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THE FORMATION OF ADAPTIVE MANAGEMENT STRATEGY OF ENTERPRISE IN THE CONTEXT OF DIGITAL TRANSFORMATION

Abstract. *The article is devoted to the study of aspects related to the formation of an adaptive enterprise management strategy in the context of digital transformation. The paper aims to analyze, systematize, and summarize the existing theoretical and methodological approaches to the formation of adaptive management strategies and to determine the role of digital technologies in strategic management under conditions of uncertainty.*

The study examines modern challenges shaping the highly turbulent business environment in which Ukrainian enterprises operate, particularly amid military conflict, economic uncertainty, and digital transformation. The article systematizes key challenges faced by Ukrainian enterprises that contribute to environmental turbulence, including security, political, economic, logistical, technological, financial, human resources, marketing, institutional, ecological, social, and market-related factors. The research identifies a strong correlation between the level of adaptability in strategic enterprise management and the company's ability to respond to multidimensional external influences effectively. The study substantiates the necessity of transforming strategic management from traditional approaches toward the development of flexible, scenario-based, digitally oriented strategies capable of ensuring rapid response to changes and generating long-term competitive advantages.

The article characterizes digital technologies that serve as tools for adapting to the challenges of a highly turbulent environment, such as artificial intelligence, big data analytics, the Internet of Things, blockchain, digital platforms, and cloud computing. It was found that the application of these tools enhances the strategic planning process, improves forecasting accuracy, ensures transparency of management processes, personalizes decision-making, allows rapid response to changes, reduces costs, and increases operational efficiency. At the same time, the study revealed several limitations associated with the implementation of digital solutions: high implementation costs, risks of confidentiality breaches, dependency on external providers, the need for highly qualified personnel, and the complexity of technical integration.

Overall, an adaptive management strategy, combined with digital tools, can shape a new paradigm for enterprise development in the post-crisis period. This approach not only ensures survival in times of instability but also enables the transformation of challenges into sources of growth and strategic opportunities.

Keywords: *adaptive strategy, strategic management, digital technologies, uncertainty, digital transformation.*

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ФОРМУВАННЯ АДАПТИВНОЇ СТРАТЕГІЇ УПРАВЛІННЯ ПІДПРИЄМСТВОМ В УМОВАХ ЦИФРОВОЇ ТРАНСФОРМАЦІЇ

Анотація. Статтю присвячено вивченню аспектів формування адаптивної стратегії управління підприємством в умовах цифрової трансформації. Статті має на меті проаналізувати, систематизувати та узагальнити наявні теоретико-методичні підходи щодо формування адаптивних стратегій управління підприємством та визначити роль цифрових технологій в стратегічному управлінні в умовах невизначеності.

В статті розглянуто сучасні виклики, що формують високо турбулентне бізнес-середовище, в якому функціонують українські підприємства, зокрема в умовах воєнного конфлікту, економічної невизначеності та цифрової трансформації. Систематизовано основні виклики, що постають перед українськими підприємствами та формують високо турбулентне середовище: безпековий, політичний, економічний, логістичний, технологічний, фінансовий, кадровий, маркетинговий, інституційний, екологічний, соціальний та ринковий. Дослідження дозволило виявити тісний зв'язок між рівнем адаптивності стратегічного управління підприємством та його здатністю ефективно реагувати на багатовимірні зовнішні впливи. Обґрунтовано необхідність трансформації стратегічного управління від традиційних підходів до формування гнучких, сценарних, цифрово-орієнтованих стратегій, здатних забезпечити оперативну реакцію на зміни та створення довгострокових конкурентних переваг.

Охарактеризовано цифрові технології, що є інструментами адаптації до викликів високо турбулентного середовища: штучний інтелект, аналітика великих даних, Інтернет речей, блокчейн, цифрові платформи, хмарні обчислення. Виявлено, що використання цих інструментів дозволяє удосконалити процес стратегічного планування, підвищити точність прогнозування, забезпечити прозорість управлінських процесів, персоналізацію управлінських рішень, оперативне реагування на зміни, а також сприяє зниженню витрат та підвищенню ефективності операцій. Водночас дослідження виявило, що реалізація цифрових рішень супроводжується низкою обмежень: високими витратами на впровадження, ризиками порушення конфіденційності, залежністю від зовнішніх провайдерів, потребою в висококваліфікованих кадрах та складністю технічної інтеграції.

Загалом, адаптивна стратегія управління у поєднанні з цифровими інструментами здатна сформувати нову парадигму розвитку підприємств у посткризовому періоді. Цей підхід дозволяє не лише забезпечити виживання в умовах нестабільності, а й трансформувати виклики у джерела зростання і стратегічних можливостей.

Ключові слова: адаптивна стратегія, стратегічне управління, цифрові технології, невизначеність, цифрова трансформація.

Problem statement. In the context of global digital transformation, enterprises are facing dramatic changes in the structure of markets, business processes, consumer behavior, and technological platforms. Traditional approaches to strategic management, characterized by rigid hierarchies, long-term planning, and limited flexibility, are losing their effectiveness in the face of high dynamics of change generated by digital innovations. Optimization of resource provision and strengthening of competitive advantages. Under such conditions, there is an objective need to form an adaptive management strategy, which is based on the principles of flexibility, quick response, decentralization of management decisions, and active use of digital technologies.

However, the lack of clear methodological recommendations for building such a strategy, the insufficient level of digital maturity of enterprises, and limited analytical capacity hinder the implementation of adaptive strategizing in practice, which determines the relevance of the study.

Analysis of recent research and publications. A large number of scientific papers are devoted to the formation of an adaptive strategy of enterprise management. In particular, in the domestic scientific discourse, the problem of transformation of management strategies is covered through the prism of challenges faced by enterprises. In this regard, scientists Kopchak Y., Slyusarenko K., and Chumakov K. substantiated the need to take into account foreign experience in management to adapt to the conditions of the digital age [1]. Similarly, Samofatova V. determined the importance of sustainability strategic development of small and medium-sized enterprises in conditions of uncertainty, in particular in the digital environment [2]. Serhiychuk S. emphasized the need to build strategies for adaptation to the realities of wartime, which are inextricably linked with the digitalization of management processes [3]. The aspects of ensuring financial flexibility as the basis for strategic adaptation under martial law were investigated by N. Mykhalytska and M. Yatsyk, who identified digital tools as the key to ensuring stability [4]. The broader context of transformation processes was studied by A. Mokiy, V. Nebrat, and others; they identified digitalization as the basis of structural modernization in the post-war economy [5].

Foreign literature focuses on the applied potential of digital technologies. In this regard, Micallef P. and his co-authors proposed an agenda for the implementation of Big Data and analytics in business value creation, which is critical for adaptive strategies [6]. Aburub F. proved that the use of ERP systems has a positive effect on organizational flexibility, which is consistent with the goals of adaptive strategic management [7]. Lee I. and Lee. K. outlined practical challenges and opportunities for using the Internet of Things in entrepreneurial activities, emphasizing the importance of digital investments for building adaptability [8].

The article aims to analyze, systematize, and generalize existing theoretical and methodological approaches to forming adaptive strategies for enterprise management

and to determine the role of digital technologies in strategic management under conditions of uncertainty.

Presentation of the main results of the study. The formation of an adaptive enterprise management strategy is particularly relevant in the context of growing economic instability, which manifests itself both at the global and national levels. The modern business environment is characterized by a high degree of volatility, unpredictability of changes, complexity of management decisions, and ambiguity of economic prospects, which generally corresponds to the characteristics of the VUCA environment. Extremely difficult conditions caused by ongoing hostilities, deep structural transformations in the economy, instability of financial markets, reduced demand, loss of traditional sales channels, logistical constraints, and exacerbation of problems with access to financial, material, and labor resources. The analysis of literature sources [1-5] allowed us to systematize the main challenges that Ukrainian enterprises face in the implementation of their economic activities. So, we can highlight the following:

1. Security challenges manifest in various forms, including hostilities, shelling, territorial occupation, and worker mobilization, ultimately leading to the destruction of production infrastructure, suspension of technological processes, and loss of labor resources. These negative consequences affect all industries operating in the territories of hostilities. To counter such threats, the strategic response involves the relocation of production capacities, the decentralization of management structures, the organization of remote work, as well as the diversification of sales markets.

2. Political challenges, including frequent legislative changes, tax policy shifts, and restrictions on foreign economic activity, generate regulatory uncertainty, pose the threat of penalties, and complicate long-term planning. Usually, they have the most acute impact on enterprises focused on foreign markets and logistics operators. In response, enterprises develop mechanisms for legal support of activities, systematic monitoring of regulatory changes, and carry out strategic legal planning.

3. Economic challenges include inflationary processes, rising resource prices, and currency instability. The consequence for enterprises is a decrease in profitability,

uncertainty in cost planning, and a decrease in the purchasing power of consumers. All sectors of the economy are under pressure from these factors. The strategic response involves applying adaptive pricing, optimizing costs, and utilizing currency hedging.

4. The destruction of transport infrastructure, fuel shortages, and changes in supply routes characterize logistics. This leads to supply disruptions, contract disruptions, and rising logistics costs, which is especially critical for the agro-industrial complex, pharmaceuticals, and retail. To minimize risks, enterprises create logistics hubs, use alternative routes, and diversify suppliers.

5. A technological challenge manifested in the deterioration of equipment, limited access to modern foreign technologies, and cyber threats. The lag in technological development leads to a decrease in productivity, which is especially dangerous for industry and energy. Accordingly, strategic measures include modernizing production lines, digitalizing processes, ensuring cybersecurity, and participating in technology alliances.

6. Financial, which is characterized by the inaccessibility of credit resources, the outflow of investors, and the deficit of working capital. The result is a lack of liquidity, the suspension of investment projects, and the risk of bankruptcy, which affects small and medium-sized enterprises, as well as innovative startups, the most. Strategic responses include finding alternative financial instruments, using grant programs, crowdfunding, and collaborating with international donors.

7. The personnel challenge associated with mobilization, emigration, and staff burnout causes a shortage of qualified personnel, loss of expertise, and a decrease in productivity. The IT sector, the agricultural sector, and healthcare acutely feel this. Strategic measures in this context should be aimed at the implementation of educational programs, the introduction of flexible work schedules, advanced training, and employee support programs.

8. Marketing, which manifests itself in a change in consumer priorities and a decrease in solvent demand, leads to a reduction in sales and the need for rebranding. The sectors most affected are retail, tourism, and light industry. Strategic responses are rebranding, active marketing in the digital environment, and market segmentation.

9. An institutional challenge related to corruption, institutional instability, and mistrust, which creates barriers to investment and complicates business processes. This is especially true for construction and large infrastructure projects. To overcome problems, enterprises form partnerships with international organizations and implement compliance policies.

10. An environmental challenge has manifested in environmental pollution and the destruction of natural resources, leading to increased fines and more stringent ESG reporting requirements. The agro-industrial complex, the processing industry, and energy are the most sensitive to these changes. Accordingly, the strategies include conducting an eco-audit, obtaining certification, implementing eco-technologies, and adhering to green economy principles.

11. A social challenge that consists in increasing the requirements for corporate social responsibility (CSR), which can lead to a loss of reputation and a decrease in trust in enterprises if ignored. All enterprises are affected by these processes. The strategic response involves transparent reporting, social initiatives, and the implementation of ESG strategies.

12. Market challenges arise from the loss of sales markets, market saturation, and increased competition with imports, leading to a reduction in sales volumes and exit from markets. This is critical for the food and mechanical engineering industries. Strategic measures include expansion into new markets, development of e-commerce, and diversification of the product portfolio.

Therefore, the business environment has become extremely unstable and unpredictable, so the ability to adapt to it is a key condition for the survival of enterprises. The diversity of modern challenges emphasizes the need to develop comprehensive strategies. In such circumstances, the effectiveness of strategic management directly depends on the enterprise's ability to adapt and flexibly restructure its goals, tools, and management mechanisms in response to the fast-moving conditions of the external environment. Traditional strategic approaches, focused on long-term forecasting and rigorous implementation of predetermined plans, are losing their relevance and need to be transformed towards more flexible, dynamic, and scenario-

based approaches to strategizing. That is why the concept of an adaptive management strategy, which is based on constant monitoring of external changes, rapid decision-making, digitalization of management processes, and the development of organizational plasticity, becomes a necessary condition for the survival and sustainable development of enterprises in the modern environment.

Digital transformation, which rapidly covers all areas of economic activity, is both a challenge and a resource of strategic advantage. In particular, the introduction of digital tools provides an opportunity to model development scenarios, build dynamic risk maps, and flexibly adjust strategic plans. The process of digital transformation of strategic management encompasses the integration of technologies such as artificial intelligence, big data (Big Data), analytics, blockchain, Internet of Things, digital platforms, and cloud computing. The use of these tools allows management to quickly adapt to changes in the market environment, predict risks, and identify new opportunities for creating added value. Let's consider the main technologies in more detail and determine their advantages and disadvantages.

1. Machine learning algorithms automate the processing of large amounts of information, forming management decisions based on relevant and dynamic indicators. The use of artificial intelligence in strategic management can significantly reduce the time for analyzing market information and improve the quality of forecasting changes in the external environment [6]. However, the implementation of artificial intelligence is associated with high financial costs, ethical and legal risks, as well as a significant reliance on the quality of available data, which can limit its effectiveness.

2. Big Data technology provides a deep understanding of market trends, improving the accuracy of strategic analysis and personalizing management decisions. At the same time, it requires significant computing resources, has risks related to data security, and complicates the process of visualizing it, which can create difficulties in interpreting analytics results.

3. The use of ERP, CRM, and SCM platforms creates integrated decision-making systems that cover all levels of management: from operational to strategic. This contributes to increasing the flexibility of the business model and ensures the scalability of management decisions by the transformations of the external environment [7].

However, the effectiveness of its use depends on the availability of qualified personnel and is often complicated by the problems of integration with the existing information systems of the enterprise.

4. Thanks to the Internet of Things, enterprises gain the ability to monitor assets, production processes, and external changes continuously. In the strategic dimension, this creates conditions for rapid response to risks and efficient use of resources. In industry, in particular, the introduction of sensor systems allows real-time updates of information for strategic maintenance planning, which helps to reduce the risks of unforeseen shutdowns [8]. At the same time, IoT is associated with cybersecurity risks, privacy protection, the complexity of scaling systems, and the technical compatibility of different devices.

5. Salesforce, SAP, Microsoft Dynamics, etc., platforms provide data centralization, integration of key strategic indicators, and prompt response to changes in the external environment. Companies that have successfully implemented the digital transformation of management processes have achieved a significant increase in financial performance and improved strategic results [9]. However, there are risks of data monopolization by third-party platforms and loss of control over sales channels, which requires a careful approach to the choice of partners and platforms.

6. Cloud computing helps to reduce IT infrastructure costs, provides flexibility in the deployment of digital services, and provides quick access to innovative solutions. At the same time, they are associated with dependence on external service providers, data privacy risks, and legal restrictions on information storage, which may affect the security and legality of transactions.

Therefore, digital tools in strategic management are a powerful resource for improving the efficiency and competitiveness of enterprises. However, their implementation requires a balanced approach, taking into account both potential benefits and existing limitations and risks.

Conclusions. In today's extremely dynamic and unstable business environment, the formation of an adaptive strategy for enterprise management appears as a decisive condition for its survival, sustainability, and development. Domestic enterprises face various challenges, including security, economic, logistics, financial, personnel, technological, political, marketing, environmental, social, institutional, and market-

related issues, which require a systematic, strategic, and proactive approach to management. In response, enterprises are forced to change traditional approaches to strategizing, giving preference to flexible, scenario-based, and digitally-oriented management models.

Adaptive strategic management, taking into account the requirements of a highly turbulent environment, should be based on the principles of organizational plasticity, rapid response to changes, digital transformation, and the use of the latest technologies. In particular, the introduction of digital tools such as artificial intelligence, Big Data, analytics platforms, the Internet of Things, blockchain, digital platforms, and cloud computing creates new opportunities for agile planning, risk management, effective decision-making, and increased competitive advantage. At the same time, it is necessary to take into account the associated risks: cybersecurity, ethical and legal challenges, technological complexity, high cost of implementation, and dependence on external suppliers.

Thus, the formation of an adaptive management strategy requires the integration of digital technologies into strategic processes, the development of rapid response mechanisms, an in-depth analysis of the external environment, and an increase in the institutional capacity of the enterprise. In turn, a balanced combination of innovation, flexibility, and digital maturity will allow enterprises not only to adapt to the challenging operating conditions but also to turn the crisis into a source of strategic growth.

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