

# Strategic Effectiveness Evaluation as Integral Part of the Modern Enterprise Management

Elena G. Popkova<sup>1</sup>, Sergei A. Abramov<sup>2</sup>, Lilia V. Ermolina<sup>3</sup> & Evgenii V. Gandin<sup>4</sup>

<sup>1</sup> Volgograd State Technical University, Volgograd, The Russian Federation

<sup>2</sup> Volgograd Economic-Technical College, Volgograd, The Russian Federation

<sup>3</sup> Samara State Technical University, Samara, The Russian Federation

<sup>4</sup> Financial University under the Government of the Russian Federation, Moscow, The Russian Federation

Correspondence: Lilia V. Ermolina, Samara State Technical University, 244, Molodogvardeiskaya street, Samara, 443100, The Russian Federation. E-mail: ermolina@mail.ru

Received: January 6, 2015 Accepted: February 4, 2015 Online Published: June 13, 2015

doi:10.5539/ass.v11n20p16

URL: <http://dx.doi.org/10.5539/ass.v11n20p16>

## Abstract

Strategic planning and management create the conditions under which key workers develop the mission, business philosophy, and strategic plan in the course of teamwork. This opens up the organization to new solutions, allows you to interact with the environment, revealing the potential of employees, and turns the organization into a team of professionals, driven by the disclosure of personal potentials. Optimal set of quality indicators and targets of the strategic plan provides its implementation in real-time, enhances the level of control and, consequently, increases the efficiency of the organization. Management is the process of updating the company as a constantly evolving and relatively open complex system, which consists in the selection and development of its productive management deviations in the work and activities of the staff. Successful strategic management requires an estimate of the effectiveness of strategic enterprises which are the subject of this article.

**Keywords:** economic activity, management, modern enterprise, socio-economic system, strategic effectiveness evaluation

## 1. Introduction

Modern economics still includes non-regulated intra- and inter-sectorial mechanisms for joint economic activity. There are significant lag qualification managers that control firm as an organization. Efficient functioning of the economy of the subject based on the strategic development of its system-resources in conjunction with heterogeneous external organizations on a systematic level remains undeveloped.

In this regard, the development of techniques and practices of development of management organization and its resource base in cooperation with business entities of the environment are essential for improving the theory of socio-economic systems and business. In the presence of such system, resource management firm becomes able to plan and successfully implement the investment process. Development of methods of strategic planning and performance management of the firm's resources, as well as managing their interaction, are intended to create an organization in which the realized economic relations diverse business entities. Subject of the research is Strategic effectiveness evaluation and its role in the modern enterprise management.

## 2. Materials and Methods

Measuring the effectiveness of strategic planning is based on a comparative analysis of economic activities of the organization with the objectives. Evaluating the impact of the strategy is seen as a feedback mechanism to adjust the strategy. Evaluation of the strategy can be of private or integral character:

- Assessment developed specific policy options to determine their suitability, feasibility, acceptability, and consistency to the organization;
- Comparison of the results with the implementation of the strategy objectives (Eppink, 2013).

It seems clear that the effectiveness of strategic planning can be seen in broad and narrow senses. In the narrow sense, the effectiveness of strategic planning (as a time-limited process) is the ratio of the result (developed by

the company's strategy in terms of its completeness, consistency, consistency, compliance situation, timeliness, etc.) to the resource costs associated with the development strategy.

In broad sense, the impact of strategic planning is understood as the effective implementation of the developed strategy. The second approach is more than justified, as "formal presence" strategy (strategic plan) does not mean the successful development of the organization, so the process of strategic planning makes sense only in the case of the practical implementation of the developed strategy. In this regard, this article is devoted to methodological and methodical approaches to the assessment of the effectiveness of the organization's strategy. Evaluation of the effectiveness of the strategy can be carried out on three levels (Table 1).

Table 1. The main directions of evaluation of the effectiveness of the organization's strategy

Level of evaluation of the effectiveness	Directions of evaluation
Effectiveness of the implementation of certain strategic projects	1. Cost of the project over its budget 2. Duration of the project compared to the plan 3. The size of the resulting effect of the project compared to the expected effect 4. The amount of additional (external, indirect) effects encountered in the implementation of the project
Degree of achievement of strategic objectives	Level of achievement of business performance (long-term and mid-term)
Degree of compliance of strategic objectives interests of stakeholders	The success of the strategy depends not only on achieving the goals of the company, but also on the degree of consideration of the interests of stakeholders: government, suppliers, lenders

The first three parameters assessing the effectiveness of individual strategic projects are traditionally included in all systems of business planning and investment planning (Table 2).

Table 2. The main parameters assessing the effectiveness characteristic

Criteria	Sphere of application	Weaknesses	Strengths
1. Return on Investment (BCR or PI)	Formation of rational set of projects with an investment during one year	Reflects the relative attractiveness of the project and makes it possible to rank the projects as to preference for including in the program	Ignores the scale of the project. No unit of time given. Obtained by the PI set of projects is not always optimal (the problem of diversification, interconnection projects, their liquidity and scale)
2. Net present value (NPV)	Evaluation of all the identity projects with a fixed start and completion dates. Assessment of organizational, financial and technical measures in the current activities of the company	Takes into account the scale of a particular project. Easy to calculate. Unambiguous interpretation.	Gives a correct estimate to continuously renewing projects only in conjunction with ECF. Inapplicable for evaluation of economic feasibility of the service life of assets (e.g., equipment) and for comparing the projects with different periods of life
3. The internal rate of return (IRR)	A comparison of the yield of processes which are underlying projects. The modified method (MIRR) is used for the same purposes	Provides compatibility with alternative investment. Does not depend on the discount rate, chosen by analyst. Provides a unified	One project can have multiple IRR, which makes it difficult to interpret the results of calculation. Incorrect in the accounting of reinvestment of revenues. Manual calculation

		evaluation of all projects, it is easy to develop reference values	often impossible or inaccurate. When comparing projects only by IRR, the risk is not accounted
4. Payback period (PB)	Sub-indicators for the rejection of projects with unnecessarily stretched time periods of receiving benefits. Evaluation of capital risk of the project	Gives an estimate of the project in terms of capital turnover. Allows rejecting projects with a lifetime, similar to the period of amortization of investments	Does not allow assessing the project after the payback period. Calculation is not unified (several modifications are known)
5. The equivalent annual income (annuity) - ECF	The basis for the choice of economically viable life of the asset (equipment). Sub-indicators in the analysis of individual projects to assess their "financial strength".	Easy to calculate. Unambiguous interpretation. Correctly accounted for reinvestment of revenues	Does not take into account the scale of a single project, and gives a correct assessment only in conjunction with NPV. In the analysis of economically viable life of old equipment, it should be supplemented by NPV

The fourth option - the definition of "side (external)" effects - is necessary, but often overlooked, when analyzing the effectiveness of strategic programs step. However, the appropriate use of tools for assessment of projects' efficiency involves the consideration of all the most significant impacts of the project: in determining the effectiveness of the investment project, all the consequences of its implementation - direct economic and non-economic - should be taken into account.

The degree of achievement of strategic objectives is based on the conformity assessment of the planned targets of the strategic plan and of the reached level (Yue & Teng, 2014).

The simplest use of the target model assumes that there are few objectives, so they can be made achievable, and they are well formulated, so that they can be understood and measured.

As the characteristics of the target efficiency, a coefficient of adjustment (k) is used, which can be represented as follows:

$$k = (E / E_0) 100\% \quad (1)$$

where E and E<sub>0</sub> - actual (observed, reporting) and projected (desired, expected) effect (figure), respectively.

Unfortunately, the study of the target model revealed several problems of its application (Popkova et al., 2013):

- difficulty of the targeted approach consists in the fact that organizations have a multiplicity of objectives;
- purpose of the organization is quite specific (Saeed et al., 2012);
- used temporal perspective: a successful result for a short period may be unsuccessful for a long period;
- differences in the effects of the problem of events inside and outside the organization.

Thus, the problem of measuring the effectiveness of the strategy of the target depends on the accuracy of target formulating firms. Formulation of objectives must meet three basic criteria (Golam & Akhtar, 2011):

- objectives should directly follow the logic of business and selected strategic trajectories;
- objectives should be as specific as possible and be formulated in the form of quantitative indicators that can be monitored and of periodic inspection (Evans, 2012);
- quantitative indicators should be based on the ratio of the original situation (position) in the firm.

The sequence of formulating objectives should also follow the natural logic of strategic actions and their results:

1. Objectives related to the position of the firm's business in the market: the desired value for the money, the image of the goods (services) and its reputation with key customers, the desired level of customer loyalty, and so on.

2. Operational objectives that characterize the form and content of the business processes of the company and change the positioning of the business in the industry market: early impact on the client's needs, reducing the level of individual types of costs and so on (Pine et al., 2013).

3. The target level of sales provided by the selected value for money (Zhang & Tan, 2012).

4. Financial objectives: to determine the level of financial investments (investments) and financial returns (profit margins, etc.).

### 3. Results

Strategic level evaluation of the effectiveness of organizational change is related to the development of the marketing activities of strategic projects, increasing the cost of business, so it is not tied to specific sales (Harrigan, 2012). Marketing costs are referred to as attachments, or investments, and the main criterion for assessing is the situation of the company in the market due to organizational changes (Galbraith, 2013).

To evaluate the effectiveness of organizational changes at the strategic level, we propose to use the indicator of strategic effectiveness of organizational changes SEOC (strategic efficiency of organizational changes):

$$SEOC = P(t_1, t_2, \dots, t) \times a \times f(O; I; L) \quad (2)$$

where  $P(t_1, t_2, \dots, t)$  - strategic capacity,  $a$  - capacity factor,  $O$  - cumulative effect of the ambient (outside) environment,  $I$  - aggregate impact of internal (inside) of the medium,  $L$  - indicator of leadership participation.

Strategic potential  $P(t_1, t_2, \dots, t)$  is defined by a set of target characteristics (parameters)  $t$ , for ensuring which the organizational changes are conducted. A list of desired characteristics  $t$  is formed according to specific strategic intents and is given in the form of individual goals of changes. The extent of reaching them influences the total result - strategic potential  $P(t_1, t_2, \dots, t)$ , i.e. this potential is a function of progress of target characteristics (Ofori & Hinson, 2013).

To ensure a high strategic potential, the values of the targeted characteristics as a result of changes  $t$  should be close to the values that were set initially in the form of targeted  $t$ . In addition, the synergistic effect from the achievement of all targeted parameters should be maximized (Popkova & Tinyakova, 2013a):

Capacity factor (capitalized value) is used in the investment analysis to calculate the amount of money that the investor will receive after a certain number of years (Popkova & Tinyakova, 2013b). Coefficient of increase is calculated for a given rate of interest and the number of years, for which, during the assessment of investments, a special table with calculated values  $a$  is used. Formula of coefficient of increase is the following:

$$a = (1 + j)^m \quad (3)$$

where  $j$  is a given interest rate as a decimal (for example, 10% = 0,1),  $m$  - time (a year) for which the effect is calculated.

The feasibility of increasing the coefficient in the evaluation of the effectiveness of organizational change is justified by two important moments. First, simplified organizational changes can be viewed as an investment project, where the financial point of view of the investor will be interested in the capitalization of investments. Secondly, in the strategic management, the potential is something that will have the form of specific financial results in the future. The potential is converted into tangible effect gradually, becoming the basis for the formation of a different potential (thus being projected into other subsequent effects) (Kogut, 2013). Thus, over the years, the strategic potential is "capitalized" and already finds another value. Actually, in this sense, strategic and organizational changes are different from simple investment projects of validity (use).

To understand what the strategic potential of  $P$  should be ( $t_1, t_2, \dots, t_j$ ) for the provision of the given strategic effectiveness SEOC, discount coefficient  $B$  should be used:

$$B = 1 / (1 + j)^m \quad (4)$$

Cumulative environmental effects  $O$  affect the relevance of achieving the strategic potential, increasing or, on the contrary, decreasing it. The indicator can be calculated by the formula:

$$Q * \sum_{i=1}^n S_i * F_{exti} = 0; \sum_{i=1}^n S_i = 1 \quad (5)$$

where  $q$  is a function that reflects the interdependence of environmental factors (as a property of the environment),  $S$  - index of influence (share weight) of environmental factors on the process and results of organizational changes; it can be determined by expert assessments,  $F_{ext}$  - value of environmental factor (external factor) on organizational changes and their results.

Cumulative impact of the internal environment of  $I$  is defined by the formula:

$$u * \sum n_i = 1; \sum n_i = 1; \sum n_i = 1 \quad (6)$$

where  $u$  is a function that reflects the interdependence of the factors of the internal environment,  $S_i$  - influence index (share weight) of the internal environment factors on the process and results of organizational change; it is determined by expert assessments,  $F_{int}$  - value of the  $i$ -th factor of the internal environment (internal factor) for the organizational changes and their result.

The leader depends on the use of (return) strategic potential in the long term. Successful organizational change is impossible without a strong leader. Usually, he initiates the change. The key to success will be the quality manager, such as experience, knowledge, energy, ability to lead people and take responsibility, exact calculation, prudence, caution. Coefficient of leadership participation  $L$  is defined by a set of characteristics of the leader:

$$L = v(e, m, c, ps, ph) \quad (7)$$

where  $v$  is a function expressing the combination of individual characteristics in a leader,  $e, m, c, ps, ph$  - respectively, educational, spiritual and moral, creative or generative, emotional and psychological and physical characteristics of a leader.

#### 4. Discussion

Thus, the rate of effectiveness of strategic organizational changes SEOC will always have a unique value, depending on the strategic potential of organizational changes, the specific effects of environmental factors, unique set of the factors of internal environment, the leader's personality changes - all adjusted for evaluating the effectiveness of a particular point in the future.

The proposed formula for calculating this indicator is specially designed for strategic management. The final result of evaluating the effectiveness of organizational change is a comprehensive assessment of various areas of marketing and other activities in terms of their operational and strategic effectiveness, adjusted for the company's strategic position in the market.

#### 5. Conclusion

In the context of the modernization of production and management, the organizational management structures are unable to change in response to changes in the environment. Management of the organization, which is a relatively closed system, is necessary during the moments of fixing its new stage of development. This approach is particularly significant for the control on the lower levels of the hierarchy of the organization. Ideal technical and technological basis of functioning of the organization ensures the possibility for entrepreneurial activity at the upper levels of its hierarchy.

This division management is carried out in the theoretical consciousness, while in practice they exist simultaneously. It is an emphasis on the use of a particular method, depending on the specifics of the corresponding stage of the life cycle of the organization. Therefore, evaluation of strategic effectiveness is an integral part of the modern enterprise management, as it provides the timely identification of the necessity and assessment of the perspectives of its activities.

#### References

- Aaker, D. A., & Mascarenhas, B. (2014). The Need for Strategic Flexibility. *The Journal of Business Strategy*, 5(2), 74-83. <http://dx.doi.org/10.1108/eb039060>
- Eppink, D. J. (2013). Planning for Strategic Flexibility. *Long Range Planning*, 11(4), 9-15. [http://dx.doi.org/10.1016/0024-6301\(78\)90002-X](http://dx.doi.org/10.1016/0024-6301(78)90002-X)
- Evans, J. S. (2012). Strategic Flexibility for High Technology Manoeuvres: A Conceptual Framework. *The Journal of Management Studies*, 28(1), 69-89. <http://dx.doi.org/10.1111/j.1467-6486.1991.tb00271.x>
- Galbraith, C. S. (2013). Transferring Core Manufacturing Technologies in High-Technology Firms. *California Management Review*, 32(4), 56-70.
- Golam, K., & Akhtar, M. H. A. (2011). Evaluation of customer oriented success factors in mobile commerce using fuzzy AHP. *Journal of Industrial Engineering and Management*, 4(2), 361-386.
- Harrigan, K. R. (2012). *Strategic Flexibility: The Economics of Strategic Planning*. Lexington, Massachusetts, Lexington Books.
- Jaykumar, A., Anbalagan, G., & Kannan, L. (2012). CSR in India-a vision for the future. *The Business & Management Review*, 2(1), 94-103.
- Kogut, B. (2013). Designing Global Strategies: Profiting from Operational Flexibility. *Sloan Management*

*Review*, 27(1), 27-38.

- Ofori, D. F., & Hinson, R. E. (2013). Corporate social responsibility (CSR) perspectives of leading firms in Ghana. *Corporate Governance*, 7(2), 178-193. <http://dx.doi.org/10.1108/14720700710739813>
- Pine, J. H., Peppers, D., & Rogers, M. (2013). Do you want to keep your customers forever? *Harvard Business Review*, 73(2), 103-114.
- Popkova, E. G., & Tinyakova, V. I. (2013a). New Quality of Economic Growth at the Present Stage of Development of the World Economy. *World Applied Sciences Journal*, 5, 617-622.
- Popkova, E. G., & Tinyakova, V. I. (2013b). Drivers and Contradictions of Formation of New Quality of Economic Growth. *Middle-East Journal of Scientific Research*, 11, 1635-1640.
- Popkova, E. G., Morkovina, S. S., Patsyuk, E. V., Panyavina, E. A., & Popov, E. V. (2013). Marketing Strategy of Overcoming of Lag in Development of Economic Systems. *World Applied Sciences Journal*, 5, 591-595.
- Saeed, R., Mehdi, G., & Mostafa, J. (2012). Evaluation model of business intelligence for enterprise systems using fuzzy TOPSIS. *Expert Systems with Applications*, 39(3), 3764-3771. <http://dx.doi.org/10.1016/j.eswa.2011.09.074>
- Yue, C., & Teng, Z. (2014). Study of Shuanghe Medical Corporation Human Resource Performance Management System. *International Journal of Business and Social Science*, 5(9), 300-310.
- Zhang, J. S., & Tan, W. (2012). Research on the Performance Evaluation of Logistics Enterprise Based on the Analytic Hierarchy Process. *Energy Procedia*, 14, 1618-1623. <http://dx.doi.org/10.1016/j.egypro.2011.12.1142>

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).