbokova & Shamurzaev, 2009; Ovsyanikov, 2011).

The lack of interconnectedness and inconsistency of these principles impedes the possibility of an appropriate solution to the problem under consideration, a comprehensive and systematic implementation of measures to prevent enterprise bankruptcy. In our opinion, the use of such plans should be considered as a significant structural and functional area of crisis management, which has a number of common features and characteristics.

Many special models have been developed, and the system of estimated indicators has been formed to diagnose economic sustainability and the effectiveness of an enterprise. One of the most popular models for analysing a firm's performance is the balanced scorecard model by Kaplan & Norton (2010). It is advisable to use it in assessing the effectiveness of an enterprise based on a group of financial and non-financial parameters.

The specialized literature contains a detailed analysis of the comparative characteristics for financial and non-financial indicators intended for diagnosing an enterprise based on a study of the system of financial indicators; systems of special indicators focused on markets and customers; business process component of the scorecard; and organizational development indicators (Fomin, 2008; Shikhabakhov, et al., 2012; Aloyeva & Misakov, 2013).

In the course of our research, we talked with the leaders of different management levels at industrial enterprises of the Southern Russia. We found that, as a rule, managers and analysts in developing strategic plans at industrial enterprises are limited only by financial indicators, ignoring other important indicators regarding the sphere

of production and innovation. It is clear that this makes it impossible to objectively diagnose the sources of crisis situations and thereby minimize possible damages and losses.

In our opinion, when forming the indicative basis for management of sustainable development on the grounds of a balanced scorecard in the context of Russian practice, a number of possible problems should be taken into account.

Firstly, it is necessary to get rid of the simplified idea concerning the relationship between the set of measures and the goals provided, because there is a serious methodological problem of the need to reduce the main performance indicators to the objective function (Fomin, 2008).

Another, but not less important problem is an objective choice of a hierarchical ordered and unified target landmark being a basic indicator.

All this suggests the need to supplement the considered balanced scorecard with mathematical models, which will describe the relationship of the complex of planned activities and enterprise functions. We are talking about the need to use a strategic map, which will allow identifying and determining the mathematical and logical relationships between the components of the balanced scorecard.

Experts note that the proper use of the balanced scorecard allows ensuring the implementation of such functions in the activities of the enterprise as transformative, stimulating, evaluative, communication, and regulatory. This, ultimately, allows optimizing the goals of various levels of enterprise management and thereby ensuring its economic efficiency (Fomin, 2008; Kaplan & Norton, 2010; Ryakhovsky, 2012).

We consider it appropriate to refer to the balanced scorecard model by P. Horvat; its implementation provides for the passage of five stages:

- Creation of organizational conditions for implementation;
- Conducting strategic analysis;
- Development of a balanced scorecard;
- Cascading management;
- Ensuring consistent use of the balanced scorecard (Garaedagi, 2010).

Other models can also be cited; they also demonstrate significant advantages for the formation of an indicative base for managing the economic sustainability of industrial enterprises through the introduction of the balanced scorecard, which allows us to quickly identify the

shortcomings of the management system used and take effective measures to address them.

CONCLUSIONS

Ensuring sustainable economic development of enterprises is associated with the need to resolve the complex of problems concerning the destructive impact of a crisis, the formation and expansion of production and competitive horizons of activity.

In our opinion, the priorities for forming an indicative base for planning and ensuring the sustainable development of industrial enterprises should be based on principles such as preventive response, selectivity, timeliness and a compromise of interests of all parties, cost-effectiveness and quick payback, and also information transparency.

Prioritization of the formation of an indicative base for management of sustainable development involves identifying instability factors; the coordination of management goals, objects and the management subject; determination of resource requirements; provisioning an organizational compliance of the management mechanism; diagnosis of final results and adjustment of the strategic management mechanism.

The implementation of stabilization measures and strategies for the sustainable development of industrial enterprises may not so pronouncedly change the structure of manufactured industrial products, but this will definitely lead to a positive change in its quality aspects and cost parameters.

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