

# Definition of the effective strategic enterprise management model in context of economic security

## Definición del modelo efectivo de gestión empresarial estratégica en el contexto de la seguridad económica

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#### ABSTRACT:

The article offers an optimal strategic management model for any large enterprise aimed at economic growth and national interests. Methods: analysis of documents, reports, statistical data, generalization. Findings: The presented economic model of enterprise strategic management is applicable in practice. An example given in this article describes the OJSC «Sevmorneftegeofizika» development model effectively implemented in the conditions of economic instability. Conclusions: The tools and methods described in this research are used to elaborate the enterprise development strategies in relation with the real economic situation. The article also contains a brief declaration of the algorithm for making theoretical grounds at the stage of choosing the most appropriate enterprise development strategy.

**Keywords:** Strategic management, economic security, large enterprise

#### RESUMEN:

El artículo ofrece un modelo óptimo de gestión estratégica para cualquier gran empresa destinada al crecimiento económico y los intereses nacionales. Métodos: análisis de documentos, informes, datos estadísticos, generalización. Hallazgos: el modelo económico presentado de gestión estratégica empresarial es aplicable en la práctica. Un ejemplo dado en este artículo describe el modelo de desarrollo «Sevmorneftegeofizika» de OJSC aplicado efectivamente en las condiciones de inestabilidad económica. Conclusiones: las herramientas y métodos descritos en esta investigación se utilizan para elaborar estrategias de desarrollo empresarial en relación con la situación económica real. El artículo también contiene una breve declaración del algoritmo para establecer los fundamentos teóricos en la etapa de elegir la estrategia de desarrollo empresarial más adecuada.

**Palabras clave:** Gestión estratégica, seguridad económica, gran empresa

## 1. Introduction

The right choice of strategic benchmarks that will allow to realize an enterprise material and

technical and staff potential, is the guarantor of effective work, long-term goals achievement set by the management for the enterprise, and in our case - by the state.

Strategic goals are important strategic milestones that determine the company's specific desired state and its separate subsystems. Strategic goals are being formed on the basis of a vision of the company future (Markov & Kuznetsova, 2012, p. 160).

The development strategy implies a planned (stable) economic growth and an enterprise development, and these two concepts «growth» and «development» should be considered in detail. To trace their interconnection and differences.

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## 2. Methodology

Theoretical and methodological base of the research included the works of leading researchers. The study is based on the scientific-technical literature, which addresses the issues of strategic development of the enterprise, statistical data, financial analysis and technical reporting of JSC «Sevmorneftegeofizika».

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## 3. Results

In industry, the enterprise development can occur while maintaining the activity scale, i.e. the development does not necessarily imply the enterprise growth.

We can define the concept of «growth» as an increase in enterprise size (firstly in the staff) and an expansion of the output volume, the growth of enterprise material and economic indicators.

The «Development» is to be understood as a qualitative progressive movement based on improved management, the functioning of the enterprise itself, its material and technical base improvement, training and enhancing the staff creative potential, a gradual planned increase in labor productivity.

Three models of the organization's evolution are selected:

- ideal model - for the progress in the enterprise innovations are being introduced with considering the country's scientific and technical capabilities;
- real model - reforming the enterprise's various structures activities when undesirable economic and financial situations arise;
- radical model - global changes of various organizations functioning aimed at a complete change in the enterprise structure with a view to enhancing competitiveness and production efficiency.

The growth in production, i.e. enterprise life cycle, can be vertical, horizontal and diversified unlike the development. This cycle includes the stages of formation, growth (raise), maturity, recession, stabilization, reorganization, and others (Belyaev & Korotkov, 2012, p. 47). The development and growth in this case are the synergists of enterprise manufacturing and economic process. This implies the main concept definition of «enterprise development strategy model» described in this article. The key stages of its implementation are described below. There are several interpretations:

The strategy is a single concept that links and directs the growth of a complex, large organization.

The enterprise development strategy is an integration of strategic alternatives and management strategy (or functioning) by any enterprise.

The development strategy characterizes the forward movement of the enterprise as a whole, i.e. the progress, and the strategic alternative is the basis for the management strategy implementation (Kleiner, 2012, p. 36).

Any process of strategy implementation has a planning stage and an effective management phase:

- strategic planning - the development of an effective program or an action plan with considering the possibility of approbation of the created model. This model should reflect the

organization's response to possible changes in the external environment to achieve the desired result;

- strategic management - the implementation of a specific strategy due to the manager's (managers') potential capable to implement a plastic regulation and to make necessary changes to the organization for the competitive advantages implementation for the future.

Strategic planning is the most difficult part of human activity in manufacturing and economic field. This is the process that should cover the enterprise best staff involving, if necessary, third-party specialists. We can say that strategic planning is a kind of art for forecasting, calculating and selecting options, researches. The hierarchy is the basis of the building the enterprise strategy model. How many organizations, so many development strategy models.

However, the technology for creating any model of enterprise strategy should include the following stages:

1. Evaluating the financial and economic environment:

- the impact of financial and economic external environment;
- the potential of the organization's or the enterprise's internal capabilities.

2. Defining the enterprise policy (goal-setting).

3. Structuring the strategy and choosing alternatives:

- a marketing strategy;
- a financing strategy;
- a production plan in accordance with the consumer market;
- defining research and developmental work;
- a social sector strategy;
- a forecast of various risks;
- an environmental strategy.

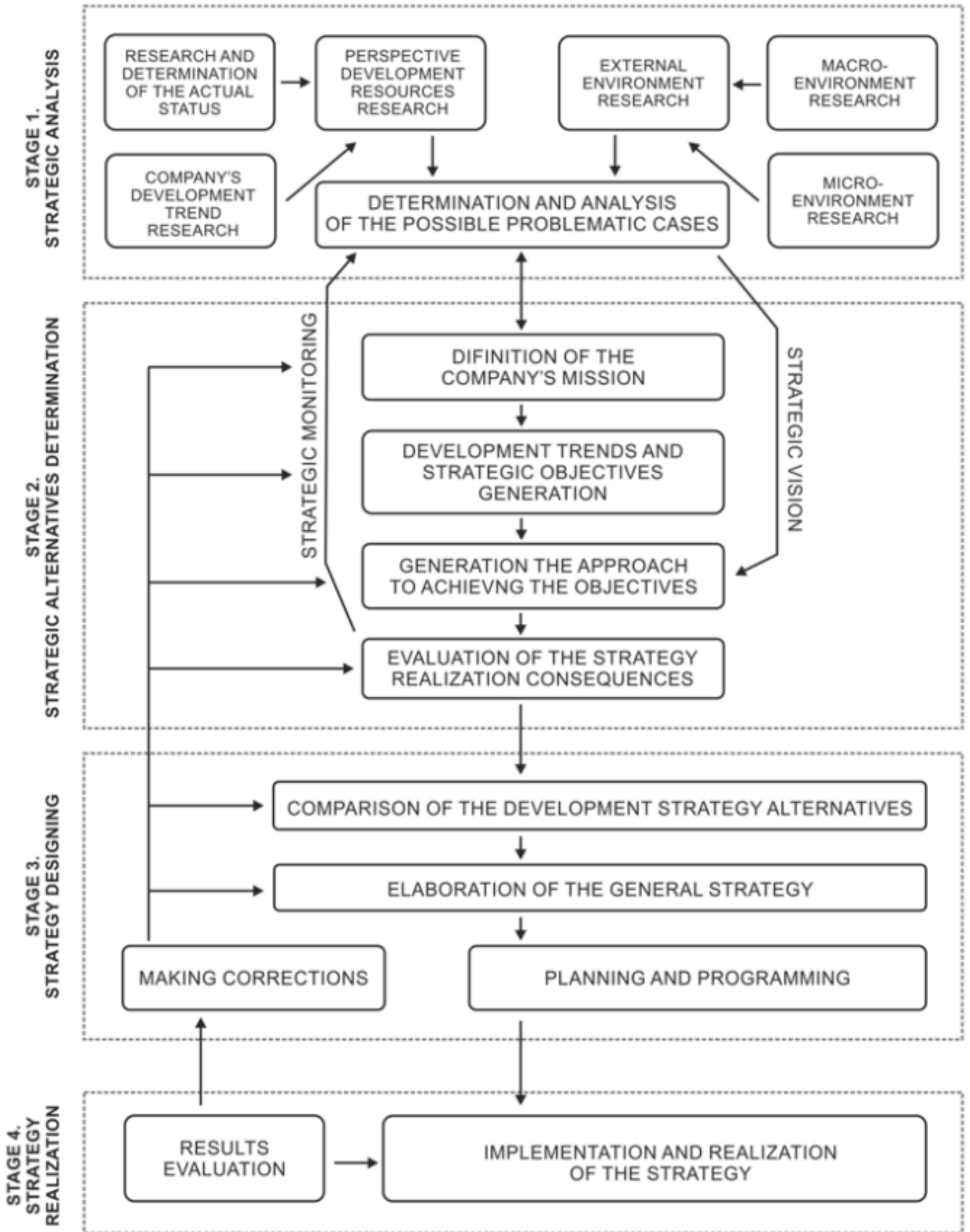
On the basis of the above-mentioned model, the document «The Organization Strategic Plan» including:

- The purpose and objectives of the enterprise activity;
- Short-term and long-term plans;
- The main and alternative kind of enterprise activity;
- Prepared major implemented and effective plans;
- Investments and financial revenues distribution;
- Possible non-emergency situations (the calculation of financial, economic and other risks);
- Various financial documents (annual reports, balance reports for the accounting period, reports on savings, the cost program, and others).

There are different methodologies by which the enterprises development strategy models are being created. Let's imagine tools, methods and technologies of strategy formation which exist in theory and can be applied in practice. Figure 1 schematically shows the formation process of the model reflecting the enterprise development strategy. It's more laborious to realize stage I of strategic process of enterprise management as it involves drawing up a strategy implementation plan and selecting a highly qualified staff.

**Figure 1**

The formation process of the model reflecting the enterprise development strategy.



It can be seen from the scheme that the strategy formation process should include the following four main stages: strategic analysis, identification of strategic alternatives, strategy development and strategy implementation.

Based on the above scheme, the rationale for any enterprise development strategy can be formed, i.e. the technology of this process is shown here:

- the creation of a highly qualified managerial team which will be able to unite the entire

team's efforts aimed at achieving strategic goals;

- • *strategic matrices* use when the organization forms the development strategy relying on two parameters: business competitive positions and the stages of manufacturing life cycle.

The use of strategic matrices is a variant of the expert assessments method that are based on the study of diversified quantitative and qualitative indicators that affect the results of business. The matrix method should not be regarded as the tool used in practice. This is an analytical method by which a manager can analyze the enterprise strengths and weaknesses, determine the opportunities and prospects.

For example, the use of mathematical methods when building models is convenient for existing sets of relevant quantitative data. Here are used specific methods of social and economic systems analysis, forecasting the economic growth of the enterprise or the branch, the economy balance and, of course, strategic planning based on some important components of mathematical analysis (enterprise products and services, supply and demand, resources and costs, national accounts, and etc.).

Economic and mathematical methods and models are used to solve the structural and measurable enterprise problems. With the help of linear programming, at present the tasks of production planning are being effectively solved: investment development, purchasing and optimal equipment loading, drawing up the program of production and selling products at given labor and material resources, and others.

It should be noted that correlations in the economy are more often nonlinear. At present the nonlinear (parametric, integer), stochastic, dynamic programming has developed on the world market. That's why to create the enterprise strategic development model one will have to apply system analysis and synthesis methods .

The specificity of the analysis and synthesis method in strategic planning is the differentiation, i.e. the decomposition of financial and economic systems and the processes in them into composite semantic parts, structures. A similar research method is necessary to be applied in solving any potential tasks of strategic planning.

The analysis directly allows to solve complex problems related to the strategic plans development, the production systems development at various levels. The analysis effectiveness is directed to the production systems functioning and to the achieved level of enterprise development. The analysis of the organization state, the result of which is aimed at enhancing production and economic indicators, will help determine the initial positions of the strategy alternative model. Analysis and synthesis are always considered in the methodological system. Any of the above methods has its advantages and disadvantages. But all these methods should be taken into account in developing a strategy for a prospective enterprise development.

Let's present an example of the realized effective model of the OJSC «Sevmorneftegeofizika» development in the conditions of the changing economic external environment. The main activity of «Sevmorneftegeofizika» (hereinafter referred to as the OJSC «SMNG») is marine, production, research and experimental and geophysical working on the continental shelf of the Russian Federation and other countries for the purpose of studying the geological structure of oil and gas bearing basins.

The OJSC «SMNG» is a marine geophysical company providing a wide range of marine geophysical services: marine seismic surveys of 2 D and 3 D, radionavigational provision, digital processing and complex interpretation of seismic data (Sevmorneftegeofizika, 2013).

The OJSC «SMNG» technical and economic performance indicators are reflected in the annual accounting documentation that involves annual reports approved by shareholders' general meeting, as well as various accounting statements, including the annual balance sheet accompanied by an explanatory note.

Against the backdrop of Russian competitors' increased activity by 2014 the OJSC «Sevmorneftegeofizika» has not first taken any steps to upgrade its fleet. In the spring of 2015, the state enterprise switched to a survival regime, drastically having reduced all costs and shifting the shore staff to a four-day workweek.

It is worth highlighting the key points for the state diagnosing of enterprise internal environment. They are:

- Material and technical base state
- Personnel potential status

Let's consider the enterprise material and technical base.

As it has already been mentioned above, the main enterprise production base is its fleet. The OJSC «SMNG» owned 6 vessels. Four vessels could be used for 2D work all around the world (primarily in the Arctic), and two small boats - for working in shallow water. Five of six vessels are equipped with modern equipment that was purchased in the West.

It should be noted that the OJSC «Sevmorneftegeofizika» has its computer centers located in Murmansk and Gelendzhik. Also modern computer systems are on each ship.

Let's consider the enterprise personnel potential.

The number of pensioners was about 60% of the total number of employees. During the last years young specialists are not detained at the enterprise but they are looking for the use of their forces at other enterprises (foreign ones in particular). This was due to the low loading of the OJSC «SMNG» fleet which was in sludge in the autumn-winter-spring period, and in 2015 it did not start working in June. Also skewed toward the number of shore personnel although the OJSC «SMNG» main kind of activity is marine explorations. The company marine staff was about 200 people that is much less than half of total staff then (474 people). For comparison, in Western and new Russian companies (the OJSC «SKF»), the ratio of maritime personnel to shore personnel is approximately five to one. That is, one office worker has five people working in the sea. This is a correct strategic proportion.

Initially, the diagnosis of the internal environment company state in 2014 showed that the company long-term and strategic objectives looked like this:

- winning the dominant position at the market, approving and strengthening the organization's position;
- taking strong positions at new dynamic markets;
- the movement towards increasing the number of clients improving the quality of service;
- the organization modernization, the introduction of scientific and technological revolution achievements to more meet the population needs;
- the increase in volumes of products sales, the expansion of the goods assortment list and services offered for sale;
- the increase in cash proceeds from sales due to the search for products sales optimal channels;
- improving profitability through inventory management and improving production quality.

The organization short-term goals can be formulated as follows:

- an exit from the crisis financial situation;
- ae modernization and timely repair of equipment, allowing to reduce their idle time;
- an increase in the price for the enterprise sale of services and products;
- making a full calculation with the budget for all types of tax payments and fees;
- an expansion of the number of contractors profitable for the enterprise with a constant reduction in the number of contractors who have shown themselves to be unscrupulous executors.

The strategic potential of enterprise development was assessed.

The overall picture of enterprise economic indicators reflects a positive dynamics of its development and a stability of its financial position. The relative slowdown in the growth rates of indicators in 2013 compared to 2012 was explained by the changing situation at the geophysical services market. In these conditions it was important to maintain existing positions and to increase a geophysical services 2 D share, to have government long-term contracts, to preserve the reputation of a reliable contractor, along with the optimal solutions

search for the implementation of geophysical studies 3 D as the basis for the future development and increase in the value of the OJSC «SMNG» assets.

It should be noted that in 2014 there was a sharp decline in the enterprise technical and economic indicators, due to the insufficient number of won tenders that was directly related to the OJSC «SMNG» material and technical base obsolescence and the enterprise low activity at the market.

The deterioration of the situation in 2015 was expected. It was the first year when in June (the beginning of the field season in the Arctic) none of the OJSC «SMNG» vessels had started working. The first work was planned in the middle of July, 2015.

Therefore, in the new plan of the OJSC «SMNG» strategy development there were several solutions to tackle the leading world marine geophysical contractors' level, such as Western – GECO; C.G.G .; PGS; Polarcus:

The state's real support, first of all, in updating the OJSC «SMNG» material and technical base.

1. The marine cluster creation from geophysical companies included in the OJSC «Rosgeologiya».

2. Lobbying by the OJSC «Rosgeologiya» which has the opportunity for it, building two (least) new 3 D vessels that will be primarily used on the Arctic shelf and the shelf of the Far East, as the new, well-equipped modern vessels with dozens of seismic tanks need for carrying out three-dimensional and multicomponent seismic, complicated but already implemented at the world oil market, 3D, 4D, 4C methods, Q-technology, OVS and others (Sevmorneftegeofizika, 2013).

Based on the strategic plan, two alternatives were expected for the OJSC «SMNG» development.

The first way - the hard one is to reduce the shore staff and transition to the regime of financial savings that has come into effect since April 2015. This option allowed to settle the enterprise costs, to transfer it to a balanced budget, to focus on the seismic surveys 2 D performance. It is a short-term tactical plan of actions for 2015 that allowed the OJSC «SMNG» to support afloat for the first time.

The second way is an innovative way of development connected with the production diversification. The main goal is a breakthrough to a qualitatively new level in its main kind of activity - marine geophysics. To achieve this goal it is necessary to unite enterprises of the same profile into a single cluster, to increase production, to involve the state in management that implies by itself a setting goals from the center which sees the entire situation in an industry as a whole not its individual components. The association of geological exploration companies under the general management of the OJSC «Rosgeologiya» is the need for time.

As a result of a single cluster formation, the new association has already had the fleet consisting of ten specialized vessels capable to carry out marine seismic surveys of 2 D and 3 D. All the vessels have an ice class and are capable to work on the shelf of the Russian Arctic and the Far East.

The total number of the enterprises staff has also increased. It should be noted that the OJSC «SMNG» has a subsidiary «Sevmorneftegeofizika-Yug» (SMNG-Yug) located in Gelendzhik. At any time, the OJSC «SMNG» vessels can be relocated to the south and start working in the Black Sea and the Caspian Sea under the operational guidance from the SMNG-Yug office. According to the laws of synergy, the association of enterprises led to a positive effect, to an increase in production and economic indicators and an access to the world market. This conclusion can be made on the basis of using *the forecasting method* to formulate the rationale for the enterprise development strategy.

The entry into a single cluster has led to the division of the Russian shelf into zones of responsibility for each enterprise. For the OJSC «SMNG» the zone of responsibility should be the Barents Sea, the Pechersk Sea, the Kara Sea, the Laptev Sea, the Black Sea and the Caspian Sea. The strategic positive effect of this division led to the fact that the enterprises



had got rid of vessels large transitions out of the region to the region, they work with the agent companies, they know well and continue working systematically in the same areas by the same vessels from year to year, thus reducing preparatory time for writing Projects and a conclusion of Agreements.

The main difficulty in implementing this effective development strategy is the age of ships that approaches 30 years and the enterprises «age» staffing. Since 2016 the enterprise has been participating in training of onshore and, first of all, marine personnel for the work on modern geophysical vessels. After the formation of a single cluster it is possible to rotate the staff, to invite specialists from other offices, to exchange experiences. The enterprises are also offered the program for young specialists training:

- To send the OJSC «SMNG» leading specialists to the profile higher educational institutions that they should lecture on marine geophysical researches, tell about the rich experience of the OJSC «SMNG» work, try to pay to students' close attention to this theme.
  - To coordinate with the Chairs on students attraction to production practice in the summer field season.
  - «To run» the maximum possible number of students on the OJSC «SMNG» vessels.
  - To offer the most promising young professionals employment in the company. To think over young specialists living conditions in Murmansk, if necessary, to conclude contracts with hostels for their living, partially/fully paying for this accommodation.
  - To develop a housing program by young professionals.
  - To introduce the preparatory phase of entry young professionals into the production process. This requires to envisage their work in the OJSC «SMNG» all production departments during the time necessary for understanding the production process. The main departments are radio geodesy party, cameral party, computer center, marine working service.
  - On the basis of the characteristics given by subdivisions heads, after passing the preparatory stage to rotate young specialists for further work place.
  - To appoint a curator for each young specialist who will assist him in mastering the specialty throughout the year.
  - To think over the young specialists' career growth program.
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## 4. Conclusions

We can conclude that despite the deterioration of main indicators in the OJSC «Sevmorneftegeofizika» production and economic activity the from the beginning of autumn, 2014 to the present day the strategic potential of the enterprise development, laid down by the team work in previous periods, is very high.

The practice shows that there is no universal model of all enterprises sustainable development as there is no single universal strategic management. Each enterprise is unique and the strategy development for each of them has significant features. They depend on the enterprise position at the market, the dynamics of its development, the production potential state, the functioning environment, and many other factors.

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## Bibliographic references

Belyaev, A. A., & Korotkov E. M. (2012). *Crisis management: Textbook* (2nd ed.). Moscow: Yuniti-Dana.

Kleiner, G. B. (2012). *Strategy of the enterprise: Textbook*. Moscow: Case.

Markov, V. D., & Kuznetsova, S. A. (2012). *Strategic management*. Moscow: Infra-M.

Sevmorneftegeofizika. (2013). *Investor relations: Annual report for 2013*. Retrieved from: <http://www.smng.com/07052013.html>

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2. Arctic Murmansk State University, 9 Commune str., 183038, Murmansk, Russia

3. Arctic Murmansk State University, 9 Commune str., 183038, Murmansk, Russia

4. Arctic Murmansk State University, 9 Commune str., 183038, Murmansk, Russia

5. Russian Presidential Academy of National Economy and Public Administration (Murmansk branch), 3 Volodarskogo str., 183038, Murmansk, Russia

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