Evaluation Methods Basis of Strategy Development Effectiveness of the Enterprise

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ABSTRACT
The urgency to study the problem is caused by the necessity to make management decisions in terms of reducing goods life cycle, reducing profitability of production, increasing speed of technological progress. In this context, this article aims to identify and elaborate the tools for integrated diagnostic of strategy efficiency, taking into account the relationship of parameters which characterize various spheres of enterprise activity, and to formulate integral indicator of strategic effectiveness, which can be accepted as the criterion for evaluating the effectiveness of strategic development. The leading approach to the study of this problem was the systems approach, used in the development of methods for efficiency evaluation of strategic development, it allows to identify priority factors of the strategic development of the company. The article substantiates the use of value approach to management as a methodical bases of diagnostics of the effectiveness of the strategic development of the industrial enterprises; the matrix tool was developed, supplementing the information-analytical foundation of management. The results of the research work may be useful for effectiveness evaluation of the strategic development of industrial enterprise and for identifying priority strategic development factors and making recommendations to improve the value of business.

KEYWORDS
Strategy development effectiveness, value approach

ARTICLE HISTORY
Received 13 May 2016
Revised 28 June 2016
Accepted 02 July 2016

Introduction
The observed trend of increasing complexity and uncertainty of the external and internal environment of economic entities functioning is becoming one of the

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key problems of rhythmic and sustainable business development. The decision of problem of the strategy planning tools development is particularly essential. The decision which is made by managers more often in such a situation, is limited in raising financial activity effectiveness and it has an effect but for the short term period. Long-term planning compels managers to develop more flexible goals and formulate the problem under the influence of changing internal and external conditions of functioning. At the same time, facing fierce market competition, enterprises must optimize strategic work by enhancing the synergy of all spheres of their activity.

Under such circumstances, the management of industrial enterprises has to generate the set of development goals for each activity, which will be aimed at achieving the common strategic efficiency, and identify synergic links between departments and develop them. The solution for the problem requires creation of an independent decision-making support system to coordinate and control the activities of all structural units.

Creating and maintaining such coordination between strategic resources of organization and ever-changing external environment requires understanding and taking into account the key factors that determine the success of the organization. Once the most important competencies are identified, you need to focus on them for continuous improvement of the organization's work in this area. This requires the systems for analysis and accounting the indicators of efficiency, which should be the most accurate and objective.

The essence of value-based management concept is that company management should be aimed at ensuring the growth of the market value of the organization and its shares, provided anticipatory profits. All organizations aspirations, analytical methods and techniques of management should be directed towards one common goal: to help organizations maximize their value by building a process of management decision-making on key value drivers (Helfert, 2001; Byrne, 2001).

Problems of increase of strategic management efficiency were studied in a large number of works of Russian and foreign scientists. Significant contribution to the development of theoretical and methodological approaches of this area of strategic management was made by I. Ansoff & E. Mcdonnell (1990), J.B. Quinn (1992), K.R. Andrews (1987), M.E. Porter (1998), C. Prahalad & G. Hamel (1990), P.F. Drucker (1999; 2002). Problems of increase of strategic management efficiency were studied were also developed in the work of Ashmarina et al. (2016) and Lubnina et al. (2016).

However, we primarily rely on national experience of economic analysis, which is significantly different in different countries. It influences greatly the theoretical constructions and limits their practical application at domestic industrial enterprises.

Methods

The study is based on scientific studies, reflecting the results of fundamental and applied research in the field of economy of industrial enterprises, strategic and general management. The study was conducted using the existing regulations governing the functioning of the aviation industry of the Russian Federation.
Scientific methods of scientific abstraction, analysis and synthesis, systematic approach have been used to achieve the objectives, as well as private methods - graphics, statistics, comparative analysis, economic and mathematical modeling, and others.

Results and Discussions

_Evaluation characteristic “effectiveness of strategic development” was revealed_

A significant part of research works on the concept of management effectiveness, deals with generalizing theories that span the entire organization, and private theories, in which efficiency is considered in relation to specific aspects of management practices, such as the management of human capacity, levels of management or leadership. Individual researchers share the concept of effectiveness into the system and operational efficiency.

System efficiency is dependent on how efficiently arranged management at the enterprise, in other words, the composition and number of units, their affiliation, functions distribution. Thus, the effectiveness of the control system determines the quality of the organizational structure and management processes, but not the quality of specific managers.

Operational efficiency - the ratio of administrative performance and effort expended - in the first place is determined by business qualities of the manager, and how rational their potential is used in the organization. For the purposes of this study it is necessary to highlight the concept of evaluation system of strategic development effectiveness from organizational performance evaluation system. Analysis of the research showed that the main differences lie in the approach to the definition of the evaluation subject and management levels. Traditional models for assessing the organizational effectiveness proposed doing it through the analysis of resource allocation and utilization processes. Here are the main indicators of labor productivity, capital productivity, return on capital, equipment utilization rates. Also common indicators in these models are those describing the efficiency of financial and economic activity of the enterprise: profitability, turnover, sales growth.

At the same time a lot of alternative policy options aimed at achieving the goals are available for the company. From this perspective, the strategy is efficient if it achieves its goals. The degree of achievement of company goals can be interpreted as the impact of the process of strategic management and, accordingly, as a measure of strategic effectiveness.

The leaders focused on the achievement of the efficiency of the strategic development, most often focused on achieving goals, which can act as: expanding the scale of production, increase in the number of sales, improve product quality, innovation, cost reduction, product added value.

The leaders focused on achieving effectiveness in their strategy, through its "profitability" are aimed to ensure that:

— avoid spending over planned for its implementation;
— produce to the amount of no more and no less than the level of demand for these products on the market;
— avoid staff proliferation;
— increase productivity;
— avoid excessive changes.

Strategic Management feature is that it seeks to overcome the limitations of existing resource. In this regard, we need a comprehensive approach to assessing the effectiveness of strategic development, which on the one hand, will determine the required resource provision for goals achievement, and on the other hand, to determine the feasibility of the additional resources involvement into the company activity.

Effectively implemented strategy is an important factor determining the competitiveness of the enterprise and its capacity for sustainable development.

In order to evaluate the effectiveness of the strategic decisions it is necessary to operate the indicators that reflect the dynamics of the company's ability to obtain the maximum result with minimum utilization of resources (labor, capital, materials, energy, information). At the same time the object of evaluation can act as resource efficiency and process efficiency. Process efficiency assessment is the measurement of the performance efficiency, which is defined as the degree of achievement of the planned results. Evaluation of resource effectiveness is performed using the performance indicators calculated as the ratio of the results achieved and resources used.

On the one hand, a measure of the strategy effectiveness is the return from resources involved in its implementation (Ashmarina, 2015). Thus, the resource performance indicators assess the effectiveness of the implementation of a specific embodiment of the strategy for the given resource constraints under the current management.

At the same time a lot of alternative policy options aimed at achieving these goals are available for the company. The degree of achievement of enterprise goals can be considered as the process efficiency of strategic management and, accordingly, as a measure of the strategic development effectiveness.

Value-based approach is proved to be the methodical basis for the evaluation of strategy development effectiveness of the industrial enterprise

Target approach, an approach based on the theory of systems, multi-parameter approach to the assessment can be distinguished among the approaches aimed at assessing the effectiveness of enterprise activity (including its strategic effectiveness),

The target approach is a look at efficiency, which emphasizes the central role of the goal as the performance evaluation criteria. In accordance with this approach, the organization exists to achieve certain objectives, and the degree of implementation of tasks reflects the degree of its effectiveness. The approach to assessing the effectiveness of systems based on the theory involves the analysis of organizational behavior, providing for the allocation of core elements (the "input", "process", "exit") in the system and its adaptation to a high level of system conditions more, of which it is. Systems theory focuses attention on the fact that the survival of the organization depends on its ability to adapt to environmental requirements. Meeting these requirements depends on whether the complete cycle of "input - process - output" is in the center of
management attention. Consequently, the criteria should reflect the strategic effectiveness of these provisions. This approach explains why resources should be used for activities that are not directly linked to the achievement of organizational goals.

Multi-parameter approach involves assessing employee satisfaction and groups involved in the organization.

Using the traditional financial model for evaluating the effectiveness of the market is based on the type of economic thinking, according to which the efficiency of the company is affected by the factors of the internal environment (objectives, organizational structure, tasks, used technology and human resources). Consequently, the working efficiency is achieved by making strategic and operational decisions based on current capabilities of the organization. This assessment of the effectiveness of past decisions and analysis of development options based on the financial information reflected in those statements.

The cost financial model differs from the traditional one by taking into account existing alternatives and associated risks. This model is an integrated assessment of all aspects of the organization of business value through the performance.

The study concluded that as methodical bases of strategy effectiveness evaluation it is advisable to use the concept of Value-Based Management, (VBM), focused on ensuring the sustainable development of the enterprise in the long-term period.

In accordance with the concept of VBM the criterion of enterprise management effectiveness acts the increase of businesses market value. Gains in business value provide businesses the ability to create economic benefits. In this case the economic profit is created through the merger of capital (financing function) and their investments in mechanisms to receive certain business profits (investment function). The company, on the whole can be seen as a set of value creation mechanisms.

Economic profit is the most common indicator of the effectiveness of the organization, which represents the amount of profit after covering all the organization costs, both operational and financial, associated with the performance of obligations to creditors and owners. Financial costs related to the servicing of equity capital in the amount corresponding to the requirements of the owners return on the capital invested are also included, regardless of the size of dividends actually paid.


To determine the effectiveness of the process of adding value to the basic characteristics of strategic effectiveness may be used: efficiency and productivity. In this case, the performance can be expressed in terms of the ability to create added value effectively in the process of basic and investment activities (ROIC), and productivity - through the assessment of the ability to generate positive financial results, as the ability to use invested capital effectively (ROIC-WACC). The relationship of activities of the enterprise as sources of economic profit is presented in Figure 1.
Thus, the efficiency determines the level of achievement of objectives and planned results in production and business, marketing, financial, social, innovation and other activities of the enterprise. With regard to the business process efficiency characterizes its ability to meet the requirements of internal and external customers and is manifested as a result of business processes they interact with each other, as well as interaction with the external environment of the enterprise. Thus, the impact of being a quality parameter of effectiveness evaluation of business processes it reflects the level of implementation of the goals and describes how to satisfy the needs and expectations of the consumer or the client process. Efficiency can be improved by improving the products or services (outputs), which the company offers to the market. Depending on the situation, efficiency can be improved by redesigning processes or redesign of products (services) to the performance requirements defined by external and / or internal customer and consumers.

Productivity is an integrated, multi-factor index, which combines skills and interests of staff, level of technology, product quality, quality of management, marketing, social and economic environment. The best combination of factors of production determines the best use of resources, their best performance. Productivity is primarily affected by internal factors: the technology, production organization and management. Thus it is necessary to take into account macroeconomic factors that may facilitate or hinder performance improvement. This includes government policies, economic and social strategy and direction of their implementation, the business cycle and international competition, the natural environment, geographical and climatic features, demographics (structural and social) changes.

Productivity as the quantity parameter of the business process assessment, is the ratio of the volume of goods manufactured or services sold to the organization, to the costs for their creation. It reflects the effective use of resources (labor, capital, materials, energy, information) into the business processes of the organization.

The matrix instrument for the evaluation of strategy development effectiveness of the industrial enterprise has been elaborated

The existing balance between productivity and efficiency, which determines the efficiency of the selection and implementation of the strategy, can be evaluated by special tools, based on the principles of the matrix analysis. Visualization of the dynamics and balance of components of strategic effectiveness is performed by the polar coordinate system. The parameter that
expresses the productivity assigns the polar angle and the parameter that expresses the efficiency - the polar radius. Scaling the polar angle and pole radius are tailored to the economic substance of the parameters used.

To measure the factors expressing productivity the factors affecting the value of return on invested capital (ROIC) were studied.

$$\text{ROIC} = \frac{\text{NOPLAT}}{\text{IC}}$$ (1)

The comparison of the dynamics of these factors can be represented in a linear coordinate system that allows the identification of changes in the direction of the integral index of the performance of ROIC, which can be considered as the identification of performance areas such as the characteristics of strategic effectiveness (Fig. 2).

Figure 2. Changes of ROIC indicator

Divided into 4 sectors the matrix involves the formation of 4 categories of performance management tasks as a component of the strategic effectiveness.

1 sector corresponds to the situation of business development and increasing its capacity. Accordingly, in this sector, the company faces the task of ensuring the accelerated profit growth compared to the amount of invested capital.

2 sector reflects the situation of productivity growth due to elevated profitability in operations, while reducing the amount of capital used. Performance management tasks in this sector should be linked to the preservation of the productive capacity and the implementation of adequate investment to ensure the company's ability to create added value and generate profits in the long run.

3 sector corresponds to the situation of reduction potential. In this sector, the company faces the problem of optimizing the use of invested capital.
4 sector reflects the situation of lost productivity as a result of reducing the profitability of operations while increasing the level of utilization of capital. In this sector, the company faces crisis management tasks associated with the revision activities. An important task is to prevent the loss of replacement additional funds lenders and investors.

The worst situation of the company requires its presence in the 4th sector. Enhancing strategic effectiveness by enhancing the performance will provide a positioning move point counterclockwise.

Scaling the polar radius is performed by using the parameter which reflects the efficiency of activities. The efficiency is described as company's ability to generate positive financial results, the ability to use the invested capital effectively (ROIC-WACC).

— When scaling the polar radius 3 identification zones can be selected: The zone of poor financial results, which is determined by the condition ROIC<WBC (the cost of borrowed capital) – it is limited by the radius r1 (r1 = WBC);

— The zone of satisfactory financial results WBC<ROIC<WACC – it is limited by the radius r1 и r2 (r2 = WACC);

— The zone of accepted financial result WACC<ROIC – it is limited by the radius r2 и r3 (r3 – the targeted result of efficiency criterion (ROIC-WACC)).

The area of poor financial results is characterized by insufficient operating profit for full implementation of enterprise service obligations of borrowed capital (loans). The business value is destroyed in this zone.

Financial results can be considered satisfactory when the company receives a positive net income that is generated after the interest payments on the debt, but the size of the net profit is not sufficient to meet the investors' requirements for return on invested capital, an adequate level of business risk in full. Accordingly, satisfactory financial results zone also lacks gains.

The company's activities can be recognized definitely effective only in the zone of acceptable financial results. An acceptable financial result is a net profit, which is sufficient for the payment of dividends, corresponding to the requirements of investors to return on invested capital, formed taking into account the level of risk of the investment. It is the area where the formation of economic profit happens, providing the enterprise gains.

Thus, each company can be associated with a point on the coordinate plane (Fig. 3). The coordinates of the point will indicate the achieved value of the criteria of both productivity and efficiency. Radius (R) deposited in this point corresponds to the value of the business.
Figure 3. Matrix of strategic effectiveness evaluation in the polar coordinate system

The matrix has three areas of application. Two of these arise from the general functions of portfolio analysis. Matrix, first, allows to evaluate the effectiveness of enterprises strategy at the moment, and, secondly, provides a basis for strategic decision-making in the field of corrections or adjustments of chosen strategy for business processes for its implementation. The third area of application of the matrix is derived from the method of scaling used in its construction. The division of the plane into sectors is based on a qualitative transition from one class of problems faced by enterprises and their units to another. Therefore, the proposed matrix can be applied in the current management of companies as a whole, and the individual units as well and serve as the basis for the construction of a controlling system. Thus, the diagnosis of strategic effectiveness is the basis of the formalization process control which is the economic substantiation of administrative decisions aimed at selection of strategic options for development and improvement of current activity of the enterprise.

I. Ansoff & E. Mcdonnell (1990), C. Prahalad & G. Hamel (1990) made a great contribution into the formation of strategic management as the development of methods for evaluating the effectiveness of enterprise strategy. Applied research works of a number of well-known consulting firms also contributed to the need of the management problems solution of the business community. Nevertheless, with the growth of interest to the Evaluation of Strategic Management efficiency it is becoming increasingly evident that the theory and methodology of evaluation of strategic effectiveness is still quite far from its formation completion and, in some cases, its classic installation may be subjected to harsh criticism. The gap between selected strategies and operation management is considered as a general lack of the classical methods of strategies estimation reflected in the matrix portfolio analysis and others. The
main task is not only to control the development of the strategy, but also its implementation. There is an objective need to coordinate strategic objectives with operational objectives of departments and key employees.

**Conclusion**

Companies of various industries operate in a highly complex, uncertain and dynamic modern social and economic environment. Global information market formation, where you can get almost instant access to information about any goods from any vendor in all regions of the world, caused sharp increase in competition between business entities. Inertial organization of business management, with rigid structure does not allow responding quickly to constantly changing market requirements. The basic condition for sustainable development in the competitive struggle is the ability of the economic entity for long-term vision and consistent implementation of various innovations in the range of products and services, management, technology and so forth. To achieve a competitive advantage the enterprise should be better than its competitors not only in terms of all business processes, but also in the overall efficiency. The clear strategy, expressed in terms of objectives and indicators of business processes should be aimed at meeting the expectations of customers and shareholders (investors). This approach from general to the particular (top to bottom) reveals completely new business processes in which and through which the company will be able to achieve excellence.

**Implications and Recommendations**

The research work may be helpful for the educational institutions, leading training and retraining centers in the field of economics and management, and entrepreneurs themselves in order to create a system of evaluation of the enterprise strategy effectiveness.

**Disclosure statement**

No potential conflict of interest was reported by the authors.

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