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PECULIARITIES OF STRATEGIC DEVELOPMENT OF ENTERPRISES IN THE CONDITIONS OF DIGITAL TRANSFORMATION OF THE ECONOMY OF UKRAINE

ABSTRACT

The purpose of the article is to study the peculiarities of the strategic development of enterprises (SDE) in the conditions of digital transformation economy (DTE), conditions of crisis and war; to establish the SDE peculiarities related to the opening of "windows of opportunity"; determine the stages of formation, directions for increasing the level of strategic stability. The methodology included the following methods: the method of induction and deduction - to determine the prerequisites of the dynamic organizational architecture enterprise as a DTE tool; critical analysis - to determine the stages of formation and the nature of DTE; logical analysis - to identify the branch and regional features in the formation of DTE; prerequisites for the formation of DTE directions, related to the opening of "windows of opportunity". It is indicated that DTE forms four spaces for manoeuvre in the formation of the SDE prerequisites. The stages of development strategy formation are indicated. It is assumed that the digitalization strategy should acquire a fragmented but systemic character. The importance of risks associated with frequent changes in digital technologies for national enterprises is indicated. Therefore, digital strategies should be variable and based on a "decision tree" that takes into account the degree of uncertainty of the economic situation in crisis conditions. It is indicated that the identification of windows of opportunity determines the introduction of process modification and recomposition of the organizational resource. The reorganization of the organizational resource should provide for not only a change in the boundaries of the subordination elements of organizational structure but also their complementarity. It is indicated that the rate of turbulence in the market environment determines the formation of the dynamic organizational architecture of the enterprise. The revealed peculiarities of the SDE provide the possibility of their relevant management in the conditions of DTE and dynamic challenges.

Keywords: strategic management, digital economy, digital transformation, competitiveness, peculiarities of Ukraine

JEL Classification: D21, L10, O10

INTRODUCTION

Ukraine's economy has not yet reached a level of digitalization that would correspond to the level of digital transformation of the world's leading economies. The volume of gross domestic expenditure on products/services of Ukrainian economic entities involved in the digital sphere is only ~3.2% of the gross domestic product [1], which is five times less than the indicator of developed countries. The global market requires Ukrainian enterprises to apply new approaches to the formation of development strategies, and in some spheres of economic activity (IT, banking industry), they have already become an absolute necessity. Therefore, in order to acquire the appropriate level of competitiveness, Ukrainian enterprises should form their development strategies by taking into account the prospects of digitization of the country's economy, the pace of this process, and a sober assessment of obstacles and their own capabilities.

In the conditions of the digital transformation of the economy, those enterprises that properly adapt their strategies to challenges and use new opportunities will have additional advantages in ensuring strategic sustainability. Strategic stability under conditions of crisis and war acquires primary importance for subjects of economic activity, and its importance becomes the main feature of the strategic development of enterprises.

The digital transformation of Ukrainian enterprises is not limited to the introduction of computer technologies - it is a complicated and complex process of restructuring all spheres of the enterprise - management organization, formation of the client environment, interaction with business partners, logistics, marketing, etc. An example of this is digital methods of labour organization, which help to increase the efficiency of production, particularly crowdsourcing, and therefore are increasingly used by Ukrainian enterprises.

The digital transformation of the economy requires the acceleration of business processes of enterprises, which, in turn, requires a radical change in approaches to the formation of strategies and giving them new qualities, such as variability, flexibility and adaptability to challenges.

The new challenges of war and crisis not only create threats to production activity but also form windows of opportunity, offer options for using the peculiarities of the digital transformation of the national economy, and therefore require a dynamic review of approaches to planning the strategic development of enterprises.

LITERATURE REVIEW

The problems of strategic development of enterprises in the conditions of digital transformation of the economy are significant for scientists of Ukraine and other countries of the world.

Thus, in the thorough scientific work of Mishchenko [1], the methodological foundations of the formation and implementation of strategic management mechanisms in the conditions of digital transformation are investigated. The thesis of the indicated work about the need to take into account the multi-level strategic management is taken into account in the given article.

In scientific publications, there is a statement that in modern conditions, the formation of the strategy of each enterprise is determined only by its technological state and selected development goals [2]. This is not indisputable since technological development is determined not only by the technical equipment of the enterprise and its financial capabilities but also by other factors, in particular, the development of the regional digital infrastructure. Scientists also indicate the need to take into account the indirect consequences of digitalization in the strategies of enterprises, for example, a significant number of multiplier effects, in particular, from the integration of the entire set of production chains into a global information space [3]. The specified association can bring benefits for development in the case of the inclusion of the enterprise in these chains or damage due to the reduction of its competitive opportunities due to improper organization of the association.

A number of scientists confirm the importance of the development of the enterprise, not only in terms of the direct effects of digitalization on the country's economy but also in terms of the indirect ones. For example, the article by Levchenko et al. [4] indicated that the digital transformation of the economy leads to fundamental changes in the field of employment, as a result of, in particular, the digital transformation of the workplace, the formation of virtual workplaces, the creation of conditions for remote work and, even, changes in the structure of the labour market. Failure to take this into account in the company's strategy can lead not only to losses but also to bankruptcy.

Enterprise development strategies in the digital economy should be based on a sober management assessment of the impact digital technologies will have on enterprise efficiency and the harmonization of business processes with digital transformations [5]. This somewhat narrows the understanding of digital strategy. At the same time, the article by Gudz [6] indicates that digital strategies, due to the non-linearity of managerial hierarchical chains, the variety of directions for the prospective development of subjects of economic activity in management require a shift in priorities from efficiency and rationality to an increase in the importance of socialization, creativity, etc.

Approaches to forming a development strategy in the conditions of digitalization are not the same for small, medium and large enterprises [7]. If a digital development strategy can be a component of a corporate strategy for large enterprises, then for small and, to a greater extent, micro-enterprises, such a strategy has a rather intuitive character [7]. Therefore, when considering approaches to the formation of a company's digitalization strategy, the use of even extremely simplified options - such as the Osterwalder-Pinier model [8], is not excluded.

Grynko et al. [9] proposed that enterprises form digital strategies based on the so-called "digital sustainability" as a basic factor of competitiveness. Digital sustainability is considered the ability of the enterprise to operate in a long-term sustainable manner as a result of using the opportunities of the digital economy. This approach is expanded on in this article. Scientists also indicate that the effectiveness of a digital strategy as a prerequisite for the sustainable development of an enterprise is determined by the speed and flexibility of responding to external and internal challenges in the environment, optimizing the use of resources and ensuring effective functioning and sustainable growth over time [10]. Also, when implementing an enterprise's digital strategies, it is necessary to take into account the constant nature of this process due to rapid changes in the challenges of the digital economy [11]. This thesis is also expanded on in the presented article.

According to Kysh [12], the strategy of modernizing production using the capabilities of digital technologies will provide enterprises with the prospect of integration into high-tech industries and a long-term stable position in new markets. One cannot fully agree with this thesis since digital technologies are characterized by a significant rate of renewal and often lead to drastic changes in the market, so the digital modernization of an industrial enterprise does not guarantee an increase in production volumes and profitability for long periods of time. At the same time, it is fair to consider [12] that only a large business is capable of forming a digital infrastructure capable of ensuring the strategic development of its enterprises, while medium and small businesses need government assistance in forming a digital infrastructure. The thesis of the scientific work of Kysh [12], that strategic management should be aimed at acquiring competitive advantages in the context of the digital economy, is expanded in this article. At the same time, consideration was given to the thesis of the article by Edeh et al. [13] that in the conditions of the digital economy, obtaining competitive advantages is not sustainable due to the possibility of rapid copying of digital practices and the acquisition of new innovative assets.

When considering the risks of digitization of enterprises, scientific works mostly avoid the risks associated with the frequent change in the vector of development of digital technologies. In a number of scientific works, it is even indicated that innovative transformations of the development of subjects of economic activity do not depend on the threats of their market environment [14]. Even defining digital transformation as the main risk factor [15] does not indicate the risk of a radical change in digital technologies. A number of researchers limit themselves to stating the destructive nature of the technological breakthrough of Industry 4.0 and mentioning the exponential speed of the spread of digital technologies [15]. For example, in the article by Sazonova et al. [16], considering controlling as a tool of strategic management aggregation and risk reduction for production activities, the above risks are not mentioned. Even in a thorough study by Andriushchenko et al. [17], where a wide range of characteristics are considered to minimize the risks of the digital transformation of the enterprise: the coefficient and speed of development, quality change parameters, etc., the risks associated with the change in digital technologies are not mentioned. In view of the indicated risks, it is worth realistically assessing the possibilities of Ukraine regarding the introduction of the latest technologies into production, in particular, the creation of a Ukrainian electronic component base for domestic and foreign markets [18]. This can be achieved only in the event of a radical change in approaches to the financial support of scientific developments in this direction.

There are still different interpretations of the concept of enterprise digitalization strategy in the scientific literature: as a process of choosing and implementing digital technologies, as digitalization of enterprise management, as a component of corporate strategy or as a variant of enterprise business strategy [19], which causes disagreements in the recommendations of scientists. At the same time, the difference in the views of scientists on the strategy of digitalization of the enterprise indicates that the significant variability of the challenges of digitalization requires a change in traditional approaches in this matter [8].

The aforementioned requires the settlement of the specified disagreements and the determination of the features of the strategic development of enterprises in the conditions of digital transformation of the economy of Ukraine and in the conditions of the economic crisis and significant non-economic challenges that need to be taken into account when forming strategic plans of Ukrainian economic entities; determining the stages of formation, the nature of the development strategy, directions for increasing the level of strategic stability of Ukrainian enterprises.

AIMS AND OBJECTIVES

The purpose of the article is to investigate the peculiarities of the strategic development of enterprises in the conditions of digital transformation of the economy.

The tasks that need to be solved are: to investigate the peculiarities associated with the conditions of the economic crisis and threats of war; to establish the peculiarities of strategic development related to the opening of "windows of opportunity"; determine the stages of formation, the nature of the development strategy, directions for increasing the level of strategic sustainability.

METHODS

A wide range of cognitive methods was used in the research.

The method of induction and deduction - to determine the prerequisites of the dynamic organizational architecture of the enterprise as a tool for the implementation of the development strategy in the conditions of war and crisis.

The method of analysis and synthesis to establish that the digitalization strategy should acquire a fragmented, but at the same time, systemic character.

The method of critical analysis is used to determine the stages of formation, the nature of the development strategy, and directions for increasing the level of strategic stability.

Methods of logical analysis of statistical data are used to identify sectoral and regional differences in the formation of development strategies using the opportunities of digital transformation of the economy; identification of the peculiarities of the IT-FOP sustainability acquisition strategy; prerequisites for the formation of new areas of strategic development associated with the opening of "windows of opportunity".

RESULTS

The strategic development of enterprises in the conditions of digital transformation of the economy should be based on a digital strategy. The specified strategy is proposed to be defined as the planning of a complex of multifunctional agreements for the implementation of digitalization in all areas of the enterprise: business and production processes, formation and maintenance of the client environment with the chosen strategic direction of development to ensure sustainably profitable operation of the enterprise in the conditions of the formation of Economy 5.0 and in the conditions of today's challenges. The development strategy should be based on constant monitoring and not only in established areas - market research analysis of competitors' actions [20], but also on the assessment of the possibility of the emergence of new technologies that will lead to a radical change in the conditions of production, the market, the national and global economy in a very short period of time. The specified changes can, for example, lead to the devaluation of capital investments in the enterprise, where products that will become obsolete are manufactured.

The development strategy of each enterprise is unique, as it is not only based on sectoral and regional differences but also on different resource capabilities of the enterprise, determined by its position on the market, peculiarities of risks of a general economic nature, in particular the impact of digitalization of the economy, as well as non-market risks, in particular, war risks, for example, the level of vulnerability of the infrastructure and the main means of production.

The success of the strategy depends, in particular, on the nature of its implementation. Even the companies of countries with developed economies have a factor called "active inertia" in scientific works - that is, the inability of the enterprise to implement appropriate and timely management measures in the conditions of economic changes, the impact of the crisis, etc. The importance of this factor in Ukraine is its peculiarity. Management, owners, and staff of enterprises often consider digital innovations to be a burden, an unnecessary additional load.

Digital tools should facilitate compliance and timeliness of management actions but not guarantee them. Everything depends on the quality of management.

For the strategic development of enterprises, the digital transformation of the economy creates four spaces for manoeuvre: new areas of digital business strategy, expanded scope of activity, increasing the speed of business operations, new sources of additional value creation.

Scalability can be provided by new digital communication technologies. The speed of business operations adds a new dimension to the strategic development of enterprises, particularly because digital technologies provide an additional effect by increasing the level of coordination of business activities between partner enterprises. An example can be the release of an innovative product that partner companies accompany with their own innovative products and services.

Based on the above theses, it is possible to indicate the stages of development strategy formation in the conditions of digitalization: identification of new opportunities opened by digitalization; identification of the economic, financial, organizational, personnel capabilities of the enterprise for their implementation; evaluation of the probable result; dynamic adjustment of strategy when external conditions change.

With a significant level of wear and tear of the main means of production of Ukrainian enterprises, a lack of financial resources and significant risks of capital investments in the latest technologies due to their constant changes, the digitalization strategy should acquire a fragmented but, at same time, systemic character. This means that during the phased implementation of the selected digital technologies with the provision of their further modernization, each subsequent stage in accordance with a substantiated adaptive strategy, should provide a certain synergistic effect on the achievement of the set goal. Phased implementation will also ensure the appropriate flexibility of digital strategy implementation in case of technological, economic, etc., changes. That is, digital strategies should be variable and based on a "decision tree" that takes into account the degree of uncertainty of the economic situation in crisis conditions, the variability of consumer preferences due to changes in technology and the market, etc.

At the same time, the decomposition of the management strategy should provide for the next stage of the composition of the specified strategy.

The pace of turbulence in the market environment will affect the pace of transformation of the company's strategy and directions for mitigating the impact of turbulence. Thus, the requirements of the strategic development of enterprises in the conditions of digital transformation determine the formation of a dynamic organizational architecture of the enterprise as a tool for the implementation of the development strategy in the conditions of war and crisis. The specified dynamic organization of the architecture in interaction with the elements of the organizational structure allows the carry out the permanent transformation of business and production processes in an operational manner, ensuring the mobilization of organizational resources, their optimal distribution according to tasks and directions and regulating the interaction of organizational elements in such a way as to ensure the maximum synergistic effect.

The dynamic organizational architecture of the enterprise should not be limited only to the corporate space - it also has to be directed to the outside, in particular, to the formation of mutually beneficial alliances and business partnerships in the use of common digital (for example, cloud) resources, to form promising cross-industry connections. The mechanisms of expanding the scope of coverage of the enterprise's organizational architecture also refer to processes and actions that help to overcome the digital divide between corporate structures and their personnel and create a common environment for interaction.

In this case, strategic planning should form in advance models of enterprise development opportunities under the permanent digital transformation of the economy and in accordance with dynamic challenges and taking into account the reactions of business partners, consumers, and competitors to the management actions of the enterprise management. The identification of windows of opportunity is a prerequisite for the introduction of processes of modification and recomposition of the enterprise's organizational resource to assess the weight of the impact of the specified measures on increasing the efficiency of the subject of economic activity. The reorganization of the organizational resource should provide not only a change in the boundaries of the subordination of the elements of the organizational structure but also their complementarity.

The new tasks of recomposition are the creation of organizational competitive advantages and the creation of prerequisites for the rapid scaling of business activities. The recomposition strategy also opens up opportunities for joint use of assets, compatibility of service provision, mutual complementation of enterprise products (for example, sets of auxiliary tools for self-produced devices), reconfiguration of resource use, provision of new organizational manoeuvrability and flexibility, etc.

In particular, in view of the above, it is rational, as experience shows, to organize the coexistence of the latest and traditional technologies at the same enterprise during the period of introducing innovations. In this case, the strategic model should be formed as an optimization of the use, most often, of shared resources by the specified technologies under the objective function of economic efficiency. In order to achieve stability in the functioning of the enterprise, its digital strategy should not focus on the introduction of digital technologies in production (with the exception of niche products and services) but rely, first of all, on the digitalization of operational activities, resulting in technological, organizational changes, changes in business processes, which becomes a prerequisite for changing the concept of enterprise management.

Since a feature of Ukrainian industrial enterprises is a high share of outdated technologies in use, the scope of modernization in them is significant, and they require significant volumes of implementation of digital technologies. The economic condition of Ukrainian enterprises reduces their ability to finance the scientific development of innovative technologies. However, a bigger problem is that the available financial resources of enterprises are invested mainly not in high-level technologies but in lower-level technologies. Thus, a comparative analysis of state statistics data [21] indicated that the

share of R&D financing of high-level technologies is only 14.11% of the total amount of R&D expenditures. This is one of the negative features that slow down the strategic development of Ukrainian enterprises.

At the same time, the problem of Ukrainian enterprises in the real sector is that for them, the return period of investments in the latest, in particular, digital technologies is much longer than for subjects of economic activity in other industries, for example, related to the provision of services.

The conditions of the digital economy thus increase the level of risks for industrial enterprises both when implementing innovative development strategies and for refraining from capital investments in innovation. Refraining from the introduction of innovations is guaranteed to cause the company's uncompetitiveness, the only question is at what pace competitive positions in the market will be lost.

At the same time, digital technologies are changing the service sector, which is the most flexible in using their capabilities. This, in particular, is evidenced by the revenue dynamics of the e-commerce market in Ukraine (Figure 1), according to Webpromo data [22]. The rapid growth of the specified market in the period until 2022, not even taking into account the economic crisis associated with the COVID-19 pandemic, and the rapid recovery after the start of a full-scale war with a rate of 2.51 - comparing the indicators of 2023-2022 and with the rate 1.93 - comparing the indicators of 2024-2023, indicates not only the significant profitability of this newest retail segment but also its high adaptability to challenges. Large, medium and small enterprises are involved in this sphere, and the rapid pace of recovery indicates that they mostly chose the right strategic direction for their business development.

This confirms significant sectoral differences in the formation of development strategies for the use of opportunities for the digital transformation of the economy.

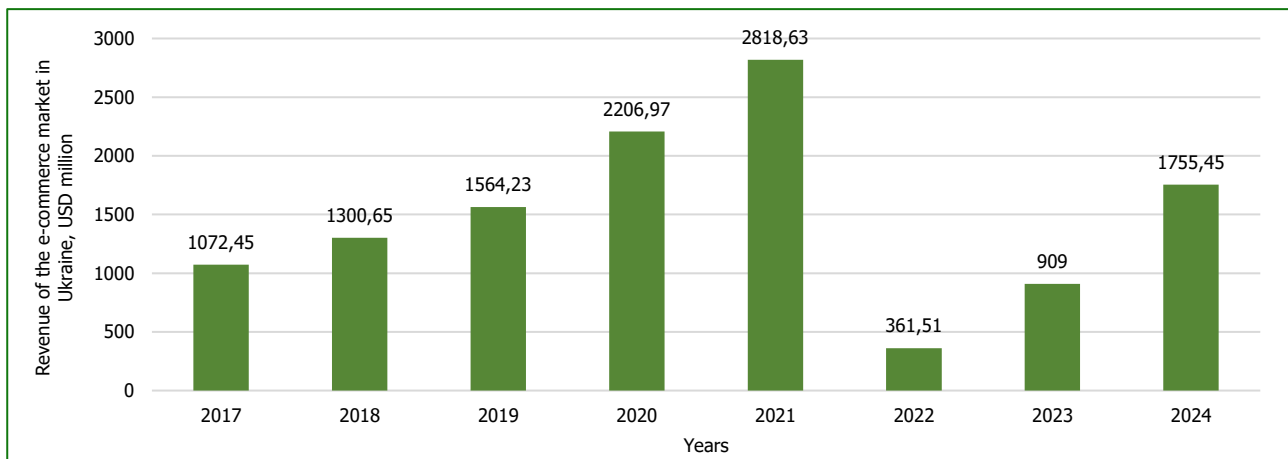


Figure 1. Revenue dynamics of the e-commerce market in Ukraine*, USD million. Note: *2024 data are forecast. (Source: made by the authors using [22])

The service industry also includes IT companies that are registered with the Tax Service mainly as individual entrepreneurs (IE). The number of IT IEs, according to the Community of Programmers [23], is growing at a high rate in Ukraine despite threats of crises and risks of war. The growth rate of the number of specified IEs compared to annual indicators is increasing, and in 2023 to 2022 it amounted to 13% (Table 1).

Table 1. The dynamics of changes in the number of individual entrepreneurs in Ukraine. (Source: built by the authors using [23])

Year	Number of IT- individual entrepreneurs	Change in the number of IT- individual entrepreneurs year to year, %
2016	89475	-
2017	102046	14
2018	122964	21
2019	150639	23
2020	183437	22
2021	212587	16
2022	239906	13
2023	271700	13

Due to the lack of opportunities for strategic management tasks, Ukrainian IT-IEs direct all available human potential to solve the main production task and, therefore, it seems, are not supposed to have “digital stability”. At the same time, the strategy of acquiring sustainability of IT-IEs consists of quickly achieving the result and, accordingly, a short period of payback of the invested financial resources. Sometimes, IT-IEs use simplified approaches, in particular variants of the Osterwalder-Pinier model [8] or even the trial and error method - an intuitive approach [7] to strategy formation. The short period of implementation of digital innovations by IT-IEs also allows them to avoid the risk of radical changes in digital technologies.

According to the Community of Programmers [24], the labour market generally indicates a shortage of qualified IT specialists, but to a greater extent, the shortage of specialists is felt by a new field of digital activity for the Ukrainian economy - military IT technologies (military technologies, shortened as miltech). Examples of miltech digital products include fire coordination software for dispersed artillery systems, unmanned aerial vehicles (UAVs), autonomous remote demining systems, etc.

The rate of increase in the number of miltech vacancies is 12.4 times greater than the rate of increase in the number of IT vacancies by July 2024, and this gap has a growing tendency (see Figure 2). The rate of growth of the field of miltech technologies can be estimated at this rate.

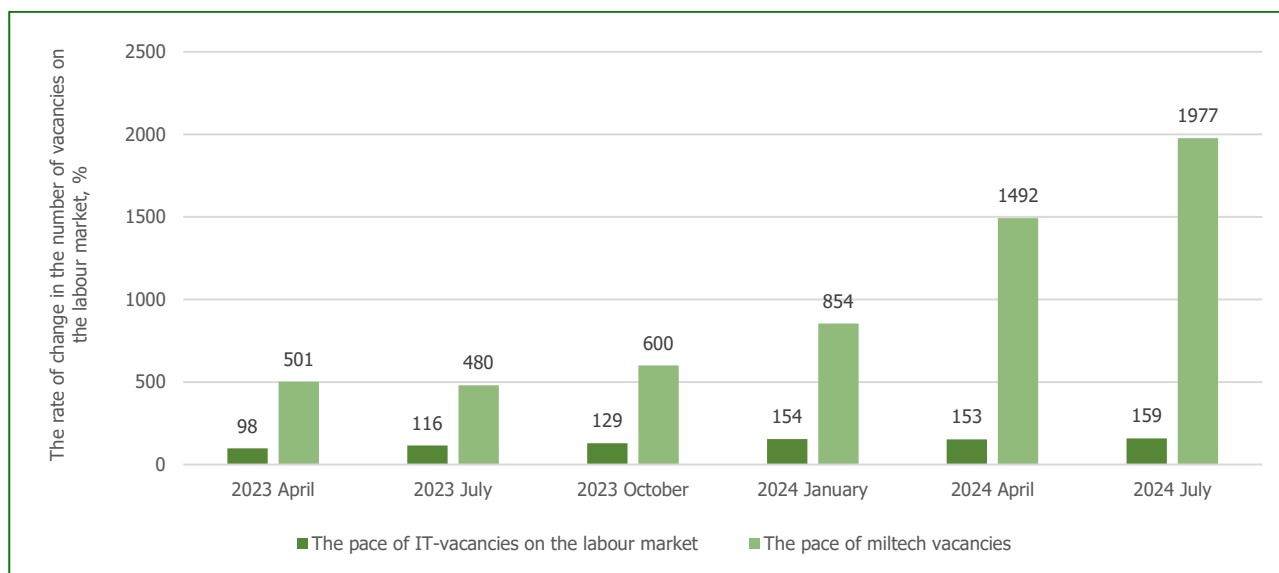


Figure 2. Rate of change in the number of IT vacancies on the labour market by types, %. (Source: made by the authors using [24])

Acceleration of the implementation of military IT technologies into practice and direct confirmation of their effectiveness in the conditions of hostilities brings this field into the leaders of the world market, which will ensure its growth in the post-war period, as it forms high competitive prospects and not only for the arms market, since many developments, in particular, GIS systems, UAVs, etc. are widely used in civilian spheres of economic activity.

The rate of increase in the IT market of M&A deals (Mergers and Acquisitions) and the number and value of deals, which is also a recognition of the development of the specified industry, is indicative of the rate of investment attractiveness of the IT services industry.

The above points to the prospects opened by the digital transformation of the Ukrainian economy for the realization of a rapid sectoral breakthrough in the world market by using the window of opportunity, which, accordingly, must be taken into account by Ukrainian enterprises when planning their strategic development.

A peculiarity of Ukraine is also significant regional differentiation in the development of the digital economy, which causes a significant difference by region in the strategic development of enterprises. This is evidenced by the data of the Ministry of Digital Transformation of Ukraine [25] shown in Table 2, according to which the indicators of digital transformation in the regions differ by 5.1 times, and the average deviation from the average value of 0.66 is 0.14.

Table 2. Index of digital transformation. (Source: constructed by the authors using [25])

The name of the region of Ukraine	Index of digital transformation
Dnipropetrovsk	0.908
Lviv	0.891
Poltava	0.833
Volyn	0.831
Odesa	0.785
Kyiv	0.684
Cherkasy	0.672
Khmelnyskyi	0.62
Zhytomyr	0.56
Chernihiv	0.553
Chernivtsi	0.546
Kirovohrad	0.531
Sumy	0.178

Peculiarities of the strategic development of enterprises are also determined by the features of the digital transformation of Ukraine, which include:

1. The inadequate pace of digital infrastructure development is primarily due to inadequate institutional support for this sphere of digital transformation of the economy.
2. A significant level of ignorance of the population and, accordingly, the personnel of the enterprise about computer technologies neglect of the need for professional retraining to acquire computer skills. The mental unpreparedness of both the personnel of enterprises and a significant part of their management to use new opportunities opened by Economy 5.0 slows down the strategic development of enterprises.
3. Significant complications in using the advantages of the scalability of data analysis due to their unstructured nature due to the difference in corporate digitalization strategies and the absence of state standards that regulate this problem.
4. Regional disparities in the development of digital technologies and in the distribution of digitalization gains which has significant consequences in the formation of regional market disparities, increasing the digital divide, etc.
5. Inadequate level of protection of intellectual property rights.
6. The pace of digital transformation is significantly ahead of the pace of changes in the regulatory and legal field in this sphere, as a result of which the regulatory framework slows down, rather than speeds up, the process of transformation in a number of directions, which, accordingly, complicates the strategic development of Ukrainian enterprises.
7. The cost of implementing certain digital technologies and the high operating costs for their operation are exorbitant for a significant part of Ukrainian enterprises. This, in particular, leads to the widespread use of illegal software, which, in turn, closes the localization of software products of leading developers in Ukraine and, accordingly, stimulates the shadow economy.
8. The lack of trust between manufacturers, their business partners and consumers, which does not contribute to the acceleration of the introduction of direct digital communication between them, does not give an opportunity to use the advantages of speeding up business operations.
9. A significant level of reduction in the payment capacity of the population, on the one hand, reduces the sales of digital goods and services, and on the other hand, accelerates the introduction of digital technologies that contribute to increasing the availability of goods and services, for example, shortening supply chains between the producer and the consumer, strengthening the level of cooperation in production and consumption, etc.
10. A significant specific cost (compared to the cost of one's own products or services) of digital equipment and software, renting digital services complicates the digitization of enterprises, increases the share of added costs in the cost structure, and reduces the prospects for strategic development.

A peculiarity is also the strong dependence of Ukrainian manufacturers on foreign components, which can lead to a slow-down, complication or even termination of production processes due to the blocking of external supplies (for example, the blocking of the Chinese supply of components for drones). Also, the practice of ensuring the uninterrupted functioning of enterprises in conditions of large-scale hostilities indicated a lack of digital solutions that take into account the specified conditions.

A certain feature is also the fact that at the beginning of the process of modernization of production, the transition to Industry 4.0 technologies, digitalization requires significant resources, first of all, financial resources, which requires the enterprise to increase prices for innovative products and services and thereby provoke a market shock, which, in particular, has the consequence of a significant difference between the projected and actual volumes of sales of own products/services.

The development of digital technologies creates not only new risks but also opens new directions for increasing the level of strategic stability. The main thing for this is the permanent improvement of management competence in working with information, primarily in the technologies of data collection, processing, storage and analysis. In order to ensure the long-term functioning of the enterprise under new challenges, the enterprise management should form an automated structure of strategic sustainability management.

DISCUSSION

A significant number of researchers: Kirzhetska [7], Tiahunova and others. [10], Piatnytska et al. [14] rely on the static organizational architecture of the enterprise. At the same time, as it is stated in the presented article, dynamic external conditions and the need to introduce digital technologies that change all production and business processes of the enterprise require dynamic adaptation to these changes in the organizational structure, and adaptation is so radical that it can be defined as the formation of a new organizational architecture of the enterprise. Without a permanent restructuring of the specified architecture, it is impossible to achieve the appropriate level of effectiveness of the development strategy in conditions of war and crisis.

Researchers, in particular, Kirzhetska [7], Tiahunova, etc. [10], Piatnytska et al. [14], also do not take into account the need to use variable strategies - building "decision trees", the need for which is indicated in the presented article. Pre-prepared options for strategies will come in handy for dynamic changes in external and internal factors of influence, which is especially important in the conditions of war, the risks of which lead to drastic changes in the activities of enterprises.

Dynamic changes in external challenges create not only threats but also new opportunities for the development of enterprises. This is in contradiction with the thesis of the article by Grynyk et al. [9] where it is proposed to form digital strategies of enterprises with regard to "digital sustainability" - the ability of the enterprise to operate in a long-term stable manner as a result of the use of digital economy technologies. At the same time, it is important to promptly use opportunities that open up dynamic changes in external conditions. The above determines not only the use of long-term development prospects but also rapid breakthroughs in development due to the appearance of "windows of opportunity".

Agreeing with the thesis of Andriushchenko et al. [17] that the main results of the digitization of the enterprise are acquired by cross-industry production and economic systems, the facts of the influence of the IT industry on the adjacent spheres of economic activity given in the presented article are proof of this, the thesis about the concentration of digital innovations mainly in operational activities raises some doubts. The thesis of Andriushchenko et al. [17] that changes in the organizational structure and management concepts shape the company's strategy is also doubtful. The company's strategy is formed under the influence of the entire set of external and internal factors.

The formation of a digital transformation strategy is an absolute necessity for enterprises in the conditions of Economy 4.0, and this is rightly pointed out in the article by Panchuk et al. [19]. At the same time, the company's development strategy should not be reduced to a digital strategy. Digital transformation strategies should be an integral part of the development strategy.

CONCLUSIONS

The success of the strategy depends, in particular, on the nature of its implementation as well as the significance of the influence of the "active inertia" factor, which is a Ukrainian feature.

Four spaces for manoeuvre that the digital transformation of the economy creates for the strategic development of enterprises have been identified. The stages of development strategy formation in the conditions of digitalization are indicated. It is noted that the digitalization strategy should take on a fragmented but, at the same time, systemic character when each subsequent stage will provide a synergistic effect on the achievement of the set goal. Phased implementation will ensure proper flexibility of digital strategy implementation in case of technological, economic, etc. changes. That is, digital strategies should be variable and based on a "decision tree" that takes into account the degree of uncertainty of the economic situation in crisis conditions.

The rate of turbulence in the market environment will affect the rate of transformation of the company's strategy. Thus, the requirements of the strategic development of enterprises condition the formation of a dynamic organizational architecture of the enterprise, which becomes a tool for implementing the development strategy in conditions of war and crisis.

The dynamic organizational architecture of the enterprise should also be aimed at the outside, in particular, at the formation of mutually beneficial alliances, as well as to form promising cross-industry connections.

Strategic planning should form models of enterprise development opportunities. The identification of windows of opportunity is a prerequisite for the introduction of processes of modification and recomposition of the enterprise's organizational resources. Recomposition of the organizational resource should foresee not only a change in the boundaries of the subordination of elements of the organizational structure but also their complementarity. The new tasks of recomposition are the creation of organizational competitive advantages and the creation of prerequisites for the rapid scaling of business activities.

The problem of Ukrainian enterprises in the real sector is that for them the return period of investments in the latest, in particular, digital technologies is significantly longer than for subjects of economic activity in other industries, for example, related to the provision of services. The conditions of the digital economy thus increase the level of risks for industrial enterprises both when implementing innovative development strategies and when refraining from capital investments in innovation.

Digital technologies are changing the sphere of services, which is the most flexible in using their capabilities, as evidenced by the dynamics of the e-commerce market income in Ukraine. The rapid growth of this market under the conditions of the economic crisis caused by the COVID-19 pandemic and the rapid recovery after the start of a full-scale war indicate its emerging adaptability to challenges. This confirms significant sectoral differences in the formation of development strategies for the use of opportunities for the digital transformation of the economy.

The rapid growth of the number of IT-IEs is indicated. It is noted that Ukrainian IT-IEs, due to the lack of opportunities for strategic management tasks, often purposefully do not form the prerequisites of "digital sustainability". At the same time, the strategy of acquiring sustainability of IT-IEs consists of quickly achieving the result and, accordingly, a short period of payback of the invested financial resources.

The labour market as a whole indicates a shortage of qualified IT specialists, but to a greater extent, the shortage of specialists is felt by a new sphere of digital activity for the Ukrainian economy - military IT technologies. The rate of increase in the number of miltech jobs is significantly higher than the rate of increase in the number of IT jobs, and the gap is growing. The above shows that Ukrainian manufacturers quickly realize the "window of opportunity" opened by the war, which makes this industry a leader in the world market and ensures its growth in the post-war period.

A peculiarity of Ukraine is also significant regional differentiation in the development of the digital economy, which causes a significant difference by region in the strategic development of enterprises.

The peculiarities of the strategic development of enterprises are determined, first of all, by the peculiarities of the digital transformation of Ukraine. A list of the specified peculiarities is given. It is indicated that the development of digital technologies opens up new directions for increasing the level of strategic sustainability. The main thing for this is the permanent improvement of management competence in working with information, primarily in the technologies of data collection, processing, storage and analysis.

The prospect of further research development is the development of software for the formation of a variable digital strategy, which is based on the "decision tree".

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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The Authors declare that there is no conflict of interest.

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ОСОБЛИВОСТІ СТРАТЕГІЧНОГО РОЗВИТКУ ПІДПРИЄМСТВ В УМОВАХ ЦИФРОВОЇ ТРАНСФОРМАЦІЇ ЕКОНОМІКИ УКРАЇНИ

Мета дослідження – вивчення особливостей стратегічного розвитку підприємств (СПП) в умовах цифрової трансформації економіки (ЦТЕ), умовах кризи та війни; установити особливості СПП, пов'язані з відкриттям «вікон можливостей»; визначити етапи формування, характер СПП, напрями збільшення рівня стратегічної стійкості. Методологія включає використання таких методів: індукції та дедукції – для визначення передумов динамічної організаційної архітектури підприємства як інструмента впровадження СПП; аналізу й синтезу – для встановлення, що СПП має набувати фрагментованого та системного характеру; критичного аналізу – для визначення етапів формування, характеру СПП, напрямів збільшення рівня стратегічної стійкості; логічного аналізу – для виявлення галузевих і регіональних особливостей у формуванні СПП; передумов утворення нових напрямів СПП, пов'язаних із відкриттям «вікон можливостей». Зазначено, що ЦТЕ утворює чотири простори для маневру при формуванні передумов стратегічного розвитку підприємств. Акцентовано увагу на етапах формування стратегії розвитку. Зазначено, що стратегія цифровізації має набувати фрагментованого, але системного характеру. Указано на значущість для національних підприємств ризиків, пов'язаних із частою зміною цифрових технологій, тому цифрові стратегії мають бути варіативними й спиратися на «дерево рішень», яке враховує ступінь невизначеності економічної ситуації в умовах кризи. Зазначено, що виявлення вікон можливостей обумовлює запровадження процесів модифікації та рекомпозиції організаційного ресурсу. Рекомпозиція організаційного ресурсу має перебачити не тільки зміну меж підпорядкованості елементів організаційної структури, а й їх комплементарність. Указано, що темп турбулентності ринкового середовища обумовлює формування динамічної організаційної архітектури підприємства. Виявлені особливості СПП дають можливість релевантного управління ними в умовах ЦТЕ й динамічних викликів.

Ключові слова: стратегічний менеджмент, цифрова економіка, цифрова трансформація, конкурентоспроможність, особливості України

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