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FEATURES OF MODELING COMPANY DEVELOPMENT SCENARIOS BASED ON CHANGES IN STRATEGIC MANAGEMENT

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Abstract. The article explores the role of scenario planning in modern strategic management of companies, analyzes the concept of scenario planning as a flexible tool for predicting the development of events in conditions of uncertainty. The relationship between scenario modeling and strategic management is explored, a classification of scenario types and the main stages of scenario construction are presented. Typical approaches to modeling (intuitive logic, "La Prospect", morphological analysis, etc.) are considered. Based on analytical research and comparisons of several common scenario modeling methods according to their characteristics and application, practical possibilities for use are proposed.

Key words: strategies, scenario planning, strategic management, scenario modeling, company development, conditions of uncertainty.

Introduction.

In today's dynamic market conditions of changing business environments, companies face a high level of uncertainty, so traditional forecasting methods often prove insufficient for flexible planning of the future. Under such conditions, it is advisable to use scenario planning - an approach that allows you to model different scenarios and prepare for them in advance [1, 2]. Scenario planning is part of strategic planning and consists in describing several scenarios of future development that take into account key risks and market uncertainty. As a result, managers can not only see alternative prospects, but also check the stability of the chosen strategy to various possible scenarios [2, 3], this approach contributes to building an adaptive development strategy for the company, capable of effectively responding to changes in the external environment.

Classical models and strategies of the big world are focused on the predicted future, and it is important not to be able to intrude on new challenges, risks, threats and extreme earthquakes. Increasingly, at the extreme edges, the need for adaptive strategies is realized, or else, getting stuck in a theoretical situation, and the application of the use itself, taking into account the insignificance of the mind.



The concept of scenario planning and strategic management.

Scenario planning is defined as a flexible process of describing possible future scenarios, this is a part of strategic management that involves the use of tools and methods to handle future uncertainty [1]. Scenarios in this context are specific ideas about the future that encourage reflection on the consequences of various events and help formulate action plans [4], that is, the purpose of scenario planning is not simply to predict one future, but to prepare for several possible scenarios [1, 3]. Scenarios allow you to «test» a company's strategies for their sustainability – how well the chosen strategy will be able to achieve goals under different circumstances [3]. In situations of significant strategic change (crisis, war, pandemic), scenario modeling is especially valuable - companies that use scenario planning adapt to the new environment [1, 2].

Scenarios are usually classified according to the planning objectives. Forecast scenarios assess possible future conditions based on current trends, exploratory scenarios consider alternative developments of key factors, and standard scenarios indicate the desired future state and determine the ways to achieve these goals. The above classification determines the choice of scenario building methods. For example, intuitive thinking involves creatively building future stories, checking their consistency and checking the consistency of key factors, while prospective (French school) usually begins with defining strategic goals (standard scenarios) and listing current circumstances. Another approach is represented by probabilistic modified trends. This approach is based on statistical data and trend analysis while simultaneously determining the probabilities of each scenario [4].

There are also special methods, such as morphological analysis, which systematically cover the space of all possible combinations of variables, ensuring the consistency and completeness of the developed scenarios [5]. Different approaches are united by the idea of taking into account internal and external factors (constant reassessment of the «rules of the game») to create strategic flexibility and stimulate thinking, thus experts note that the focus of scenario planning lies at the heart of strategy. That is, scenarios force the company to constantly rethink goals, strategies and resources under unpredictable future circumstances [3, 4].



The scenario creation process consists of several main steps. The first stage is (1) identifying risk factors and their importance, (2) selecting key risks that significantly affect the achievement of strategic goals, (3) formulating baseline scenarios and checking their internal consistency, (4) assessing the feasibility of implementing each scenario, and (5) conducting scenario analysis to assess the different impact of scenarios on achieving goals [6].

For example, let's consider the construction for a practical case.

1. Identifying risk factors - collecting information about the company's external environment (economic, political, technological) and internal resources, identifying potentially critical events.

2. Selecting key risks - studying less important factors and focusing on 2-4 most important factors that can radically change the course of events.

3. Formulating a scenario - describing alternative versions of the future (from the most likely «baseline» to extremes), examining them for logical consistency.

4. Probabilistic assessment - assessing the likelihood of each scenario occurring to set priorities.

5. Gap analysis - comparing the results of each scenario with the company's goals to identify potential «gaps» in the strategy.

In addition, practical methods often involve creating visual aids, such as scenario matrices, to conveniently present the results. It is also important to involve experts and stakeholders to generate ideas and improve the scenarios.

In general, the choice of approach depends on the specifics, resources and tasks of the company. Intuitive methods and morphological analysis are widely used to build qualitative scenarios, while probabilistic approaches are useful when a numerical assessment of the probability of events is required. Standard scenarios are used when there is a clear strategic vision and target state. All of them are united by an emphasis on adaptability, that is, so that the company using scenario planning is ready to quickly switch between alternative strategies, responding to changes in the environment [2], [3].



Table 1 - Comparison of scenario modeling approaches

Approach	Key Characteristics	Benefits and Features of Use
Intuitive Logic	Creative generation of scenarios based on expert opinions and stories of the future	Suitable for complex, qualitative assessments; provides space for "thinking outside the box"; however, the results depend on expert opinion and can be subjective
Prospect	A normative approach that begins with a description of the desired future and the reverse definition of the paths to it	Provides orientation on strategic goals and the definition of specific steps; requires detailed structured work (matrices, impact analysis) and significant resources
Probabilistic-trend	Relies on quantitative analysis of data and statistical trends, assigning probabilities to scenarios	Well suited when reliable data is available; allows estimating the probability of future events; however, may underestimate unpredictable shifts
Morphological analysis	Systematic construction of all possible combinations of parameters of future situations with subsequent cutting off of logically incompatible ones	Provides a structured and comprehensive overview of all options; ensures consistency of scenarios through compatibility analysis; however, complex with a large number of parameters and resource-intensive

Sources: [1-6]

The presence of developed dynamic capabilities allows for an effective response to crises, for example, to quickly reorient production or develop new markets. The advantage of the theory of dynamic capabilities is its ability to explain the mechanisms of organizational transformation, its limitations are that the concept is very abstract and difficult to quickly quantify; practical implementation requires specification, development of methods and training of personnel. Thus, the combination of strategic thinking, scenario planning, adaptive management, risk management and the development of dynamic capabilities forms a common theoretical basis for the strategic management system in conditions of instability. These approaches complement each other. Strategic thinking defines a general vector, scenarios – specific hypotheses of



development, adaptive management – learning mechanisms, and risk management and dynamic capabilities – systems for assessing and redirecting resources. At the same time, it is important to take into account their limitations. No theory provides a universal management strategy for a company, therefore an effective strategy involves the integration of several approaches taking into account the specifics of the company.

Summary and conclusions.

Scenario modeling plays an important role in the strategic management of modern companies. It complements traditional planning methods, providing flexibility and readiness for unexpected changes. As a result, companies can not only better understand potential threats and opportunities, but also formulate alternative action plans. In particular, studies show that companies that practiced scenario planning in crisis situations and operating under conditions of uncertainty (pandemic, war, etc.) were able to adapt to new circumstances faster.

Strategic management systems in conditions of crisis uncertainty are built around hybrid forecasting, adaptation and risk management tools. Its goal is not to provide perfect forecasting, but to provide the organization with flexibility and agility to survive and thrive in any environment.

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