

**CHAPTER 26**  
**FORMATION OF AN ECONOMIC MECHANISM**  
**FOR THE SUSTAINABLE DEVELOPMENT OF ENTERPRISES**  
**UNDER CONDITIONS OF ECONOMIC DIGITALIZATION**

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**INTRODUCTION**

The contemporary development of economic systems is taking place under the influence of large-scale transformations that determine changes in approaches to the functioning and development of enterprises. The dynamism of the market environment, increasing competition, growing uncertainty, and instability of economic processes create new requirements for ensuring the efficiency of business activities. Under such conditions, the issue of long-term enterprise development becomes particularly relevant, necessitating a reconsideration of traditional approaches to managing their development. One of the key concepts that defines the current directions of enterprise development is the concept of sustainable development, which involves achieving a balance between economic, social, and environmental components of activity. The sustainable development of enterprises is considered as a process of ensuring their stable functioning and adaptation to changes in the external environment, taking into account the need for efficient resource use, minimization of negative environmental impact, and enhancement of corporate social responsibility. In this context, the concept acquires new meaning as it integrates with other global trends in economic development.

A significant factor in the transformation of economic processes is digitalization, which shapes a new paradigm for enterprise development. The digitalization of the economy encompasses a wide range of processes related to the implementation of digital technologies in production, management, marketing, finance, and other areas of enterprise activity. The use of information and communication technologies, automation, big data analytics, artificial intelligence, and digital platforms transforms not only the technological basis of enterprise functioning but also the logic of forming their competitive advantages.

Today, digitalization acts as an important tool for improving the efficiency of enterprise activities, optimizing business processes, expanding market

opportunities, and ensuring managerial flexibility. At the same time, it creates new challenges related to the need for enterprises to adapt to rapid technological changes, enhance the digital competencies of personnel, ensure information security, and integrate digital solutions into management systems.

Particular relevance is attributed to the study of enterprise development issues in the context of ongoing transformations in the economy of Ukraine, which are driven by deep structural changes and crisis phenomena. Disruptions in production and logistics processes, a decline in investment activity, and the need to restore the economic potential of enterprises determine the necessity of forming new approaches to their development. In this context, digitalization is considered one of the key factors of recovery and modernization of enterprises, contributing to increased adaptability, innovativeness, and competitiveness. The combination of the sustainable development concept and digitalization processes forms new conditions for enterprise functioning, in which the formation of effective economic mechanisms for managing their development becomes particularly important. The economic mechanism for sustainable enterprise development should ensure the alignment of economic interests, efficient use of resources, stimulation of innovation activity, and implementation of digital technologies. At the same time, the integration of economic, organizational, and institutional instruments is essential for ensuring a comprehensive approach to managing enterprise development.

An analysis of scientific research indicates significant attention to the issues of sustainable enterprise development, digitalization of the economy, and development management. However, in academic literature, the issue of forming a holistic economic mechanism that would ensure the integration of these processes into a unified enterprise development management system remains insufficiently explored. Existing approaches are typically focused on individual aspects of enterprise activity and do not fully consider the comprehensive impact of digitalization on ensuring their sustainable development. The relevance of the monograph topic is determined by the need for both theoretical substantiation and practical solutions to the problem of forming an economic mechanism for sustainable enterprise development under conditions of economic digitalization. The study of this issue makes it possible to deepen scientific understanding of modern enterprise development processes and to create a foundation for improving the efficiency of their activities in the context of economic environment transformation.

## **26.1. Theoretical Foundations of Sustainable Enterprise Development in the Context of Economic Digitalization**

The concept of sustainable development is one of the key concepts in modern economic science and business practice, as it defines the strategic guidelines for the functioning of economic systems at different levels – from the global level to that of individual enterprises. Its formation became a natural response to the intensification of global challenges associated with the limitation of natural resources, environmental threats, social inequality, and the instability of economic growth. In this regard, there emerged a need to transition from an extensive model of development to one that ensures the long-term balance of economic, social, and environmental processes.

The foundations of the sustainable development concept were established in the second half of the twentieth century, when the scientific community began actively discussing the limits of economic growth and the consequences of industrialization. An important milestone in the development of this concept was the publication of the report by the World Commission on Environment and Development, *Our Common Future*<sup>1</sup>, in which the classical definition of sustainable development was formulated as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This definition became fundamental for the further development of scientific approaches and practical mechanisms for implementing the principles of sustainable development. The subsequent institutionalization of the sustainable development concept took place within the framework of the activities of the United Nations, in particular through the adoption of international documents and programs aimed at achieving balanced development<sup>2</sup>. In this context, key directions of economic transformation were identified, emphasizing the integration of environmental and social aspects into economic growth processes. For enterprises, this implies the need to consider not only financial performance but also the impact of their activities on society and the environment.

The evolution of the concept of sustainable development at the enterprise level is characterized by a gradual transition from a traditional model of economic activity focused solely on profit generation to a multidimensional model that involves a comprehensive consideration of the interests of various stakeholder groups. Within the classical approach, enterprise performance was

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<sup>1</sup> Brundtland-Report-1987-Our-Common-Future. URL: <https://www.brundtland.co.za/wp-content/uploads/2022/08/Brundtland-Report-1987-Our-Common-Future.pdf>

<sup>2</sup> Sustainability. URL: <https://www.un.org/en/academic-impact/sustainability>

primarily assessed using indicators such as profitability, return, and productivity. However, over time, it became evident that such an approach does not ensure the long-term sustainability of enterprises, as it ignores the impact of the external environment and the socio-environmental consequences of business activities.

Contemporary approaches to sustainable enterprise development are based on the integration of economic, social, and environmental components into a unified management system. One of the key tools for such integration is the “triple bottom line” concept proposed by John Elkington, which involves evaluating enterprise performance across three dimensions: economic, social, and environmental<sup>3</sup>. The application of this approach enables enterprises to develop more balanced development strategies focused on achieving long-term outcomes.

An important direction in the development of the concept of sustainable enterprise development is its integration with approaches to corporate social responsibility. In this context, enterprises are viewed as active participants in socio-economic processes, bearing responsibility for the outcomes of their activities before society. This implies adherence to ethical business practices, the provision of appropriate working conditions, participation in addressing social issues, and the minimization of negative environmental impacts. A significant element of the modern understanding of sustainable enterprise development is the innovation component. Innovations serve as one of the key instruments for ensuring sustainable development, as they contribute to improving resource efficiency, reducing costs, creating new products and services, and opening opportunities for entering new markets. Innovative activity enables enterprises not only to adapt to changes in the external environment but also to actively shape these changes, thereby ensuring their own development.

In this context, particular importance is attached to the interconnection between sustainable enterprise development and the processes of economic digitalization. Digitalization creates new opportunities for the implementation of sustainable development principles, particularly through improving management efficiency, optimizing resource utilization, reducing costs, and increasing the transparency of enterprise activities. The use of digital technologies enables enterprises to analyze information more effectively, make well-grounded managerial decisions, and respond rapidly to changes in the market environment. At the same time, digitalization necessitates the

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<sup>3</sup> Triple bottom line. URL: [https://en.wikipedia.org/wiki/Triple\\_bottom\\_line](https://en.wikipedia.org/wiki/Triple_bottom_line)

transformation of internal enterprise processes, including changes in organizational structures, the implementation of new business models, the development of employees' digital competencies, and the enhancement of innovation activity. In this regard, sustainable enterprise development acquires new characteristics associated with the need to ensure flexibility, adaptability, and the ability to respond quickly to change. The study of sustainable enterprise development becomes particularly relevant in the context of transformation processes taking place in the economy of Ukraine. The current conditions of enterprise functioning are characterized by a high level of uncertainty caused by both internal and external factors. Under these conditions, sustainable enterprise development is considered a necessary prerequisite for ensuring enterprise competitiveness and long-term efficiency.

The concept of sustainable enterprise development is a multidimensional and dynamic category that reflects the complex interaction of economic, social, and environmental factors of development. Its evolution indicates a gradual expansion of its content and increasing complexity of approaches to ensuring enterprise development, driven by changes in the external environment and the growing role of innovation and digital technologies. In this context, sustainable enterprise development is considered not only as a strategic objective but also as a necessary condition for the effective functioning and long-term development of enterprises.

Economic digitalization is one of the key trends at the current stage of global economic development, significantly influencing the functioning of enterprises by transforming the nature of economic processes, business models, and management approaches. It represents not only a technological phenomenon but also a complex socio-economic process that defines a new paradigm for enterprise development in a globalized environment. In a broad sense, economic digitalization is understood as the process of integrating digital technologies into all spheres of economic activity, ensuring the transformation of production, distribution, exchange, and consumption processes. It involves the use of information and communication technologies, automation, digital platforms, big data analytics, artificial intelligence, the Internet of Things, and other innovative solutions that enhance the efficiency of enterprise activities. Contemporary scientific approaches interpret digitalization as the foundation for the formation of a new economic system – the digital economy – in which data become the key resource and knowledge and information serve as the main drivers of development. In this regard, digitalization is closely linked to the processes of economic intellectualization, which is reflected in the growing

importance of intellectual capital, innovation, and technological development of enterprises.

The impact of digitalization on enterprise activities is multifaceted and manifests itself through the transformation of all key functional areas. First and foremost, digitalization transforms production processes by facilitating the implementation of automated management systems, robotics, the use of intelligent technologies, and the optimization of resource utilization <sup>4</sup>. This contributes to increased labor productivity, reduced production costs, and more efficient use of material and energy resources.

Significant changes also occur in enterprise management activities. The use of digital technologies provides access to large volumes of information, which enhances the soundness of managerial decision-making. Analytical tools and decision support systems contribute to improving the quality of strategic planning, forecasting, and control of enterprise activities. As a result, management becomes more flexible, adaptive, and proactive.

Digitalization also significantly transforms the marketing activities of enterprises, creating new opportunities for interaction with consumers. The use of digital communication channels, social media, e-commerce, and digital platforms enables enterprises to better analyze consumer needs, develop personalized offerings, and expand market reach. In this context, digitalization contributes to the formation of customer-oriented business models, which represent an important element in ensuring enterprise competitiveness.

Particular attention should be paid to the impact of digitalization on the financial activities of enterprises. The use of digital financial instruments, electronic payment systems, fintech solutions, and automated accounting systems contributes to increasing the transparency of financial flows, optimizing costs, and reducing risks. This, in turn, ensures more efficient management of enterprise financial resources. An important aspect of digitalization is the transformation of enterprise business models. Digital technologies facilitate the transition from traditional business models to innovative ones based on the use of platforms, services, and digital ecosystems. New forms of business organization are emerging, such as e-commerce, digital platforms, and service-based models, which enable more flexible responses to changes in the market environment.

Along with its positive effects, digitalization also creates a number of challenges for enterprises. These include the need for significant investments

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<sup>4</sup> Дашко І., Михайліченко Л. Цифровізація економіки як нова реальність України в умовах сьогодення. *Економічний простір*. 2024. № 190. С. 237-241. DOI: <https://doi.org/10.32782/2224-6282/190-43>

in digital transformation, the necessity of improving staff qualifications, risks associated with cybersecurity, and the need to adapt organizational structures to new operating conditions. In this regard, digitalization requires a comprehensive approach to development management. In the context of ensuring sustainable enterprise development, digitalization plays a dual role. On the one hand, it creates conditions for improving resource efficiency, reducing environmental impact, and enhancing corporate social responsibility. On the other hand, it requires consideration of new risks and challenges associated with digital transformation.

Digitalization becomes particularly relevant in the context of transformation processes taking place in the economy of Ukraine. It is considered one of the key factors in the modernization of enterprises, increasing their competitiveness, and ensuring effective functioning. The implementation of digital technologies enables enterprises to adapt to changes in the external environment, enhance innovation activity, and ensure resilience to crisis phenomena<sup>5</sup>. Economic digitalization acts as an important factor in transforming enterprise activities, defining new conditions for their functioning and development. It enhances efficiency, flexibility, and competitiveness while simultaneously generating new challenges that require appropriate managerial responses. In this regard, digitalization becomes an integral component of ensuring sustainable enterprise development and forming an effective economic mechanism for enterprise development.

Sustainable enterprise development and economic digitalization constitute interconnected processes that define contemporary approaches to the functioning and development of business entities. Their integration ensures the formation of a new enterprise management paradigm based on the combination of economic efficiency, social responsibility, and environmental balance through the use of digital technologies. Sustainable enterprise development involves achieving long-term stability of enterprise functioning based on efficient resource utilization, adaptation to changes in the external environment, and consideration of the interests of various stakeholder groups. In turn, economic digitalization provides the instrumental foundation for achieving these objectives by enhancing management efficiency, optimizing business processes, and fostering innovation.

Scientific studies emphasize that economic digitalization contributes to the transformation of enterprise activities by shaping new approaches to value

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<sup>5</sup> Башлай С., Яремко І. Цифровізація економіки України в умовах євроінтеграційних процесів. *Економіка та суспільство*. 2023. № 48. DOI: <https://doi.org/10.32782/2524-0072/2023-48-48>

creation, production organization, and resource management. In particular, V. Vyshnevskiy and S. Kniaziev argue that digital technologies serve as a key factor in enhancing enterprise productivity and competitiveness, as well as creating the preconditions for the transition to new models of economic development <sup>6</sup>.

The interconnection between sustainable enterprise development and digitalization should be considered through the prism of the main components of sustainable development – economic, social, and environmental. The economic component of sustainable development involves ensuring the efficiency of enterprise activities, enhancing competitiveness, and achieving long-term results. Digitalization contributes to these objectives through the automation of production processes, cost optimization, increased labor productivity, and the development of innovative business models. As noted by L. Fedulova, the development of the knowledge economy and the implementation of digital technologies ensure more efficient resource utilization and the creation of new competitive advantages for enterprises <sup>7</sup>.

The social component of sustainable enterprise development is associated with the development of human capital, the provision of appropriate working conditions, and the enhancement of corporate social responsibility. Digitalization contributes to the transformation of labor relations, the development of new forms of employment, and the increasing importance of employees' knowledge and competencies. In this context, the role of intellectual capital as a key resource for enterprise development is growing.

The environmental component of sustainable enterprise development involves reducing the negative impact of enterprise activities on the environment and ensuring the rational use of natural resources. Digital technologies contribute to achieving these objectives through the implementation of resource-saving technologies, optimization of energy consumption, and the use of environmental monitoring systems. The application of digital solutions enables enterprises to enhance their level of environmental responsibility and ensure more efficient resource management.

An important aspect of the interconnection between sustainable enterprise development and digitalization is the transformation of enterprise management systems. As noted by S. Illiashenko and N. Illiashenko, the innovative development of enterprises, largely based on digital technologies, ensures

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<sup>6</sup> Вишневіський В. П., Князев С. І. Цифровізація економіки України: трансформаційний потенціал. Київ : Академперіодика, 2020. 188 с.

<sup>7</sup> Федуллова Л. І. Національна інноваційна система в умовах цифровізації. *Економічна теорія та право*. 2018. 4. С. 44-64.

increased competitiveness and adaptability to changes in the external environment <sup>8</sup>.

Digitalization facilitates the transition to more flexible and adaptive management models, enabling enterprises to respond promptly to changes in the market environment, improve the efficiency of managerial decision-making, and ensure long-term development. Particular attention should be paid to the impact of digitalization on the formation of new business models that align with the principles of sustainable enterprise development. The spread of digital platforms, service-based models, and ecosystems allows enterprises to use resources more efficiently, reduce costs, and generate new sources of revenue. This contributes to enhancing enterprise resilience and their capacity for adaptation.

Along with its positive effects, the integration of digitalization and sustainable enterprise development is accompanied by a number of challenges. These include the need for significant investments in digital technologies, the necessity of developing employees' digital competencies, cybersecurity risks, and the need to adapt organizational structures. In this regard, the formation of an economic mechanism that ensures the alignment of digitalization and sustainable development processes becomes particularly important.

For the economy of Ukraine, the integration of digitalization and the principles of sustainable enterprise development represents an important direction for enterprise transformation and the enhancement of competitiveness. It creates preconditions for the modernization of production, improvement of resource efficiency, and intensification of innovation activity. The interconnection between sustainable enterprise development and digitalization is a complex and multifaceted process that defines new approaches to enterprise functioning and development. Digitalization serves as an important instrument for ensuring sustainable enterprise development by creating conditions for improving efficiency, innovativeness, and adaptability. At the same time, the effective integration of these processes requires the formation of an economic mechanism for development management that ensures long-term sustainability and competitiveness of enterprises.

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<sup>8</sup> Ілляшенко С. М., Ілляшенко Н. С. Цифровізація як перспективний напрямок інноваційного розвитку економіки України. Бізнес, інновації, менеджмент: проблеми та перспективи: зб. тез доп. 3-ї Міжнар. наук.-практ. конф., 08 грудня 2022 р. ред. кол.: М. О. Кравченко [та ін.]; Київ. політехн. ін-т ім. Ігоря Сікорського. Київ: КПІ ім. Ігоря Сікорського, 2022. С. 172.

## 26.2. Analysis of the Current State and Development Trends of Enterprises in the Context of Economic Digitalization

The development of enterprises in Ukraine is determined by a combination of macroeconomic, institutional, and technological factors, among which innovation activity and the level of digitalization are of particular importance. Assessing the current state of the enterprise sector requires the analysis of statistical indicators that characterize the dynamics of economic development, innovation processes, and the use of digital technologies. The overall economic context of enterprise functioning is shaped by the dynamics of gross domestic product. According to the Centre for Economic Strategy, following a significant economic decline in 2022, a recovery of economic activity was recorded in 2023, creating preconditions for the revitalization of enterprise activities<sup>9</sup>. Positive macroeconomic dynamics contribute to the intensification of enterprise activities; however, their development largely depends on the level of innovation activity. According to official data from the State Statistics Service of Ukraine, the innovation activity of Ukrainian enterprises is characterized by a relatively low share of innovation-active business entities<sup>10</sup>. In particular, statistical data indicate that the share of innovation-active industrial enterprises has fluctuated within the range of 15-20% over the years, which is significantly lower compared to the countries of the European Union. This indicates an insufficient level of innovative development of enterprises and limited use of modern technologies. An analysis of innovation expenditures shows that the primary source of financing remains enterprises' own funds. According to the State Statistics Service of Ukraine, their share exceeds 80% of the total volume of innovation financing, while the share of public funding and foreign investment remains insignificant. Such a financing structure indicates the presence of financial constraints that hinder the development of innovation activity, as well as the insufficient development of innovation infrastructure. At the same time, there is a gradual increase in the role of technological innovation, which is associated with the spread of digital technologies. Digitalization is becoming one of the key factors in enterprise development, as it ensures improved performance efficiency, cost optimization, and expanded market opportunities. The level of digitalization of enterprises in

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<sup>9</sup> Трекер економіки України під час війни. URL: <https://ces.org.ua/tracker-economy-during-the-war/>

<sup>10</sup> Інноваційна діяльність підприємств. URL: <https://stat.gov.ua/uk/datasets/innovatsiyana-diyalnist-pidpryemstv>

Ukraine is characterized by unevenness. In particular, a significantly smaller proportion of enterprises use such technologies as:

- enterprise resource planning systems;
- cloud services;
- big data;
- artificial intelligence.

This indicates that a significant proportion of enterprises are at an early stage of digital transformation.

An important trend is the growing role of certain sectors of the economy that act as drivers of digitalization. In particular, the IT sector of Ukraine demonstrates stable development and makes a significant contribution to the formation of gross value added. According to the National Bank of Ukraine, the export of IT services is one of the most dynamic segments of the economy and generates substantial foreign exchange earnings<sup>11</sup>. This contributes to the diffusion of digital technologies across various sectors of the economy and stimulates enterprise development.

Particular attention should be paid to the development of e-commerce and digital sales channels. The spread of online platforms, marketplaces, and digital services enables enterprises to expand their markets and improve the efficiency of interaction with consumers. Alongside these positive trends, the development of enterprises in Ukraine is accompanied by a number of challenges. The main ones include a low level of innovation activity, limited financial resources, uneven digitalization, an insufficient level of digital competencies, and institutional barriers. These factors constrain enterprise development and limit their capacity for effective transformation. At the same time, the analysis indicates that enterprises actively implementing innovation and digital technologies demonstrate higher levels of resilience and adaptability. This confirms the importance of digitalization as a key factor in ensuring long-term enterprise development. The development of enterprises in Ukraine is characterized by both positive trends associated with gradual economic recovery, the growing role of innovation and digital technologies, and significant challenges that hinder their development. This necessitates the formation of effective approaches to development management that take into account the impact of digitalization and contribute to ensuring sustainable enterprise development. Innovation and digitalization form two interconnected trajectories of enterprise competitiveness: innovation ensures the renewal of

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<sup>11</sup> Експорт ІТ-послуг у жовтні зріс до \$566 млн – НБУ. URL: <https://forbes.ua/news/eksport-it-poslug-u-zhovtni-zris-do-566-mln-nbu-01122025-34534>

products and processes, while digital technologies accelerate scaling, enhance the manageability of supply chains, reduce transaction costs, and support data-driven decision-making. For Ukrainian enterprises, the dominant factors include the ability to finance innovation under conditions of increased risk, a shift toward research and development and technological innovation, as well as digital capabilities – from basic internet connectivity to corporate systems and analytics. According to official data on innovation expenditures of industrial enterprises, in 2019 total expenditures amounted to UAH 14220.9 million, while the share of research and development in the expenditure structure was 20.5%. In the period 2021-2023, an increase in the share of R&D is observed (for example, 34.7% in 2023), which can be interpreted as a “concentration” of innovation budgets toward research and development alongside a simultaneous contraction of total innovation expenditures<sup>12</sup>. In 2019, the financing of innovation in industrial enterprises was predominantly concentrated in enterprises’ own funds (87.7%), with a noticeable role of loans (6%) and a limited contribution of public funding and investors. The analysis of innovation activity of enterprises in Ukraine requires the use of a system of quantitative indicators reflecting the dynamics of innovation implementation, the structure of financing, and the outcomes of innovation activity. The generalization of statistical data makes it possible to identify the main trends in the development of innovation processes in the industrial sector, as well as to assess their impact on the efficiency of enterprise functioning. For a more detailed study of the state of innovation activity, it is advisable to examine the dynamics of key indicators over recent years (Table 1).

The dynamics of the interrelation “innovation activity – expenditures – sales” in 2019-2023 reflect significant transformations in enterprise functioning and allow for a deeper assessment of the effectiveness of innovation processes. The analysis of this chain indicates the presence of three key shifts that characterize current trends in the development of innovation activity. First, there is a decline in the share of innovation activity after 2020. The reduction in the proportion of innovation-active enterprises in 2021-2023 indicates a narrowing of the innovation base, that is, a decrease in the number of enterprises that implement or report innovation activities. This trend may be driven by increased uncertainty, higher business risks, relocation processes, disruptions in supply chains, loss of production capacities, and changes in demand structure. At the same time, when interpreting these indicators, it is important

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<sup>12</sup> Витрати на інновації промислових підприємств за видами витрат за 2000-2024 роки. URL: <https://stat.gov.ua/uk/page-contents/vidomosti-po-formakh-2026>

to consider the specifics of statistical data formation, including possible changes in enterprise samples and coverage of statistical observations. The second important trend is the contraction of total innovation expenditures alongside an increase in the share of research and development. In 2023, the total volume of innovation expenditures is significantly lower compared to 2019-2020; however, the share of R&D in their structure increased to approximately 35%. This may indicate a form of “filtering” of innovation expenditures, where enterprises prioritize funding research activities over capital-intensive investments in equipment. At the same time, this may be a consequence of constraints in the supply of technical resources or complications in logistics processes. In addition, there is a shift of innovation activity toward the intangible domain, particularly in the areas of software, digital solutions, and business process optimization, which are often reflected in statistical reporting as R&D or other innovation expenditures. The third characteristic feature is the deterioration of innovation commercialization indicators in 2023. The decline in the volume of innovative products sold, as well as the reduction of their share in total industrial sales to approximately 0.5%, indicates the presence of barriers at the stage of bringing innovations to the market. This suggests that even when innovation activity is maintained, enterprises face difficulties in scaling the results of innovation activities and their commercial application. Possible reasons include limited domestic demand, challenges in foreign economic activity and logistics, and the inertia of investment decisions among consumers. The examined chain of relationships between innovation activity, expenditure volumes, and commercialization outcomes demonstrates not only quantitative changes but also a qualitative transformation of innovation processes at enterprises, which requires further in-depth analysis and consideration in the formation of an effective economic mechanism for their development.

Digitalization serves as one of the key factors in the transformation of economic processes and determines new approaches to ensuring sustainable enterprise development. The use of digital technologies contributes to improving the efficiency of resource management, optimizing business processes, reducing costs, and forming new models of value creation, which directly affects the economic, social, and environmental components of sustainable development. In the context of the economic component of sustainable enterprise development, digitalization enhances enterprise productivity. The implementation of digital solutions such as production automation, enterprise resource planning systems, big data analytics, and digital platforms enables the reduction of operational costs, improvement of product

quality, and optimization of logistics processes. According to World Bank estimates, digital technologies can significantly increase enterprise productivity by reducing transaction costs and improving market access <sup>13</sup>.

Table 1

**Innovation activity of enterprises in Ukraine for the period 2019-2023**

<b>Indicator</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Share of innovation-active industrial enterprises, %	15.8	16.8	9.6	10.5	8.8
Number of innovation-active industrial enterprises	782	809	453	423	354
Innovation expenditures, mln UAH	14220.9	14406.9	10171.7	7640.5	6989.2
Share of R&D in innovation expenditures, %	20.5	24.2	33.3	26.4	34.7
Own funds in innovation financing, %	87.7	85.4	79.8	78.9	81.7
Loans in innovation financing, %	6	9.6	8.1	2.7	4.5
Volume of innovative industrial products sold, mln UAH	34264.9	47526.2	36838.4	31678.5	19381.8
Share of innovative products in total industrial sales, %	1.3	1.9	0.93	0.96	0.51

Source: <sup>14</sup>

An important aspect is also the impact of digitalization on the innovation activity of enterprises. Digital technologies create new opportunities for the development and implementation of innovations, particularly through the use of artificial intelligence, cloud computing, and the Internet of Things. This contributes to the formation of an innovation ecosystem in which enterprises can adapt more quickly to changes in the external environment and enhance their competitiveness.

<sup>13</sup> Digital and AI. URL: <https://www.worldbank.org/ext/en/topic/digital-and-ai>

<sup>14</sup> Витрати на інновації промислових підприємств за видами витрат за регіонами у 2020-2024 роках. URL: [https://www.ukrstat.gov.ua/operativ/operativ2021/ni/vut\\_ippni/vi\\_pp\\_reg.xlsx](https://www.ukrstat.gov.ua/operativ/operativ2021/ni/vut_ippni/vi_pp_reg.xlsx)

The social dimension of sustainable enterprise development is also significantly influenced by digitalization. On the one hand, digital technologies contribute to the creation of new jobs, the development of remote employment, and increased access to educational resources. On the other hand, digital transformation requires an increase in employees' digital competencies, which creates new challenges for the education system and human resource management. The environmental component of sustainable enterprise development is also closely linked to digitalization. The use of digital technologies enables the optimization of resource consumption, reduction of energy use, and minimization of negative environmental impact. For example, the implementation of energy monitoring and management systems allows enterprises to use energy resources more efficiently.

In the context of Ukraine, the impact of digitalization on enterprise development has its specific features. On the one hand, there is an active development of the IT sector and digital services, which creates preconditions for the diffusion of digital technologies across various sectors of the economy. On the other hand, the level of digitalization of most enterprises remains insufficient. According to the State Statistics Service of Ukraine, although a significant share of enterprises has access to the Internet, the use of advanced digital technologies remains limited. This indicates the need to intensify enterprise digital transformation processes and to develop the corresponding infrastructure.

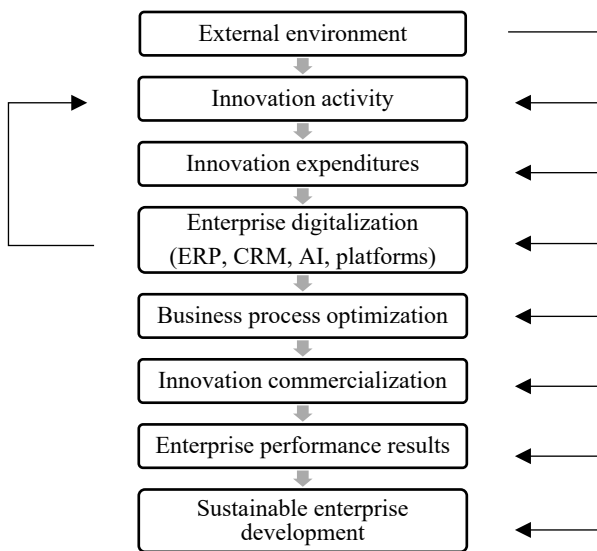
An important direction is the development of digital platforms and e-commerce, which ensure the expansion of markets and enhance the efficiency of interaction with consumers. Digital communication channels enable enterprises to respond more quickly to changes in demand and to develop personalized offerings. In addition, digitalization contributes to increasing the transparency of enterprise activities and improving corporate governance. The use of digital accounting and control systems enhances the effectiveness of managerial decision-making and reduces risks.

At the same time, the process of digitalization is accompanied by a number of challenges. The main ones include an insufficient level of investment in digital technologies, a shortage of qualified personnel, cybersecurity risks, and unequal access to digital infrastructure.

These challenges constrain the development of digitalization and reduce its effectiveness. At the same time, the analysis indicates that enterprises actively implementing digital technologies demonstrate higher levels of efficiency, resilience, and competitiveness. This confirms the importance of digitalization as a key instrument for ensuring sustainable enterprise development.

Digitalization acts as one of the determining factors of sustainable enterprise development, as it enhances the efficiency of enterprise activities, promotes innovation, and enables adaptation to changes in the external environment. The further development of enterprises in Ukraine requires the intensification of digitalization processes, the development of appropriate infrastructure, and the enhancement of digital competencies.

The generalization of the conducted analysis of innovation activity and the level of digitalization of enterprises allows for the formation of a comprehensive understanding of the interrelationships between the key elements of enterprise development. In particular, it has been established that innovation activity, the volume of innovation expenditures, the level of digitalization, and the results of innovation commercialization form a unified system of interdependent factors that determine the efficiency of enterprise functioning. In order to systematize the identified relationships, it is advisable to present a generalized framework illustrating the impact of innovation activity and digitalization on enterprise performance (Figure 1).



**Figure 1. Generalized framework of the impact of innovation activity and digitalization on enterprise performance**

*Source: developed by the author*

The presented framework allows for the generalization of the results of the conducted analysis and illustrates the key interrelationships between innovation activity, digitalization, and enterprise performance. It has been established that digitalization acts not only as a separate factor of development but also as an integrating element that enhances the effectiveness of innovation processes and facilitates their commercialization. This confirms the appropriateness of considering digitalization as a key instrument for ensuring sustainable enterprise development.

### **26.3. Formation of the Economic Mechanism for Sustainable Enterprise Development in the Context of Economic Digitalization**

The conducted analysis of the current state of enterprise development in Ukraine, as well as the study of their innovation activity and level of digitalization, has revealed both significant growth potential and systemic challenges that constrain the effectiveness of the enterprise sector. In particular, it has been established that the innovation activity of enterprises is characterized by unstable dynamics, the structure of innovation financing remains limited, and the level of digitalization is uneven and insufficient to ensure high competitiveness. The identified trends indicate the need to transition to new approaches to enterprise development management that take into account the impact of digital technologies, innovation processes, and external environmental factors. In this context, particular importance is attached to the formation of an economic mechanism for sustainable enterprise development that ensures the integration of economic, social, and environmental objectives of enterprise activity.

The economic mechanism for sustainable enterprise development should be considered as a system of interrelated elements, including goals, principles, methods, instruments, and resources aimed at ensuring the efficient functioning of the enterprise and achieving long-term results. In the context of economic digitalization, this mechanism acquires new characteristics, as digital technologies act not only as a tool for improving efficiency but also as a factor in transforming business models and managerial approaches. A specific feature of the formation of the economic mechanism for sustainable enterprise development is the need to take into account the interrelationship between innovation activity and digitalization. Digitalization acts as a catalyst for innovation processes, contributing to more efficient resource utilization and expanding opportunities for the commercialization of innovations. At the same time, innovation activity provides the substantive basis for enterprise digital transformation. In the process of forming the economic mechanism for

sustainable enterprise development, it is also important to consider the influence of external environmental factors, including macroeconomic instability, changes in market conditions, technological trends, and institutional frameworks. These factors determine the ability of enterprises to implement innovations, their level of digitalization, and the effectiveness of development strategies.

In addition, the formation of the economic mechanism for sustainable enterprise development involves the integration of modern management tools, among which digital platforms, data analytics systems, automated management systems, and digital marketing instruments play an important role. The use of these tools enables enterprises to improve the efficiency of managerial decision-making, optimize business processes, and ensure flexibility in responding to changes in the external environment. The formation of the economic mechanism for sustainable enterprise development in the context of economic digitalization is a complex and multi-component process that requires a systemic approach and consideration of a wide range of factors. The development of such a mechanism will ensure increased efficiency of enterprise activities, enhanced competitiveness, and long-term resilience.

The economic mechanism for sustainable enterprise development represents a complex system of interrelated elements that ensure the achievement of long-term economic, social, and environmental objectives of enterprise functioning. Its formation becomes particularly important in the context of economic digitalization, which transforms traditional approaches to enterprise management and creates new opportunities for development. The economic mechanism of enterprise development is considered as a set of methods, instruments, levers, and organizational solutions aimed at ensuring efficient functioning and achieving strategic goals. At the same time, within the framework of sustainable enterprise development, this mechanism acquires a comprehensive character, as it involves the alignment of economic outcomes with social and environmental aspects of enterprise activities.

Taking into account the results of the conducted analysis, it is advisable to interpret the economic mechanism for sustainable enterprise development as an integrated management system that combines innovation, digital, organizational, and economic instruments in order to ensure efficient resource utilization, enhance competitiveness, and achieve long-term sustainability of enterprises. The formation of such a mechanism requires adherence to a set of key principles, including systemicity, adaptability, innovativeness, efficient resource utilization, and a long-term orientation. Systemicity implies the interconnection of all elements of the mechanism, adaptability refers to the

ability to respond to changes in the external environment, and innovativeness reflects a focus on the implementation of new technologies and solutions.

The structure of the economic mechanism for sustainable enterprise development includes several interrelated components, each of which performs a specific function in ensuring enterprise development.

The first element is the target subsystem, which defines the strategic orientations of enterprise development. It includes economic objectives (profitability growth, improvement of efficiency), social objectives (personnel development, employment provision), and environmental objectives (reduction of negative environmental impact).

The second element is the resource subsystem, which encompasses financial, material, labor, and information resources. In the context of economic digitalization, particular importance is attached to information resources and digital data, which serve as the basis for managerial decision-making.

The third element is the instrumental subsystem, which includes methods, levers, and tools for implementing the mechanism. These include economic instruments (pricing, investment, financing), organizational instruments (management structure, business processes), and digital instruments (ERP systems, CRM systems, data analytics, digital platforms).

The fourth element is the process subsystem, which reflects the main business processes of the enterprise, including production, logistics, marketing, human resource management, and innovation activity. In the course of digitalization, these processes undergo transformation, contributing to increased efficiency.

The fifth element is the result subsystem, which reflects the outcomes of enterprise functioning and includes economic indicators (profit, profitability), social indicators (employment, employee satisfaction), and environmental indicators (emissions volume, resource efficiency). It is also advisable to distinguish a digital subsystem, which integrates all elements of the economic mechanism and ensures their effective interaction. Digital technologies function not only as tools but also as an environment for enterprise operation, defining new approaches to the organization of activities.

An important feature of the economic mechanism is its interaction with the external environment. External environmental factors, including economic crises, changes in market conditions, government regulation, and technological trends, influence all elements of the mechanism and determine the possibilities for its implementation. The economic mechanism for sustainable enterprise development represents a comprehensive system that integrates the goals, resources, instruments, processes, and results of enterprise activities.

Its formation in the context of economic digitalization involves the integration of digital technologies into all elements of the mechanism, ensuring increased efficiency of enterprise functioning, adaptability, and competitiveness. Taking into account the influence of the external environment enables the flexibility of the mechanism and its capacity to adapt, which is a necessary condition for sustainable enterprise development.

The implementation of the economic mechanism for sustainable enterprise development involves the use of a system of interrelated instruments that ensure the achievement of strategic objectives and improve the efficiency of enterprise activities. In the context of economic digitalization, these instruments undergo significant transformation, as digital technologies change the ways in which business processes are organized, resources are managed, and market interactions are conducted. The instruments for implementing the economic mechanism should be considered as a set of economic, organizational, innovation, and digital means of influencing enterprise activities that ensure sustainable enterprise development. Their effectiveness is determined by their ability to be integrated into a unified management system and to adapt to changes in the external environment.

One of the key groups of instruments is economic instruments, which include financial planning, investment, pricing, budgeting, and cost management. The use of these instruments enables enterprises to optimize cost structures, ensure efficient resource utilization, and increase profitability. In the context of sustainable enterprise development, particular importance is attached to a long-term efficiency orientation, which involves taking into account not only economic but also social and environmental factors.

Innovation instruments also play an important role, as they are aimed at the formation and implementation of enterprise innovation strategies. These include innovation project management, financing of research and development, the introduction of new products and technologies, as well as the development of innovation infrastructure. Innovation instruments ensure the renewal of enterprise activities and the formation of competitive advantages.

Digital instruments acquire particular importance in the context of economic digitalization, acting as a key factor in the transformation of the economic mechanism. The main digital instruments include enterprise resource planning systems, customer relationship management systems, business analytics systems, cloud technologies, digital platforms, artificial intelligence technologies, and the Internet of Things. The use of these instruments enables the automation of business processes, improves the accuracy of managerial decision-making, and ensures operational flexibility. According to the State

Statistics Service of Ukraine, the use of digital technologies by enterprises is gradually increasing; however, the level of implementation of advanced digital solutions remains limited. This indicates the need to intensify the adoption of digital instruments as a key element of the economic mechanism for enterprise development.

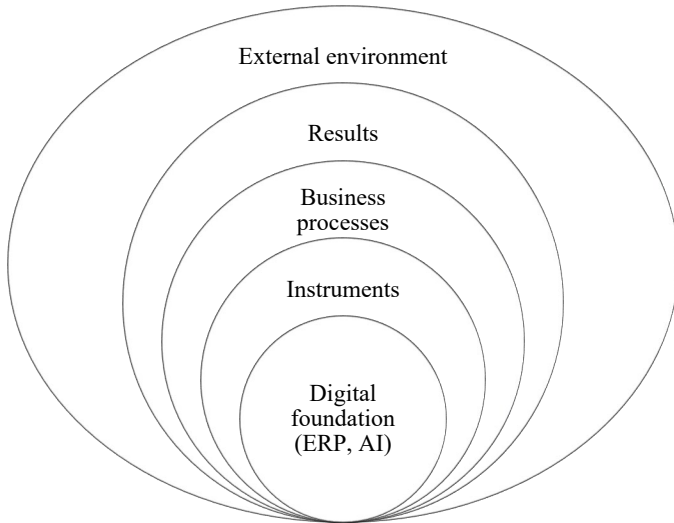
A separate group is represented by organizational instruments, which include the improvement of management structures, optimization of business processes, the implementation of modern management methods, and the development of corporate culture. These instruments ensure the effective implementation of strategic decisions and contribute to enhancing enterprise adaptability.

An important direction is the use of digital marketing instruments, which enable enterprises to interact effectively with consumers and shape demand for their products. These instruments include social media, contextual advertising, consumer behavior analytics, personalization of offerings, and the use of digital communication channels. They contribute to improving the efficiency of marketing activities and expanding the market opportunities of enterprises. In addition, instruments aimed at ensuring sustainable enterprise development play an important role. These include environmental management, energy efficiency, waste management, corporate social responsibility, and ESG approaches. The use of these instruments enables enterprises to minimize negative environmental impact and enhance their social responsibility. A significant role in the implementation of the economic mechanism is played by the integration of these instruments into a unified management system. The interaction of economic, innovation, digital, and organizational instruments ensures a synergistic effect, which is reflected in increased efficiency of enterprise activities and the achievement of sustainable enterprise development (Figure 2).

The proposed model allows for the generalization of the research findings and highlights the key role of digitalization as a system-forming element of the economic mechanism for sustainable enterprise development. Its application ensures a comprehensive consideration of the interrelationships between management instruments, business processes, and performance outcomes, thereby enhancing the efficiency of enterprise functioning and their adaptability to changes in the external environment.

The practical implementation of the economic mechanism for sustainable enterprise development in the context of economic digitalization involves the comprehensive adoption of interrelated measures aimed at transforming management approaches, optimizing business processes, improving resource

efficiency, and ensuring long-term enterprise sustainability. Unlike theoretical justification, the practical dimension of mechanism formation requires the specification of instruments, stages, and conditions of implementation, taking into account the specific features of enterprise functioning.



**Figure 2. System of instruments for implementing the economic mechanism of sustainable enterprise development**

*Source: developed by the author*

One of the key directions for implementing the economic mechanism is the integration of digital technologies into the enterprise management system. Digitalization should be considered not as a separate process, but as a systemic transformation that encompasses all levels of enterprise activity. The implementation of digital solutions, including enterprise resource planning systems, analytical platforms, cloud technologies, and automation tools, enables increased transparency of business processes, cost reduction, and improved quality of managerial decision-making. Practice shows that enterprises that implement digital technologies at a systemic level demonstrate higher operational efficiency and greater adaptability.

An important direction is the formation and implementation of an enterprise innovation strategy. Innovation activity should be integrated into the overall

management system and considered as a continuous process rather than a one-time initiative. The practical implementation of this direction involves the creation of internal mechanisms for innovation generation, the development of cooperation with research institutions, the use of open innovation, and the involvement of external partners. A special role is played by the digitalization of innovation processes, which makes it possible to accelerate the development of new products and improve the efficiency of their commercialization.

Equally important is the improvement of the enterprise business process management system. In the context of economic digitalization, there is a transition from traditional management models to a process-oriented approach, which involves the optimization of key business processes using digital tools. Practical measures in this area include business process reengineering, automation of operational activities, the implementation of monitoring and control systems, as well as the use of data analytics for managerial decision-making.

The development of human capital as one of the key elements of the economic mechanism for sustainable enterprise development is of significant importance. In the context of digital transformation, enterprises face the need to enhance employees' digital competencies, which requires the implementation of continuous learning and professional development systems. The practical realization of this direction includes the organization of training programs, the development of an innovation-oriented corporate culture, and the stimulation of employees' creativity and initiative. A separate direction is ensuring the environmental component of sustainable enterprise development. The use of digital technologies opens new opportunities for improving energy efficiency, optimizing resource use, and reducing negative environmental impact. Practical measures in this area include the implementation of energy consumption monitoring systems, the use of digital resource management tools, and the development of environmentally oriented business models.

An important aspect is also the development of digital marketing as an instrument for ensuring sustainable enterprise development. The use of digital communication channels, consumer behavior analytics, personalization of offerings, and the development of e-commerce enable enterprises to interact more effectively with the market and enhance their competitiveness. Practice shows that enterprises actively using digital marketing have greater opportunities to expand their markets and build sustainable relationships with customers.

A significant role in the implementation of the economic mechanism is played by the formation of an effective system of financial resource

management. This involves optimizing cost structures, improving the efficiency of investment activities, and using modern financial instruments. In the context of economic digitalization, the use of financial technologies is particularly important, as they allow for the automation of financial processes and increase their transparency. At the same time, the practical implementation of the economic mechanism for sustainable enterprise development requires taking into account the influence of external environmental factors. Enterprises must be prepared for changes in market conditions, technological trends, and institutional frameworks, which necessitates the development of flexible strategies and the use of adaptive management tools. Particular importance is attached to the integration of all these directions into a unified enterprise management system. The effectiveness of the economic mechanism is determined not by individual instruments but by their coordinated use, which ensures a synergistic effect. In this context, digitalization acts as an integrating element that ensures the interaction of all components of the mechanism. The practical directions for implementing the economic mechanism for sustainable enterprise development in the context of economic digitalization involve a comprehensive transformation of enterprise activities, covering management, innovation, business processes, human capital, environmental activities, and marketing. The implementation of these directions makes it possible to enhance the efficiency of enterprise functioning, their competitiveness, and their capacity for long-term development.

## **CONCLUSIONS**

The conducted research made it possible to establish that the transformation of the economic environment, the intensification of competition, the growth of uncertainty, and the spread of digital technologies necessitate a reconsideration of approaches to enterprise development. It has been substantiated that sustainable enterprise development should be considered as a comprehensive process of ensuring the long-term stability of business entities based on balancing the economic, social, and environmental components of their activities. It has been determined that the evolution of the concept of sustainable development has progressed from a narrow interpretation of efficiency as the achievement of financial results to a multidimensional approach focused on taking into account the interests of various stakeholder groups, responsible resource use, innovation, and adaptability. As a result of the theoretical analysis, it has been substantiated that the digitalization of the economy is not only a technological process but also a systemic factor in the transformation of enterprise activities. Its impact is manifested in changes to production,

managerial, marketing, financial, and logistics processes, the formation of new business models, and the growing role of data, knowledge, and intellectual capital. It has been established that those digital technologies contribute to increased productivity, flexibility, transparency, and adaptability of enterprises; however, they simultaneously require significant investments, the development of employees' digital competencies, enhanced cybersecurity, and the transformation of organizational management structures.

The study of the relationship between sustainable development and digitalization has made it possible to conclude that digitalization forms the instrumental basis for implementing the principles of sustainable enterprise development. Its influence is observed through the economic component, where digital solutions contribute to cost optimization, process automation, and increased competitiveness; through the social component, where the role of human capital, digital skills, new forms of employment, and corporate responsibility is growing; and through the environmental component, where digital technologies create opportunities for energy efficiency, resource conservation, and reducing environmental impact. This provides grounds to assert that sustainable development and digitalization are not separate processes but form an integrated system of enterprise development factors.

In the course of the analytical study of the current state of Ukrainian enterprises, it has been established that their development is characterized by a combination of positive trends and significant constraints. On the one hand, there is a recovery of economic activity, an increasing role of innovation and digital technologies, and a strengthening of the IT sector, e-commerce, and digital sales channels. On the other hand, the innovation activity of enterprises remains insufficient, the financing of innovation is predominantly carried out through internal funds, and the implementation of advanced digital solutions is uneven. The analysis of statistical data for 2019–2023 showed a decrease in the share of innovation-active industrial enterprises, a reduction in total innovation expenditures, an increase in the share of R&D in the structure of these expenditures, and a deterioration in the indicators of commercialization of innovative products. This indicates a narrowing of the innovation base, increased resource constraints, and the presence of barriers to scaling innovations.

The study confirmed that digitalization is one of the key factors in increasing the resilience and performance of enterprises. Enterprises that more actively integrate digital technologies into management systems, production, marketing, logistics, and financial activities demonstrate a higher capacity for adaptation, use resources more efficiently, and have better prerequisites for the

commercialization of innovations. At the same time, the persistence of a low level of use of ERP systems, cloud services, big data analytics, and artificial intelligence technologies indicates the incompleteness of digital transformation for a significant share of Ukrainian enterprises.

Based on the generalization of theoretical provisions and the results of the analytical study, the expediency of forming an economic mechanism for sustainable enterprise development in the context of economic digitalization has been substantiated. It is proposed to interpret this mechanism as an integrated management system that combines goals, resources, principles, tools, business processes, and performance results, ensuring the alignment of economic, social, and environmental development priorities. It has been substantiated that the structure of such a mechanism should include target, resource, instrumental, process, performance, and digital subsystems, as well as take into account the influence of external environmental factors, including market conditions, government regulation, technological trends, and crisis phenomena.

The study demonstrates that the effectiveness of implementing the economic mechanism for sustainable development is ensured through the coordinated use of economic, innovative, organizational, digital, marketing, and environmental tools. Particular importance is assigned to digital tools, which perform a system-forming function by integrating various elements of the mechanism into a unified management model. Digitalization ensures increased transparency of business processes, accuracy of managerial decisions, responsiveness to environmental changes, and the effective use of the enterprise's innovation potential.

Practical directions for implementing the economic mechanism for sustainable enterprise development are associated with the need for systemic digital transformation of management, the formation of an innovation strategy, business process reengineering, human capital development, strengthening the environmental orientation of activities, the implementation of digital marketing, and the improvement of financial resource management systems. It has been established that only the comprehensive combination of these directions makes it possible to achieve a synergistic effect and ensure increased efficiency of enterprise functioning, their competitiveness, resilience, and capacity for long-term development.

Thus, the results of the study confirm that the formation of an economic mechanism for sustainable enterprise development in the context of economic digitalization is a necessary prerequisite for improving the efficiency of enterprise functioning and ensuring long-term sustainability. In this context,

digitalization acts not only as a tool for modernizing individual processes but as a strategic foundation for enterprise transformation, ensuring the integration of innovation activity, resource efficiency, management flexibility, and orientation toward sustainable development. Therefore, the further development of Ukrainian enterprises should be associated with deepening digital transformation, intensifying innovation activity, and implementing comprehensive management mechanisms capable of ensuring their resilience and competitive advantages in the long term.

### **SUMMARY**

The study addresses the problem of enterprise development under conditions of economic transformation, increasing uncertainty, and the rapid spread of digital technologies. It emphasizes the need to reconsider traditional approaches to development management in order to ensure long-term sustainability. The research substantiates that sustainable enterprise development should be interpreted as a comprehensive process based on balancing economic, social, and environmental components. It is determined that economic digitalization acts as a systemic factor transforming enterprise activities, business models, and management approaches. The study analyzes the current state of enterprise development in Ukraine, focusing on innovation activity and the level of digitalization. The results indicate the presence of both positive trends, such as economic recovery and the growing role of digital technologies, and significant constraints, including low innovation activity and limited financing. It is revealed that the share of innovation-active enterprises is decreasing, while innovation expenditures are contracting alongside structural changes in their composition. At the same time, enterprises actively implementing digital technologies demonstrate higher levels of efficiency, adaptability, and competitiveness. The study proves that digitalization forms the instrumental basis for implementing sustainable enterprise development by enhancing productivity, optimizing resource use, and supporting innovation processes. Based on theoretical and empirical analysis, an economic mechanism for sustainable enterprise development is proposed, which integrates goals, resources, instruments, business processes, and performance outcomes into a unified management system. The findings confirm that the effective implementation of such a mechanism requires the coordinated use of economic, innovation, digital, organizational, and environmental instruments, ensuring enterprise resilience and long-term development.

## References

1. Brundtland Report 1987 Our Common Future. URL: <https://www.brundtland.co.za/wp-content/uploads/2022/08/Brundtland-Report-1987-Our-Common-Future.pdf>
2. Sustainability. URL: <https://www.un.org/en/academic-impact/sustainability>
3. Triple bottom line. URL: [https://en.wikipedia.org/wiki/Triple\\_bottom\\_line](https://en.wikipedia.org/wiki/Triple_bottom_line)
4. Дашко І., Михайліченко Л. Цифровізація економіки як нова реальність України в умовах сьогодення. *Економічний простір*. 2024. № 190. С. 237-241. DOI: <https://doi.org/10.32782/2224-6282/190-43>
5. Башлай С., Яремко І. Цифровізація економіки України в умовах євроінтеграційних процесів. *Економіка та суспільство*. 2023. № 48. DOI: <https://doi.org/10.32782/2524-0072/2023-48-48>
6. Вишневський В. П., Князев С. І. Цифровізація економіки України: трансформаційний потенціал. Київ : Академперіодика, 2020. 188 с.
7. Федулова Л. І. Національна інноваційна система в умовах цифровізації. *Економічна теорія та право*. 2018. № 4. С. 44-64.
8. Ілляшенко С. М., Ілляшенко Н. С. Цифровізація як перспективний напрямок інноваційного розвитку економіки України. Бізнес, інновації, менеджмент: проблеми та перспективи: зб. тез доп. 3-ї Міжнар. наук.-практ. конф., 08 грудня 2022 р. ред. кол.: М. О. Кравченко [та ін.]; Київ. політехн. ін-т ім. Ігоря Сікорського. Київ: КПІ ім. Ігоря Сікорського, 2022. С. 172.
9. Трекер економіки України під час війни. URL: <https://ces.org.ua/tracker-economy-during-the-war/>
10. Інноваційна діяльність підприємств. URL: <https://stat.gov.ua/uk/datasets/innovatsiyna-diyalnist-pidpryemstv>
11. Експорт ІТ-послуг у жовтні зріс до \$566 млн – НБУ. URL: <https://forbes.ua/news/eksport-it-poslug-u-zhovtni-zris-do-566-mln-nbu-01122025-34534>
12. Витрати на інновації промислових підприємств за видами витрат за 2000-2024 роки. URL: <https://stat.gov.ua/uk/page-contents/vidomosti-poformakh-2026>
13. Витрати на інновації промислових підприємств за видами витрат за регіонами у 2020-2024 роках. URL: [https://www.ukrstat.gov.ua/operativ/operativ2021/ni/vut\\_ippni/vi\\_pp\\_reg.xlsx](https://www.ukrstat.gov.ua/operativ/operativ2021/ni/vut_ippni/vi_pp_reg.xlsx)
14. Digital and AI. URL: <https://www.worldbank.org/ext/en/topic/digital-and-ai>

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