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MANAGEMENT OF THE 21ST CENTURY: GLOBALIZATION CHALLENGES. ISSUE 4

Collective monograph

In edition D. Diachkov, Doctor of Economic Sciences, Professor

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PREFACE

The modern stage of development is characterized by the realization of interdependence and interconnectedness of peoples, countries, structures, institutions and citizens. In science, this stage is called "globalization". The world is evolving, and trade and business are undergoing huge changes along with it.

The growing intensification of the interdependence of peoples and states is extended to all spheres of public life. Globalization and regionalization have become the determinative processes of the world development, the main vectors of the present. As new trends in modern post-industrial development, they lead to the emergence of new requirements for management in the 21st century, which is increasingly influenced by processes of globalization and integration, involving the consideration of regional peculiarities in the process of effective implementation of global management. However, the peculiar to the beginning of the third millennium dependence of the dynamics of society development on the quality of management activities determines the need for a solid rethinking and critical analysis of the fundamental concepts and categories of management sphere.

Traditional management, as a mechanism in its various models, forms, systems, has exhausted itself, since it does not contribute to solving the globalization problems of the development of civilization, which caused the objective need for formulation of the recent paradigm of management of the 21st century – management, the essence of which is to resist the processes of self-destruction; to create conditions for the harmonization of open self-regulatory systems: of a person, an organization, a society; to create conditions for the realization of creative potential of each person; to form and implement the management mechanism at all levels for any open socioeconomic system.

These and other problems determined the need for further research in the field of modern management, which led to the integration of the results in the third issue of the joint monograph "Management of the 21st century: globalization challenges. Issue 4".

The joint monograph presents the trends in the theory of management that are developed on the basis of the analysis of scientific-theoretical and methodological works of scientists and practitioners and create opportunities for the practical use of the accumulated experience, determine the content of management, and awareness of them is supposed to become the basis for the choice of focuses for further research aimed at improving the theory of management. In the joint monograph, much attention is paid to the practical tasks connected with the formation of organizational and economic mechanism of corporate management in the context of globalization, the development of methods, principles, models of management, taking into account modern scientific approaches and consolidated informatization of business processes of modern enterprises. The monograph presents the results of the research and scientific attitude of authors from different countries to innovative aspects of management: managementof organization as a socio-economic system, innovation, investment and information management in the system of a modern enterprise, personnel management in a modern organization, branch and regional aspects of modern management, public administration, agrarian management, international business management, risk management, management of security and competitiveness of the enterprise, marketing management, modern approaches to management of higher education.

The authors covered a wide range of problems – from the formation of conceptual foundations of the management of the potential for development of the state to the applied aspects of management of its individual subsystems.

The monograph consists of four parts, each of which is quite independent in terms of problem area. The structure of the monograph, presented by four parts: development of modern paradigm of management: globalization and national aspects; management of modern socio-economic systems: a sectoral and regional approach; current national and global fundamentals of social and economic systems' development; the legal, sociocultural and educational aspects of society management, helps to focus on the conceptual problems of the formation and development of the socio-economic and socio-ecological component as well as problems of ensuring the process of practical application of the developed management models.

The advantage of the joint monograph is the systemacity and consistency of the structure, the simplicity and accessibility of the material presentation, the presence of examples and illustrations.

The results of the research works presented in the joint monograph have a scientific and practical importance.

We believe that the monograph will become one more step towards a scientific solution of the problems in the context of formation of the effective management system under complicated globalization conditions.

The results of the research works presented in the joint monograph have a research and practice value. The advantage of the joint monograph is the system and logic of the structure, the simplicity and accessibility of the material presentation, the presence of examples and illustrations.

We believe that the monograph will become one more step towards a scientific solution of the problems concerning the formation of an effective system of security management under trying circumstances of globalization.

Publication of the monograph "Management of the 21st century: globalization challenges" is scheduled to be annual. Currently, Issue 4 is offered to our readers.

With best regards Dmytro Diachkov,
Doctor of Economic Sciences, Professor,
Poltava State Agrarian University, Ukraine

CONTENT

PART 4. LEGAL, PERSONNEL, SOCIOCULTURAL AND EDUCATIONAL ASPECTS OF MANAGING SOCIETY

«If war no longer occupied men's thoughts and energies, we could, within a generation, put an end to all serious poverty throughout the world»

6. Ovcharenko, I., Khodakivska, O., Sukhomlyn, L., Shevchenko, O., Lemeshenko, I., Martynov, A., Zos-Kior, M., Hnatenko, I., Michkivskyy, S., Bilyavska, L. (2022). Spatial organization management: modeling the functioning of eco-clusters in the context of globalization. *Journal of hygienic engineering and design, 40,* 351-356.
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PECULIARITIES OF ENTERPRISE'S DIGITAL DEVELOPMENT STRATEGIES

Yuliia Vakulenko,
Ph.D. in Agricultural, Associate Professor,
Oleksiy Chernykh,
Ph.D. student,
Poltava State Agrarian University, Ukraine

In the last decade, the rapid development of Internet technologies has led to the expansion of the electronic environment in all areas activity. The transition to the information civilization contributed to the emergence and development of the digital economy. Digital technologies have become an indispensable tool for running and developing modern business, a significant competitive advantage of enterprises, and a reason for changing requirements for conducting production and economic activities. The significant growth of technology requires companies to transform their management, production, marketing, financial and economic activities, document management, and human resources systems. Due to the growing scale of the global economic crisis, the global pandemic, and the military and political aggravation, the role of digital technologies was especially growing, as they enable businesses to reduce costs, optimize production and management business processes, expand existing and develop new markets, increase the personalization of advertising messages, and, as a result, improve the overall performance of market participants.

The relevance of the transition process and enterprise's activities transformation in the digital environment is actively studied in the scientific works of both foreign and domestic scholars [1; 4; 6; 8-11]. At the same time, the topic of forming and implementing a digital strategy as one of the ways of digital business transformation in a dynamic competitive environment remains insufficiently studied, which necessitates further research and identification in the key aspects of digital strategy formation for domestic enterprises.

From a practical point of view, it was worth noting that most large enterprises have already embarked on the path of business digitalization. However, most of them do not yet have a comprehensive digital development strategy – companies are implementing packages of pilot projects to implement individual digital solutions. This approach makes it possible to evaluate the application of a digital solution in practice, but often leads to a dispersion of resources and a shift in focus to secondary tasks. For most large companies, the concept of business digitalization is associated with the implementation of a digital strategy and the introduction of digital technologies that have become available to businesses in recent years. The prerequisites for the development and penetration of digitalization were the decline in the cost of technology and computing power, as well as the increased availability of high-speed data transmission. At the same time, it should be noted that different levels of technological, organizational, and economic readiness of enterprises lead to sectoral unevenness in digitalization.

Therefore, the levels of enterprise's digitalization can be divided by levels (Table 1). It is important to understand that the process of digital transformation was a change that affects the fundamentals of the current business, which leads to certain risks, the impact of which must also be taken into account when planning a transformation strategy. Deloitte consultants have identified the following risks:

- «obsolescence» of the implemented technologies or failures in their operation;
- incorrect implementation of technologies or insufficient attention to their implementation;
- risk of digital systems hacking;
- risk of personal information leakage;
- contradictions between the strategy and the implemented digital technologies;
- risk of state laws violation in the field of technology [3].

Table 1

The levels of enterprise's digitalization

Maturity level	Processes	Technologies	Employees
Level 0. Basic infrastructure. Technologies that do not produce business effects on their own, but are necessary for implementation. advanced technologies.	no direct impact on the processes.	creating infrastructure for the following implementations: industrial WiFi, local area networks.	employees do not need additional digital competencies.
Level 1. Computerization. The process is automated by any IT system. Data is entered into the system manually.	- elimination of paper forms and media; execution of processes through system interfaces; - automatic data transfer.	- implementation of basic production and enterprise management systems; - integration of systems for automatic data transfer.	employees trained to work with the systems in their area of responsibility.
Level 2. Connection. Process operational data is automatically entered into the system without human intervention. Related systems are integrated. Controlling influence is carried out remotely.	- formalization of the processes for implementing the production's digitalization (systematic and detailed description); - processes for involving external participants and stakeholders in the digitalization of production to ensure connectivity.	- developing ways to integrate existing systems and technologies with future elements of production digitalization; - creating a single information space and data flows, connecting systems.	- creating a culture of inclusiveness, involving employees in the development of the target vision; - division of roles and areas of responsibility; involvement of employees with competencies in business, IT and production.
Level 3. Transparency. Key process indicators are visualized on dashboards and monitored in real time.	- formalization of data flow management processes; - processes for active exchange of knowledge and data between all process participants; - creating a cross-functional data exchange network.	- improving the accuracy and analytical quality of data, reducing the amount of unnecessary information; - implementation of data mining systems; - integration of data exchange systems, for example, integration of artificial intelligence visualization systems with data sources.	- training employees to work with data systems, various devices and interfaces; development of digital skills; - development of a knowledge management culture.
Level 4. Predictive. Implementation of predictive systems/ advisors that allow predicting future states.	- developing processes for analyzing historical and current data and using the information for optimization; - establish procedures for regular optimization initiatives.	- implementation of real-time systems for analyzing activities that automatically perform analytics, generate warnings and recommendations; - introduction of digital twins for prototyping and optimization testing.	- organizing cross-functional and data sharing sessions to work on current issues and ways to optimize based on new data; - engaging additional data analysts.
Level 5. Adaptability. Implementation of systems that have a corrective effect on equipment independently or as part of a corporate system to maximize efficiency.	- development of processes for autonomous decision-making by systems; - development of day-to-day processes for regular forecasting and planning of future production.	- integration with external showcases of supplier and customer data; - use of artificial intelligence systems.	- developing a culture of continuous improvement and innovation; - introducing those responsible for the relevant areas of predictive analytics and adaptability.

Source: developed on the basis of [1-4; 7]

A McKinsey research on the implementation of Industry 4.0 elements concept at industrial enterprises and digital transformations can lead to an increase in such indicators:

• increase in productivity through the use of robots by 45-55%;

• reduction of equipment downtime by 30-50%;

• reduction of time to market by 20-50% [5].

Another study conducted by Capgemini Consulting shows what happened to the performance of enterprises when combining digital technologies and making changes in management models (Table 2).

Table 2

The impact of digital transformation on business performance

Use of new technologies	Changes in management models	Characteristics of the organization	Results (on average, compared to competitors)
-	-	enterprises at the beginning of transformation	profit is down by 24%
+	-	enterprises that follow digital fashion	Profit is down by 11%
-	+	conservative enterprises	Profit is increased by 9%
+	+	digital leaders	Profit increased by 26%

Source: developed on the basis of [2; 5]

A digital transformation strategy is a complex concept. The strategy includes a study of the current state of the company and setting goals for development. When creating a strategy, experts also study the industry and digitalization trends. The result is a document with a roadmap for digital transformation and recommendations for choosing tools and KPIs for the process.

The process of forming a digital strategy for enterprises is based on the classical provisions of strategic management, but also includes some peculiarities. Thus, the formation of the digital strategy of enterprises was shown in Fig. 1.

According to the above algorithm for forming a digital strategy, the process of strategic transformation should begin with the modernization of the current strategy, as this element determines the others. To this end, it is advisable to use the approach developed by the Boston Consulting Group, which was created directly as part of the study of the digital business transformation problem and takes into account the impact of technology and disruptive innovations on the activities of enterprises in the digital environment. It was based on 2 factors: «Predictability» and «Malleability». The first concept characterizes the ability of an enterprise to predict market dynamics and the behavior of competitors, the second – the ability of an enterprise or its competitors to influence the market.

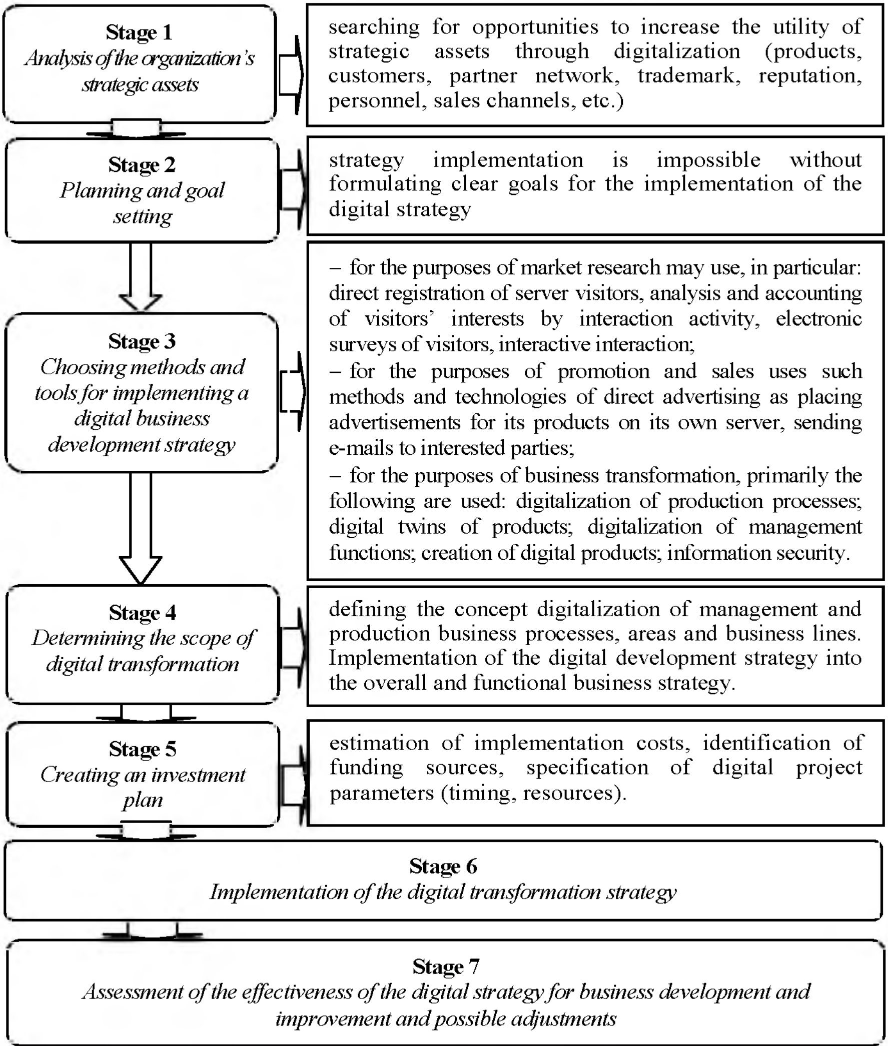

Fig. 1. Stages of forming a digital strategy for enterprises

Source: developed on the basis of [1; 2; 4; 6; 7-11]

Depending on the strength and combination of these factors, BCG consultants offer 4 types of strategic styles. At the same time, if the company was in crisis, there is a fifth style – «Renewal».

The system of strategic styles is called the «Strategy Palette». This scheme is shown in Fig. 2.

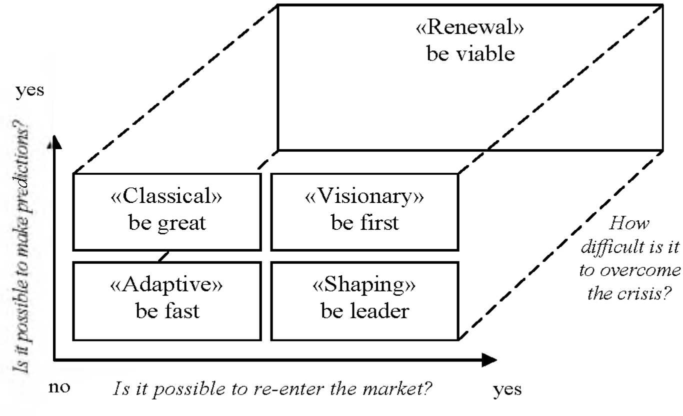

Fig. 2. «Strategy palette» with reference to digital transformation processes

Source: developed on the basis of [1; 4; 7]

These strategies can be characterized as follows:

• «Classical» – the classic strategic style should be applied when the market is fairly predictable, but the company and its competitors cannot change the established sales mechanisms, products, and customer behavior. In this case, it is worth using classic tools for digitalizing the strategy, as well as building a business model based on the company's resources and analysis of the external environment, using standard planning tools, developing strategic goals for 5-10 years, and working to improve the efficiency of internal processes. An example of such a market is the oil industry. This market was difficult to enter, business models have been stable for decades, the product was studied, and buyers were predictable. Nevertheless, oil reserves have their limit, and in what is likely to be several decades, companies in the oil and similar industries will have to change their market behavior and look for ways to diversify or completely transform their business;

• «Adaptive» – an adaptive approach to strategy development involves working in an industry that is poorly predictable and beyond the influence of individual businesses. In such an industry, planning a year in advance may not be effective because customer needs can change much more frequently. The strategic style for this industry involves a daily analysis of the environment. A good example is the retail sale of branded clothing;

• «Shaping» is a difficult word to explain literally in the context of strategies, but it can be understood as the strategic style development based on the desire to change the industry through its own products and developments. For example, the software industry, with its many startups and large enterprises, offers new solutions and ideas every month, many of which may be a surprise to other market participants. This industry requires short-term planning, large investments in development, and work on the company's brand;

• «Visionary» – this style is based on foresight analysis. This style is suitable for industries that have clear predictability. By analyzing the external environment, companies can take risks and try to develop a product that will be in demand only after a certain period of time. Accordingly, in the context of this style, enterprises need to steadily generate cash flow based on current products, while investing a significant portion of funds in the «product of the future». It is important to understand that such developments should not be made public;

• «Renewal» – this style is not related to the flexibility and predictability of the market and is essentially a crisis management strategy. The main emphasis is placed on the need to understand the causes of the crisis eliminate them and then choose one of the four styles mentioned above [1; 2; 4; 7; 10].

Thus, modern strategic guidelines for the development of business innovative forms were built with due regard to the specifics of the digital economy configuration. The access to knowledge, skills, and opportunities to replicate a product or image gained as a result of such integration creates strategic competitive advantages for business, regardless of its specific forms. Digitalization makes it possible to create and use means of production based on appropriate technologies, but also to use the means of the previous technological structure in the form of software adequate to it. This makes it possible to increase the efficiency of the entire structure of the production complex, starting with the production of goods, logistics interactions of structural parts, and marketing strategies, as well as to optimize and facilitate management processes at a modern enterprise.

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METHODOLOGICAL PRINCIPLES OF ASSESSING THE INVESTMENT ATTRACTIVENESS OF THE ENTERPRISE IN THE CONDITIONS OF EUROPEAN INTEGRATION

Milicya Volkova,
Ph.D. in Economics, Associate Professor,
Vladyslava Troian,
Ph.D. in Management and Administration, Senior Lecturer,
O.M. Beketov National University of Urban Economy in Kharkiv, Ukraine

In order for the enterprise to have constant development, it needs an inflow and attraction of external capital. Since any investors are more than interested in the profitability of their investment by individuals, when choosing an investment object, investors need to carefully calculate the risks and profitability of this investment. Investors strive to reduce the chances of

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