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**METHODOLOGICAL ASPECTS OF FORMING A SYSTEM
OF ANALYTICAL SUPPORT FOR STRATEGIC DECISIONS
IN CONDITIONS OF GLOBAL UNCERTAINTY**

**МЕТОДОЛОГІЧНІ АСПЕКТИ ФОРМУВАННЯ СИСТЕМИ
АНАЛІТИЧНОГО ЗАБЕЗПЕЧЕННЯ СТРАТЕГІЧНИХ РІШЕНЬ
В УМОВАХ ГЛОБАЛЬНОЇ НЕВИЗНАЧЕНОСТІ**

The current stage of development of the global economic system is characterized by a fundamental break with traditional models of stability. We have entered an era that researchers call the “new normal”, where crisis phenomena are not temporary deviations, but become a permanent environment for business operations. As experts from McKinsey & Company note, strategic planning can no longer rely solely on extrapolation of past trends, since the speed of change exceeds the speed of adaptation of traditional management cycles [7].

A key factor in this transformation is the transition from the VUCA concept to a more rigid paradigm – the BANI-world proposed by J. Cascio [2]. In this coordinate system, the global economy appears as Brittle, Anxious, Non-linear and Incomprehensible. In such conditions, analytical support for strategic decisions ceases to be a simple support function and is transformed into a key competency of viability – Resilience.

Traditional financial indicators are no longer able to reflect the full picture of risks. This creates an urgent need to integrate non-financial indicators, in particular ESG criteria (Environmental, Social, Governance), into the overall analytics system. According to GRI standards [5], the requirements of sustainable development today are a strict strategic filter that directly affects the capitalization and investment attractiveness of the enterprise.

Global uncertainty requires businesses to move to adaptive analytics. This means moving away from rigid long-term forecasts in favor of dynamic scenario modeling and monitoring of “weak signals”. The methodological challenge is how to combine huge data sets (Big Data), artificial intelligence,

and human intuition to form solutions that are both flexible and resilient to unexpected challenges.

Therefore, the relevance of studying the methodological aspects of the formation of analytical support is due to the need to create a new type of “intellectual immunity” of the enterprise. This is a system that allows not only to react to changes, but also to proactively adapt the strategic architecture of the business to conditions that change faster than the speed of the traditional management cycle.

The traditional concept of data-driven management, described in the works of T. Davenport and J. Harris, is gradually evolving towards Intelligence-Driven Strategy [3]. In conditions of nonlinearity, the emphasis shifts from the volume of accumulated information to the speed of its interpretation and the ability to detect “weak signals”.

Classical tools of strategic analysis undergo transformation through the prism of the theory of dynamic capabilities of D. Teece [10]. PESTEL analysis is transformed into a system of continuous horizon scanning, where the main attention is paid to the convergence of factors. SWOT analysis, in turn, is transformed into a dynamic matrix of strategic maneuvers, where the key is not the possession of resources, but the speed of their configuration for new challenges.

In a world where consequences are not proportional to causes, traditional forecasting is replaced by scenario prediction. The methodology developed by P. Schoemaker [8] and K. van der Heijden [11] allows us to abandon the search for the “single correct” future in favor of constructing a spectrum of probable environmental states. This provides mental flexibility of management and readiness for decision-making in situations of high uncertainty.

The central element of the renewed analytical support is the concept of antifragility by N. Taleb [10]. Unlike simple stability, an antifragile system uses shocks for self-improvement. Analytical support in this context is aimed at diagnosing areas of fragility and forming strategies with «positive asymmetry», where the potential benefits from environmental changes significantly exceed the possible losses.

In the BANI world, traditional profit maximization is giving way to the concept of creating long-term value for all stakeholders. As R. Kaplan and D. Norton point out in developing the theory of strategic maps, the success of a modern organization is impossible without capitalizing intangible assets, among which reputation and social responsibility occupy a prominent place [6].

The integration of ESG filters into the analytical support system is implemented through three vectors:

- 1) Environmental: Using GRI standards to monitor carbon footprint and energy efficiency. Analytics in this direction allows for proactive assessment of the risks of carbon taxes and climate change regulation, which directly affects the discounted cash flows (NPV) of strategic projects.

2) Social: Analysis of inclusion, job security, and employee satisfaction. According to BlackRock Investment Institute, companies with a high level of social responsibility demonstrate greater resilience to market shocks due to customer loyalty and low turnover of highly skilled personnel [1].

3) Governance: Analytical support for decision-making transparency and digital ethics. In the era of artificial intelligence, “algorithmic transparency” is of particular importance, preventing cognitive biases in predictive models.

Thus, ESG becomes not an additional burden, but an «early warning system». Analytical support, which includes non-financial reporting, allows you to identify fragility of the business model where traditional financial analysis demonstrates stability.

Building an analytical support system in the face of global uncertainty requires a transition to a flexible digital architecture. According to Gartner research, the modern strategic analysis technology stack is based on the concept of augmented analytics, where human intelligence is enhanced by machine learning [4]. A typical architecture of such a system includes the following layers:

I. Streaming Data Layer: Unlike static storage, modern architecture operates on data in real time. The use of IoT sensors and external APIs allows you to integrate market sentiment, geopolitical news, and environmental indicators into the analysis instantly.

II. Predictive Modeling Layer (ML & AI Layer): This is where the transition to prescriptive analytics takes place. Artificial intelligence is used not to replace the manager, but to automatically detect anomalies and «weak signals» in large data sets that the human eye may miss due to cognitive limitations.

III. Level of visualization and interpretation (Data Storytelling): As T. Davenport emphasizes, the value of analytics lies in its ability to persuade. Interactive dashboards with the ability to simulate decisions («what-if») allow top management to “live” different scenarios of the future before the actual allocation of resources [3].

Digital architecture in conditions of nonlinearity must be modular. This allows the system to be antifragile: a failure in one data channel does not destroy the entire analytical vertical, and new modules (for example, for analyzing new ESG regulations) can be integrated without stopping the main processes.

The conducted study of methodological aspects of the formation of analytical support for strategic decisions allows us to form a number of conclusions that reflect the transformation of the management paradigm in modern conditions.

1. Change of target guidelines: In conditions of global uncertainty (BANI-world), analytical support is reoriented from maximizing the accuracy of forecasts to ensuring strategic viability (Resilience) and anti-fragility of the business. The main criterion for the effectiveness of the system is the speed of adaptation of the strategy to nonlinear changes in the environment.

2. Methodological synthesis: Modern analytics requires the integration of quantitative methods (Data-Driven) and qualitative interpretation (Intelligence-Driven). Scenario modeling and monitoring of “weak signals” become the foundation for overcoming management “anxiety” and preventing strategic myopia.

3. Ecosystem and ESG: Strategic justification of decisions today is impossible without taking into account non-financial indicators. ESG filters are integrated into the analytical architecture not as formal reporting, but as a tool for identifying hidden risks and a source of long-term competitiveness.

4. Technological intellectualization: The digital architecture of analytical support is evolving towards Augmented Analytics, where artificial intelligence performs the function of filtering information noise, allowing stakeholders to focus on cognitively complex tasks and ethical aspects of decision-making.

Prospects for further research in this area lie in the development of industry-specific models for assessing antifragility, as well as in improving Data Storytelling algorithms to improve communication between analytical systems and senior management. Special attention needs to be paid to studying the impact of digital ethics on strategic choices, as the role of algorithmic decisions in business management will continue to grow.

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