

II International Scientific Conference GCPMED 2019
"Global Challenges and Prospects of the Modern Economic Development"

STRATEGIC MANAGEMENT OF THE ENTERPRISE UNDER
THE CONDITIONS OF ECONOMY DIGITALIZATION

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Abstract

Nowadays, it is undeniable that the role of strategic management as a core driver of successful functioning and sustainable future development is increasing for the Russian economy, which is developing under an unstable work environment and transition to the digital economy. The organization's interest in increasing the level of competitiveness determines the theoretical and practical demand for the business processes reorganization in accordance with the consumers' needs and environmental changes. According to the authors, it is important to shift emphasis to the need to develop organizational changes in the company, focused on the interests of internal and external users. The importance of strategic planning, management of company's economic strength, and efficiency increase of its use under modern conditions determines the relevance of this study. The national economy is structurally represented by regional economic systems that are significantly differentiated by the level of impact on the labor potential state, and the processes of its formation and development, due to differences in available resource opportunities and implemented management systems. In this regard, it is important to improve the regional forms and methods to manage these processes based on the logistics principles.

2357-1330 © 2020 Published by European Publisher.

Keywords: Business processes, digitization, environmental uncertainty, managerial transformation, re-engineering.



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1. Introduction

Strategic management has become one of the main ways to ensure the company stability. Socio-economic development of enterprises requires changes in organization and management of production processes. The need for organizational changes is also caused by the fact that the united economic area, arising as a result of globalization changes, modifies not only the competition level of enterprises, but also its conditions: quality of goods and services, level of production costs, labour productivity, and preproduction time. As a result, it is necessary to transform the business, adapting it to the emerging new and global conditions, and form new competitive advantages based on company flexibility and mobility. Large manufacturing companies, where the external environment and plurality of enterprise structure elements have their uncertainty due to the activity scale, are more influenced by this impact. The uncertainty factor is manifested in the changes of duration and strategy level, economic and political situation, fluctuations in demand and supply for a particular type of service, volume of services provided by a particular entity, enterprises profitability, competition, and interpersonal relations. Uncertainty is another strategic management tool that every organization must be prepared to use. The rapid implementation of information technologies in all life spheres contributes to the digital economy building. Russian industry should take advantage of such technological changes to achieve high rates of economic growth. The Russian economy emphasizes the digitalization of services and public management, but developed foreign countries attach particular importance to industry.

At the same time, the priority is given to market and economic efficiency criteria that increase the management flexibility relevance. One of the tools is strategic management of economic development, which is meant to ensure sustained growth with a sufficiently high rate and quality.

2. Problem Statement

Due to low innovation activity of industrial enterprises, the Russian industry is slowly transforming. Therefore, the main purposes in the field of the digital economy should include: to study successful experience of the digital technologies introduction in developed countries and to define promising opportunities for domestic industries development, to renovate productive capacities, to reduce terms and costs of new products design and production, and to increase state funding of Research and Advanced Development in the field of digital industrial technologies.

3. Research Questions

The paper deals with the formation of the basic principles of sustainable enterprise development under the conditions of competition and external environment instability. In Russia, the concept of "digitalization" is focused on developing new types of services, and the issues of possible changes in development systems, manufacture, and production distribution are not addressed. Consequently, the key areas of economic activity of industrial enterprises in the digital economy should be searching, development, and implementation of new industrial technologies and innovations that contribute to the labour productivity growth and increase in the resource exploitation efficiency. The authors developed the

theoretical foundations of strategic planning and management, which are focused on business adaptation of the enterprise under the conditions of uncertainty.

4. Purpose of the Study

The purpose of the study is to develop the theoretical foundations of strategic management improvement and enterprise development, formation of the business strategy, and building a model to evaluate and select strategic decisions. The main strategy purpose is to achieve competitive advantages and enterprises profitability. The study identified the basic principles of sustainable enterprise development and investigated their relationship with the organizational and functional structure.

5. Research Methods

The authors used the following methods: methodology of fuzzy sets theory, modeling of enterprises production and economic activity, as well as methodology of functional modeling IDEF0. The methodological basis to build the development strategy under modern conditions is the theory and concept of both foreign and Russian researchers.

Miller (1962), the founder of the strategic management theory, believes that strategy is "the definition of the main long-term purposes and objectives of the enterprise and the maintenance of the resources allocation policy to achieve these goals" (p.374). Mintzberg, Ghoshal, and Quinn, (2001) notes that "strategy is not only a plan, but a set of decisions and actions" (p.132). One of the management founders, Ansoff (2007), thinks that strategy is "a set of rules for decision-making that the company is governed by in its activities" (p.167). According to Ackoff (1994), strategy is an action plan to achieve a company long-term goals.

Nowadays, most enterprises are characterized by a "passive" form of management, that is to say, decision-making is a reaction to current events. Managers actually follow the current events, often fight against symptoms, not the causes of phenomena, and unconsciously give priority to operational goals to the disadvantage of strategic ones. All this negatively affects the business feasibility and throws into question the company existence in the near future.

In addition, this management form causes many problems and contradictions, leads to indicators decrease, and creates a "vicious circle of problems", that is an avalanche increase of various problems with their strong correlation with each other.

The most spectacular examples of contradictions are the contradictions between:

- interests of the enterprise and the state (in the name of fiscal authorities), that is to say, the lack of tax planning,
- return on equity and return on financial markets, that is to say, mistakes or financing strategy lack,
- interests of particular functional services within the company, that is to say, lack of the common goal and strategy leads to competition between particular units.

For example, according to some experts and analysts, the problem sources are low management efficiency, destructive approach to business planning, inefficiency in financial management and production costs, and making unreasonable decisions.

To sum up, we can say that most of the enterprise problems are strategic. Consequently, there is the urgent need to develop actions and activities, aimed at building competent strategies for business development and management from modern approaches. In order to determine strategic benchmarks in supply chains, it is recommended to define strategic goals, activities and key performance indicators, based on the Balanced Scorecard methodology (Van Vliet, 2010; Kaplan & Norton, 1996).

6. Findings

Further competitiveness and company existence is impossible without revision of performance principles, ways of actions, and approaches. Company re-engineering, according to new conditions and tasks, is necessary. As a fundamental principle to restructure the organization, a «customer orientation to maximize company value» should be adopted. This should ensure the development and use of such instruments and techniques by company managers that allow them to control the uncertainty level to maximize the result.

According to the authors, it is efficient to distinguish 4 levels of uncertainty and corresponding analytical tools, used for decision-making under economic environment changes (table 01).

Table 01. The correlation between the uncertainty level and type of strategy

Uncertainty level	Features	Eventual type of strategy	Techniques in operation
1 level	Insignificant uncertainty (a predictable situation)	Alternative options of possible strategies + basic forecast	Market research, value chains, Porter strategies, and cash flow analysis (NPV)
2 level	Moderate uncertainty that allows to develop an alternative scenario	Development of several behaviour lines with a clear distinction of change points between them	Scenario analysis, highlighting key success factors, stochastic modeling, financial modeling, and building a decision tree or "flywheel" of decisions
3 level	High uncertainty that concerns not only variant actions but also development directions	Working out the "strategies field" with the analysis of boundary scenarios, favorable and desirable scenarios, as well as actions that increase their probability	Scenario and simulation modeling, corporations re-engineering in order to increase flexibility and mobility, competitive analysis based on fuzzy logic, and use of options theory methods.
4 level	Totally uncertain situation	The strategy is aimed at forming an adaptive corporation (using the concept of shell companies)	Organization design of flexible mobile structures, project management methods, and risk management

The approach, described by the authors, provides thorough and systematic understanding of uncertainty. First of all, it allows us to assess analytical tools that can be used to make decisions under conditions of different uncertainty levels. Broadly speaking, the proposed concept provides a comprehensive view of uncertainty and its impact on the strategy choice. Effectively, it is a guide to make the most difficult strategic decisions.

Based on the division of the situation uncertainty level into four types, it becomes possible to distinguish typical strategic positions: adaptive, forming and preserving the right to participate in the game. In a predictable business environment, most companies keep an adaptive strategy. In this case, the purpose of the analysis is to forecast the future industry state. The strategic decisions consist of the choice of market segments and competition means. If the analysis is done carefully enough, the strategy, based on it, consists of a series of win-win actions.

At the level of insignificant uncertainty, we can use a forming strategy, but this does not happen often, because it involves a certain risk. The company that has adopted a forming strategy in order to fundamentally change the established industry structure and market participants' behaviour, thereby increases (for itself and for its competitors) the residual uncertainty of the market. Otherwise, it will remain predictable.

Using a forming strategy under insignificant uncertainty, companies try to increase this level. Under moderate uncertainty, the forming strategy aims to increase probability of the industry development through the advantageous scenario for the company. Thus, in capital-intensive industries, the use of such a strategy should restrain the competitors' desire to increase production capacity, and, consequently, prevent the emergence of its excess, leading to a decrease in the industry profitability level. As a result, it is possible either to pre-empt competitors by creating additional capacity long before demand increases, or to consolidate the industry through mergers and acquisitions.

If there is a high uncertainty level, the forming strategy changes. It is aimed at giving the market a general impetus to develop a profitable direction for the company (since this uncertainty level allows us to identify only a range of possible results).

Paradoxically, the situations that are characterized by the highest degree of uncertainty can provide companies, which have chosen a forming strategy, with higher returns and less risk than the situations with moderate and high uncertainty.

As a rule, a completely uncertain situation arises as a result of major technological and macroeconomic changes in legislation. Under these conditions, any participant of the sectoral-product market does not know what the optimal strategy should be. The role of the company that adopts a forming strategy is to create a common vision of the future (including the future industry structure and the most promising technological standards), which will serve as a guide for other market participants and help the industry move to the more stable and favorable situation.

There are some fundamental differences at the core of these positions, which, however, should not be absolutized. In addition, the strategic position of the company can be transformed with the changes in the economic environment. In general, it is necessary to develop a united dominant position.

To choose one of three positions, it is required to go through several typical steps: to study the current situation (or, at least, to assess it), to distinguish sources of competitive advantage, to formulate a business concept, to build an interaction system with a consumer, and to conduct a balanced and comprehensive assessment of the position, taking into account all interdependent factors.

The correlation of the main functions that determine the entire process to choose a strategic position (and accordingly, the structure of this process) and the requirements for the strategic management system in the organization is presented in the form of IDEF0-model (Fig. 01).

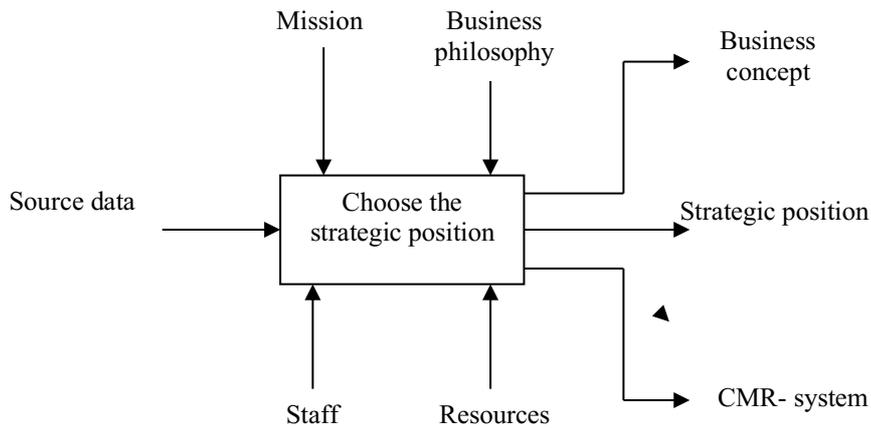


Figure 01. The choice of strategic position (external relations)

Foreign relations in this process are mission and business philosophy (as the key parameters to control and guide the process to choose strategic position), staff and organization's resources (as the means in the process to get the desired result), source data (as information, which is instrumental to analyse and develop solutions; source data is both external information and forecasts, and internal data related to the study of the organization), as well as results of the process, that is to say, the strategic position (one of the three presented), business concept, and CMR-system (the interaction system with the consumer and management of these relationships).

The authors developed the structure of correlation in this process (Fig. 02). Owing to the current situation analysis (Block A1), in terms of the company's mission, there is structured information in suitable formats for subsequent analysis. The data contain information about economic environment, current rules, restrictions, trends and forecasts, opportunities and threats for the company, as well as information about the company (internal audit). It allows to build the company profile, compare it with competitors, and identify strengths and weaknesses. With the use of the market component of the information, the study is conducted (Block A2). It is aimed at identifying the key success factors (KSF), that is to say, the sources of the company's competitive advantage. Taking into account the formulated key success factors, opportunities, threats, strengths and weaknesses, mission, and business philosophy, the concept of business development (key ideas that are used to build the organization) - Block A3 - is developed. On the basis of the business development concept, collected information, as well as the mission and business philosophy, the system of interaction with the consumer (Block A4) can be developed, and the best strategic position selected (Block A5).

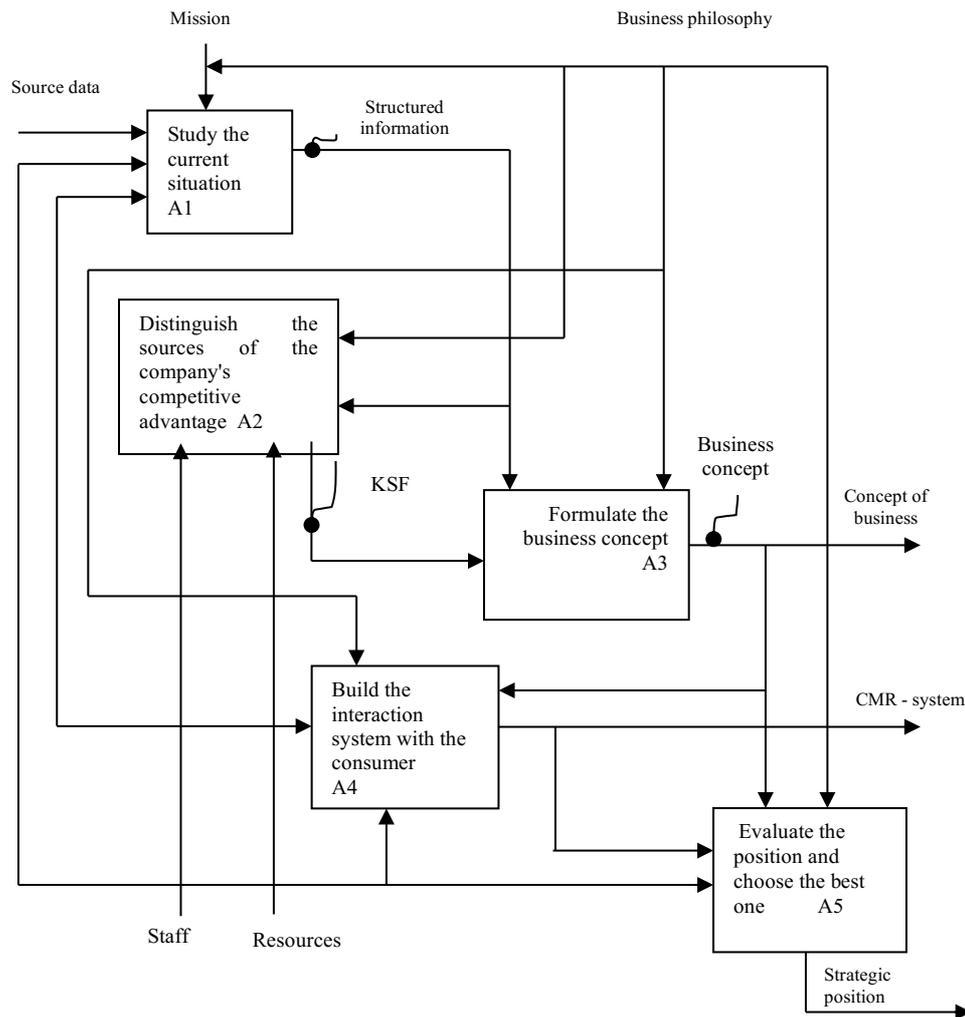


Figure 02. The choice of strategic position

This approach allows to analyze uncertainty thoroughly and systematically. First of all, it helps us assess analytical tools that can be used to make decisions under conditions of different levels of uncertainty. Broadly speaking, the concept provides a comprehensive view of uncertainty and its influence on strategy choices. It is a guide to make the most difficult strategic decisions.

7. Conclusion

Thus, the process of enterprise development is based on achieving its compliance with the consumer needs. One of the first strategic decisions of the enterprise should be the market choice to compete. The market indicators include the functions or needs to be satisfied, consumer groups in the target segments, and volumes, prices and terms of sales in target segments. External relations of this process are mission and business philosophy (as key parameters to control and guide the process of the strategic position choice), staff and company resources (as means in the process to obtain the desired result), source data (as information, which helps analyse and make decisions; source data are both external information and forecasts and internal data, related to the study of the organization), as well as

results of the process, that is to say, the strategic position, the business concept, and the interaction system with the consumer and management of these relationships.

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