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Innovative Development of the Enterprise of the Future: Analysis of Prospects in Conditions of Economic Instability

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ABSTRACT

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*Correspondence: o.trubey@knute.edu.ua The instability of the external environment, which is caused by global problems, such as the COVID-19 pandemic and the Russian military invasion of Ukraine, has focused enterprises on the new challenges to ensure the effectiveness of their functioning. The article analyzes the features of the functioning of enterprises of the future. The issues of directions for the formation and implementation of innovative activities have been resolved. The role of administrative leadership in business is analyzed. The conclusion is made about the need to consider the three components of leadership: territorial, remote, and social. Special attention is focused on the need to adapt to changes in the external environment in the short-term period of innovation planning.

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The modern development of the future enterprise aims to introduce innovations for effective adaptation to changes in the external environment, create resource potential, and maximize market value. At the same time, the direction of innovative development of the enterprise changes in the time interval. With the beginning of the formation of innovative entrepreneurial activity in the XIX century because of the development of free competition, the direction of innovative development of the enterprise expanded and deepened. Thus, already in the twentieth century began to form a new era of digital technology, which required new knowledge and the development of human capital. In general, development and the change of time imply a certain cyclical development. In such economic development, the previous waves do not disappear - they remain stable, and new waves add variety. Such cyclical changes are called phases of development. Physicists invented this concept to explain the existence of the same substance in different states. In the case of economic development, phases can be used to explain the main stages of social development, between which complex transitions take place. Global crises that have arisen in the economy, environment, international issues, politics, values, demography, governance, and education can also be explained by the presence of phase changes. One of the main reasons for this gigantic crisis is the conflict between the global nature of the problem and the local nature of the governance mechanisms. The solution to these problems may be to find a zone in the transition phase that will ensure the future development of all spheres of social, political, and economic life. At the same time, the directions of innovative development of the enterprise depend on the peculiarities and requirements of the external environment. Enterprises of the future must analyze, predict, and adapt to changes in the environment, as well as provide for the prospects of development in the short, medium, and long term. The instability of the environment caused by global factors such as the COVID-19 pandemic in 2020 and Russia's military invasion of Ukraine in 2022 has made enterprises reorient their development strategies and focus on short- and medium-term forecasts. Based on the analysis of the mechanism of functioning of the future enterprise, taking into account the instability of the environment, we offered the main directions and prospects for development. The enterprise's main goal of the future must be to achieve the maximum investment value of the enterprise based on the use of information technologies, taking into account cyclic economic development and instability of the environment.

The purpose of this article is to analyze and forecast the prospects of development of the enterprise in the short and medium term, taking into account the factors of instability of the environment. Based on the goal, the following tasks were identified: analysis of the mechanisms of functioning of the enterprise; highlighting the actors of instability of the external environment at the global, national, and enterprise level; analysis of the prospects for future enterprise development in the short, medium, and long term; formation of the development strategy for the enterprise of the future; highlighting the limitations in the application of the development strategy of the enterprise of the future. The object of the study in the article is the mechanisms of functioning of the future enterprise. The subject of the study is the formation of principles, methods, and mechanisms of analysis and forecasting the prospects for the enterprise of the future in an unstable environment.

Theoretical Framework or Literature Review

One of the economic development factors of the country is the successful activity of enterprises, providing the production of innovative products and technologies that are competitive in the international market. Most studies in this area focus on the implementation of environmental innovations. Shao et al. (2020) determined that the impact of environmental regulation on the innovation activities of an enterprise is closely related to the competitiveness of the enterprise and the sustainable development of the regional economy. Five potential areas of research on environmental innovations for sustainable economic development are proposed. Demirel and Danisman (2019) investigated the impact of cyclical eco-innovation and external financing on the growth of European small and medium-sized enterprises. The results show that a significant threshold investment (i.e., more than 10% of revenues) in cyclic eco-innovation is necessary for enterprises to benefit from investing in cyclic eco-innovation.

Other authors focus on the knowledge competencies of the management and staff of the enterprise in implementing innovations. For example, Kay et al. (2019) argue that work-integrated learning is a national priority and strategic direction for Australian universities. The article analyzes in detail the impact of project-based learning on the stability of the enterprise in the future. The authors prove that the inclusion of practical approaches in the learning process allows bringing the future specialist closer to understanding the chosen profession to orient them toward the final result. For entrepreneurs, the benefit of such training is that after graduation, they will receive a specialist who will be trained to the maximum extent possible for their project activities and will be able to immediately start training and generate profit. At the same time, the article proposes approaches that allow for the effective implementation of practice-oriented training models and adaptation to changes in the external environment. The authors present five models of learning: micro-placement, online projects, hackathons, competitions and events, incubators/startups, and consulting. The functions are divided into three broad areas: stakeholder engagement, design elements, and co-design with partners.

Another area of research focuses on analyzing the implementation of digitalization for the development of the enterprise of the future. Satalkina and Steiner (2020) determined that digital entrepreneurship is an important driver of the innovation system. It changes the structure, goals, and network mechanisms of the overall business system and ultimately affects different levels and dimensions of the innovation system.

At the same time, the conducted research covers one of the areas of innovative development and makes it possible to present a complex problem of innovative development of the future enterprise. Positive results of innovative activity are achieved not so much through the generation and implementation of innovations but through effective quality control, analysis, and planning of the process of innovative development. Thus, Bushman (2021) in his work analyzed the possible trends and challenges of the intellectual economy of the future. The author noted that as part of the large-scale transition of world economies to the phenomenon of intellectual production, it is necessary to consider the intensification of scientific and technological work and the increase in the number of scientific resources, the global impact of information, and intellectual production.

Zinchenko et al. (2023) describe an effective algorithm for implementing innovative and cultural transformations. The authors also analyze the transformations in developed (USA, Finland, Norway, Turkey) and developing countries (Ukraine, Pakistan, India, Bangladesh,

Indonesia, Thailand, China). The results showed that all survey participants consider digitalization an effective innovation transformation. A barrier-free digital environment can improve operational efficiency in the future. Functioning and development of the national economy with a noticeable acceleration of innovation process require the reorientation of enterprises to a new system of functioning, which is a structural state of the center of "technical advantages", profit maximization, and formation of the trend of industrial development. One of the leading forces is the enterprises of the future, which are focused on intensive innovation.

According to Järvis et al. (2021), the adoption of certain scientific advancements and cutting-edge technology is justified by ongoing development. Numerous concerns are examined, focusing on challenges relating to innovative development, modern sophisticated technologies, and inventive techniques. The study's proposed synthetic analysis of current cutting-edge technology and procedures is what gives it its scientific uniqueness. There are suggestions for expanding the use of cutting-edge techniques that can be used in many different industries. Korneiko et al. (2023) conducted a literature review on the correlation between traditions and innovations. The authors summarize the opinions of domestic and foreign scholars on the combination of traditional and innovative forms and methods, their interconnection and complementarity, and consider the importance of traditions for the implementation of innovative education models. Given the authors' opinion that these terms are interrelated, innovative schemes can be applied both in the educational sector and in production or administrative management. At the same time, the development of innovation is a prerequisite for a thorough modernization of the economy and responding to new global challenges.

Sapiński (2022) notes the need to consider the instability of the external economic environment and reorientation to the new requirements of consumer-oriented functioning. At the same time, the analysis shows that theoretical, methodological, methodological, and practical problems of the development of the innovative activity of future enterprises have not yet been completely solved. This is due to constant changes in external conditions and the specifics of the functioning of such enterprises in terms of innovation.

Sapiński and Ciupka (2021) analyzed the interaction of participants in the educational process during the implementation of innovations. It is concluded that the coverage of the activities of all subjects of the educational space is aimed at harmonizing the positions of students, teachers, and representatives of the administrative cluster, which is possible in organizing a holistic pedagogical discourse.

Qu et al. (2019) and Ingaldi and Ulewicz (2019) considered models of future enterprise functioning. Panetto et al. (2019) note that time-varying systems of operation and development should be developed for every Industry 4.0 enterprise. However, the paper does not propose models and directions for adapting to change, only noting the need for self-adaptive systems to exist. Tavana et al. (2020) focus on enterprise resource planning systems, noting that future enterprises are Internet systems with fixed sustainable development. However, this paper does not consider other factors and systems that affect the enterprise's development and its future growth. Dumitrache et al. (2020) proposed the concept of an intelligent knowledge-based cyber enterprise. This enterprise functions effectively in a steadily changing environment and is weakly responsive to urgent external fluctuations.

Prokopenko (2021) analyzed the features and prospects for the development of the process of using modern technologies in the educational process in the context of researching the global

trend of digitalization, which determines the digital transformation of education in the future. It is determined that digital education is not a replacement for traditional education but an effective addition to the quality of educational services by introducing advanced technologies in the educational process in accordance with the present and future technological challenges. Park et al. (2019) conducted a detailed study on the impact of R&D investment on increasing enterprise profits and market value. However, this study focuses on predicting the development of financially unstable enterprises and does not explore large financially sound, and investmentattractive enterprises. Li and Hou (2019) determined that enterprises with significant investments in research and development have high growth potential in the long run. At the same time, however, such enterprises will have low productivity when the external environment becomes more dynamic. Sanetra-Półgrabi and Tetłaka (2022) substantiated the position that in order to maintain market competitiveness under unfavorable economic conditions, it is necessary to have many producers and well-informed buyers. However, this study focuses on the analysis of the service sector, and it does not consider the peculiarities of competitiveness formation of industrial enterprises and enterprises of the non-profit sphere. This paper summarizes the approaches and methods for the design of innovative development programs, taking into account the peculiarities of the functioning of the enterprise of the future.

Method

The hypothesis of the study is that the innovative development of the enterprise of the future depends on foreign economic changes. The more dynamic the changes in the external environment, the faster and more radical the changes in the enterprise should be. To substantiate this hypothesis, the article analyzes the impact of political, social, and economic changes. Based on the analysis, the author identifies the zone of correlation of the identified areas of change and formulates the principle of responding to changes in this zone. It is proved that the Pareto principle of "80 to 20" can be applied in an unstable foreign economic environment.

To achieve the objectives, the study was carried out taking into account the methods of analysis, comparison, optimization, and modeling. To form and allocate the concept describing the introduction process of innovations at the enterprises of the future, features of the enterprise of the future approaches, and methods of introducing innovations were analyzed. Based on the analysis, the conclusion is about the need to consider the uncertainty and dynamism of the external environment and forecasting in the short term. As a result of the study, an analysis of the functioning processes of the future enterprise was conducted.

It has been determined that changes at three main levels: national, regional, and enterprise levels affect the need for changes at each enterprise. The factors of the global, external environment, and local level, aimed at modifying the structure of innovation management generally, were chosen in order to produce a predictive model of innovative development of the company of the future. The article proves that changes at each level affect the need for changes in the business sector. The factors are grouped by the principle of functioning of an open system based on the constituent elements: input, transformation, output, and feedback. At the same time, the article substantiates that the nature and intensity of changes affect the speed of innovation at an enterprise. To this end, the long and short term impact is determined for all factors.

As a result of the study, a predictive model of innovative development of the future enterprise was modeled. To build this model, we used the principle of functioning of an open organizational system "input - transformation - output – feedback". This model takes into account the challenges and non-linear functioning of the external environment, the level of use of automated systems and the level of innovation activity in the country, and the direction of public policy and innovation. The application of this model takes place within the framework of restructuring the management system of the future enterprise, taking into account changes in the external environment. Future research in this area could include analyzing innovative changes in enterprises in various sectors of the economy and identifying specific innovations for implementation in enterprises in the long and short term.

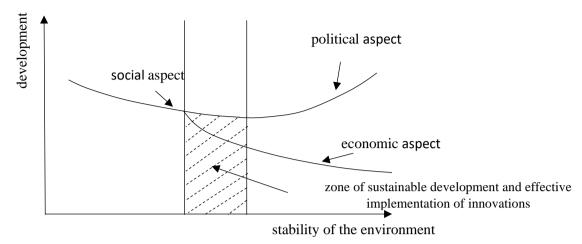
Results and Discussion

Modern economically active enterprise constantly needs to improve its activities through changes and innovation. Changes caused by the introduction of the latest technologies, processes, programs, or the acceleration of scientific and technological progress contribute to the intensification of innovative activity and, as a result, increase the efficiency of the enterprise and economic growth. At the same time, changes can be caused by negative factors of the external or internal environment. In this case, the innovative activity of the enterprise will be aimed at maintaining the economic stability and stability of indicators of the functioning of the enterprise. At the same time, the development of the enterprise of the future should be coordinated with the phase transitions in social, political, and economic life (see Figure 1).

As can be seen from Figure 1, the social development curve decreases with increasing environmental instability. At the same time, the political development curve has the opposite trend. And with increasing instability, political processes and reforms should intensify against the background of economic decline. Due to this, the curve of socio-political development has a downward trend until a certain period, but from a certain point, it begins to grow. The curve of socio-economic development has a downward trend. At the same time, there is a certain interval during the increase in the instability of the external environment, during which, due to reasonable and coordinated socio-political processes, it is possible to stop the downward trend of economic development and bring the economy to stable development.

The same is true for any phase shift. Humanity reaches the limit of its development and puts enormous pressure on the resources that support it. After that, there are only two options: either to use the limited resources and achieve development or to increase the instability gap and move into a stage of stagnation: famine, state collapse, immigration, disease, and climate change.

Figure 1
Dynamics of Phase Transitions Under Conditions of Environmental Instability



Throughout the history of phase shifts, humans seem to have made progress. Global crises are a new wave that gives impetus to development. A phase transition is not just a crisis of the old wave; it is the birth of a new world. Innovation and business leadership are the keys to the success or failure of phase transitions.

Thus, at the present stage of development, enterprises operate in conditions of high economic and political uncertainty caused mainly by the military invasion of Russia in Ukraine. In the IMF report "World Economic Outlook: War Sets Back the Global Recovery" (2022), published in April 2022, it is noted that the pandemic COVID-19 caused an imbalance in the global economy as a whole. But in early 2022, businesses began to adapt to the negative challenges of the global environment and began to achieve a stable financial and economic performance. The choice of the direction of innovative development of the enterprise of the future depends on several factors, namely: the goal in accordance with which innovations are introduced (maximization of enterprise value, improvement of social infrastructure, entering new markets, stabilization of financial and economic activity); the environment of changes (challenges of the global environment, configurations in the external or internal environment); and orientation of the innovative environment (new technologies, new technological processes, new knowledge).

The following conclusions can be drawn based on the World Intellectual Property Organization's 2022 Global Innovation Index Data, v10 (2022) study on the perception of innovation by enterprises in different countries. The main factor and goal of industrial enterprise change is revenue growth. Some countries, such as France, Germany, and the Netherlands, also see productivity. France, Australia, and the Netherlands also see an opportunity to save money. For the UK, failure to see this as an opportunity to improve worker productivity means that it continues to lag behind many countries in this area, and businesses are not using technology to improve this. Interestingly, companies with mature IT infrastructures, such as the Americas and EMEA, have identified the ability to create new channels as a high priority for their IT strategies. Meanwhile, APAC is focusing on deploying infrastructure in new regions. Enterprises have recently been focusing on agreements to expand service providers and enterprise infrastructure in the Asia-Pacific region. NTT recently announced an agreement with SAP to expand its offerings in the Asia-Pacific region. French Internet hosting and cloud

computing giant OVH also said it is looking for space in the region to build a new data center. IBM is actively working on extensions of SoftLayer Cloud Data Center and OpenPOWER Foundation. Meanwhile, ANZ announced its acquisition of IBM to expand its regional footprint with private and hybrid cloud services. There are also significant opportunities for companies looking to do business in China and other countries in the region. However, many cultural issues need to be addressed. Any company considering this path should ensure it has a local partner, as it is often easier to enter these markets than to build a business without local knowledge.

At the same time, the Russian invasion of Ukraine entailed a tragic humanitarian crisis in Eastern Europe and sanctions against Russia, which worsened the forecast. In addition to the immediate humanitarian consequences, the war has seriously hampered global recovery, slowing growth and further increasing inflation. The report predicts Russia and Ukraine's GDP will fall substantially by 2022. Ukraine's severe collapse is a direct result of the invasions, the destruction of infrastructure, and the exodus of people. Paradigm shifts and global economic processes in modern conditions are not only qualitative but also systemic. After all, scientific and technological innovation, which determines the development of modern society and the acceleration of the innovation process in developed countries, is not limited to the level of the national economy. We are witnessing the spread of multidirectional and non-linear trends in the world. Over the past few decades, the key parameters of the economy and society have undergone many changes. Due to the development of new technologies of implementation of the latest scientific and technological achievements are leading to the increased innovative repositioning of enterprises. With increased competition in the global market, management is increasingly interested in innovation, and the strategic advantages of globalization include technological exchange and development. The analysis of economic processes and results of innovation-active enterprises shows that the results of innovation activities have a significant impact on all aspects of social development. So, Karlibaeva et al. (2022) determined the investment direction to implement the most effective innovation in the long term. In this case, efficiency is understood as maximizing profits. Bulturbayevich (2021) analyzed various approaches to the implementation of innovation in enterprises. However, these developments are limited to the scope of the results and do not take into account the instability of changes in the external environment.

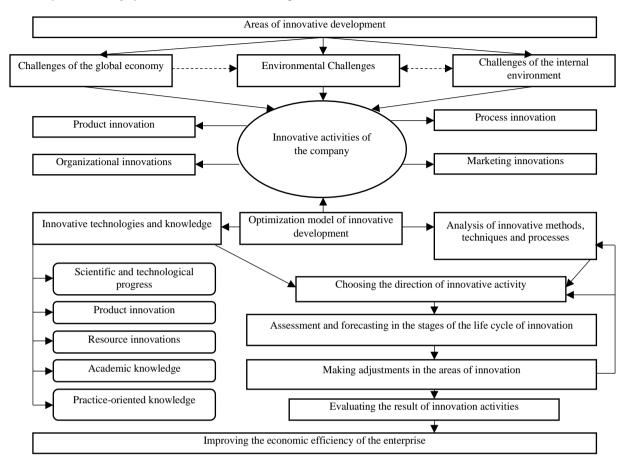
Another factor hindering innovative activity development is the unwillingness to change in society. If we look at the Ukrainian population from the point of view of values, we can say that society is dominated by people who respect order and stability and who care about their subordinates. It is not easy to implement reforms with such a majority. If reforms are implemented by people with values such as development, education, wealth, career, travel, then reforms will have more meaning. Ukrainian society also has postmodern values such as tolerance, common interests, and common development. Recently, their number has increased. Guided by the Pareto principle (80/20), the formula of our life is that a few active ones determine the direction, while the passive ones set the pace for the many. A few active ones decide the direction of reforms, but the speed of this movement is determined by the majority. Thus, the main task of each minority representative is to have at least one person from the passive majority on their side. In this case, improvement is significantly accelerated.

Thus, it is necessary to pay special attention to the choice of management system in the sphere of innovative activity, which improvement will allow to avoid the big expenses of

unproductive resources and to concentrate attention on spheres of possibilities to achieve a successful and stable activity, to strengthen positions in the world market. In the conditions of highly dynamic changes in the external environment, the necessity of scientifically grounded prognostic developments in all spheres of management grows. In the works of Sołoducho-Pelc and Sulich (2020), Pakhucha et al. (2021), Vashkiv and Vashkiv (2019) noted that with the increasing uncertainty and instability of the environment, the effective operation of enterprises largely depends on their ability to accurately predict short- and long-term prospects. The current global crisis situation has had a very negative impact on the overall economic development of countries and most enterprises. As a result of the crisis, the prices of raw materials on the world market have fallen, the demand for products by exporters has fallen, high inflation has persisted in consumer markets, and prices for manufacturers of products have fallen. This led to a drop in industrial production, lower investment growth and companies' budgets, and a deterioration in monetary conditions. The circumstances created by the crisis indicate that the economy and businesses, in particular, cannot correctly foresee the nature and extent of the crisis in the current environment and take appropriate measures to minimize its effects. One of the reasons for this situation is that the existing system of forecasting the general level of the national economy, the regional level, and the level of enterprises is imperfect. The use of forecasts is mostly cautious and properly integrated into the management system. Although the forecast information collected by the existing state bodies requires forecasting the development of the region and the country as a whole, the development of certain industries, the accumulation of forecast varieties in the market, etc., it cannot fully provide such information to potential consumers. Thus, the main task at the present stage is to establish and improve the organizational and economic mechanism of forecasting activities, to ensure the formation of the forecasting management system, and to improve the efficiency and timeliness of management decisions in response to internal and external environment changes.

The general model of the innovative activity of the enterprise can be represented by the scheme (Figure 2), which includes the need to respond to the challenges of the global external environment and the development of necessary methods to optimize innovation activities.

Figure 2
Model of Functioning of the Innovation-active Enterprise



Thus, the instability of the external environment can manifest itself in its three components: global, national, and enterprise levels. In the last five years, there have been changes in all of these components, which have had a negative impact on the key indicators of economic and social development. The instability of the global environment is expressed in the deterioration of the following indicators:

- increase in food prices in the background of the COVID-19 pandemic (2020-2022);
- disruption of logistics supply chains, resulting in higher freight prices and, consequently, an increase in the operating component of costs in the cost of final products;
- the gas crisis in Europe (2021), associated with reduced supplies from Russian Gazprom, sanctions against Russia;
- increase in demand for oil (2021), which led to an increase in prices in accordance with the law of supply and demand
- geopolitical instability (military conflicts and national confrontations).

At the national level, the need for innovation is manifested in the following:

- accelerating the pace of digital transformation (2020 2022);
- changes in the political sphere;
- economic crises, which lead to a general downturn in the economy;
- the decline in the pace of development of the main branch of the state economy;

- imperfection of the financial and economic activity;
- deterioration of political and economic relations with other states.

Changes in the global environment and at the national level, directly and indirectly, affect the functioning of the enterprise, which is manifested in the following:

- the need to change the business processes of the enterprise;
- the emergence of gaps between the strategic and tactical goals of the enterprise;
- absence or outdated operational strategy;
- lack of comprehensive planning;
- disruption of intra-organizational communications;
- low quality of the enterprise's personnel.

Depending on the nature and degree of influence of these factors on enterprises, the planning horizon, as well as taking into account the degree of innovative activity of the enterprise, the management should build a forecast of innovative development of the enterprise (Table 1). Based on the analysis of Table 1, it can be concluded that at the present stage, in conditions of high dynamism of the external environment, the greatest attention should be paid to developing and implementing innovations in the short term. Comparing the enterprises with low innovation activity and enterprises with high innovation activity (which include future enterprises), it can be concluded that the highlighted factors have a differently directed influence on the prediction of enterprise development. Thus, enterprises with low innovation activity are characterized by stability in the long term and low flexibility with high dynamism of the external environment. At the same time, the enterprises of the future have a narrower planning horizon and require effective, innovative solutions in the short term. This is explained by the features of the functioning of the company of the future. A key characteristic of future enterprises is constant adaptation to the dynamic external environment. That is, such an enterprise is like a chameleon that changes color in accordance with changes in light, mood, or temperature. As an adaptive mechanism, the enterprise changes with changes in external and objective conditions. Such characteristics of the enterprise as high flexibility, personal commitment, the predominant use of teamwork, high internal competitiveness, and the desire to diversify, will stand out. Enterprises of the future view change internally as a permanent condition. Thanks to the corporate culture, employees are comfortable with unpredictability. In an environment where products, markets, processes, and business models are constantly changing, values and value provide stability and cohesion. The enterprises of the future are seen above all as enterprises with long-term planning, that is, offering radical proposals and alternatives, which to some initially seem impractical. Also necessarily present is a strategically minded, charismatic leader who can guide, inspire and move the organization forward. High achievers receive different rewards, such as a share in the enterprise they helped build.

Table 1Peculiarities of Forecasting of Innovative Development of the Enterprise

Envir		Impact on enterprises with low innovation activity		Impact on enterprises with high innovation activity	
onme nt	Development Factor	Nature of manifestation in the long term	Nature of manifestation in the short term	Nature of manifestation in the long term	Nature of manifestation in the short term
Global	rising food prices on the back of the COVID-19 pandemic supply chain disruption				
	gas crisis in Europe higher oil demand geopolitical instability				
National level	accelerating the pace of digital transformation changes in the political sphere				
	crises caused by a general downturn in the economy slowdown in the development of the main branch of the national economy				
	imperfection of financial and economic activities deterioration of political and economic				
	relations with other states the need to change the business processes				
Enterprise level	of the enterprise gaps between the strategic and tactical goals of the company absence or outdated operating strategy lack of comprehensive planning				
	disruption of intra-organizational communications low quality of the company's personnel				
- significant level of influence - average impact - moderate impact					

That is, the enterprise of the future defines and manages change as a robust program that is centered around achieving certain business outcomes. The enterprise tracks the business benefits of change and the effectiveness of change management. Effective change management is a core competency at all levels and is cultivated as a professional discipline rather than an art.

Focusing on the skills that managers will need in the next five years, taking into account all the existing crises, we can form a portrait of a leader in the enterprise: analytical thinking and creativity, active learning and learning strategies, solving complex problems, critical thinking and analysis, creativity, originality and initiative, leadership and social impact, use, monitoring and control of technology, technology creation and programming, endurance, stress resistance and flexibility, logical thinking, problem-solving and generating new ideas.

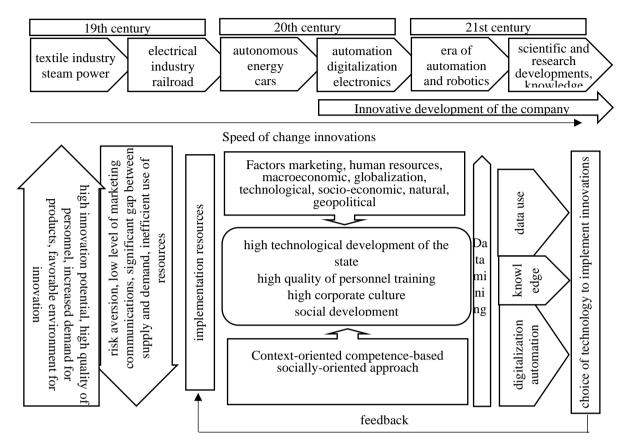
At the same time, innovation tops the list, and skills such as continuous learning, perseverance, resilience, and flexibility appear for the first time, reinforcing the need for modern innovation leaders to develop these skills.

Innovation leadership in entrepreneurship seems to be unbreakable in the face of a humancaused global catastrophe that involves development-oriented people who insist on rational and balanced consumption. Innovative leaders must maintain an atmosphere of tolerance for disagreement, distrust of conventional wisdom, openness to constant change, regular reflection, and regular giving and receiving feedback. Innovative leaders of the phase transition are people with stable mental, emotional, and physical health, as they are a source of energy for their teams in times of crisis and can constantly learn.

At the same time, today's public authorities, corporate structures, or public organizations are interested in hiring managers for leadership positions and developing and utilizing their managerial potential. The problem is that although, in theory, societies, organizations, and individuals have a common interest in creating favorable conditions for leadership, in practice, there is an obvious contradiction between their leadership requirements and the staff capable of organizing to realize the leadership potential of their people under specific socio-economic and managerial conditions. In most organizations, this difference reaches a critical mass and creates serious conditions for social, psychological, and economic problems. Enterprises of the future create processes and structures that foster innovation and transformation. Actively manage the portfolio by protecting and supporting young ideas and systematically screening out weak ideas. The functions listed above are interrelated and, if properly integrated, can improve the performance of an enterprise. They are a means of achieving success and increasing the value of the enterprise. The likelihood of success depends to a large extent on external conditions. These include fierce global competition, rapid technological development, and demographic factors. To succeed, businesses must accurately and timely incorporate these changes into their development plans to create a flexible and mobile organization. This significantly affects the ability to hire, train and keep qualified, adapted, and innovative people to produce high-quality products with the highest share of added value. All characteristics of enterprises are extremely important, but they have different priorities depending on the situation in different countries, industries, and markets.

Therefore, there is a transition to a new management model based on the integration process of enterprises using global information systems to achieve unity by creating strategic alliances. The globalization of entrepreneurship, the formation of strategic alliances, enterprise networks, and the use of information technology are factors that contribute to the creation of a "smart" enterprise, where all functions and processes are implemented on a global scale, which is impossible from the achievements of a single enterprise. Taking into account the considered features of shaping the directions of innovation development of the company of the future, the following model of promising directions can be proposed (Figure 3).

Figure 3 *Modeling the Prospects for Innovative Development of the Enterprise of the Future*



Prospects for further innovative development suggest transitioning from Industry 4.0 to Industry 5.0. Thus, Souza et al. (2022) point out the need to move to Industry 5.0 because the previous one does not pay enough attention to human development. The new model will offer a combination of human knowledge with artificial intelligence. Leng et al. (2022) point out the latest developments in Industry 5.0 and focus on previous perspectives on future transition, their limitations, and risks. These developments are a new challenge to the external environment, which requires a detailed analysis in line with industrial production and social entrepreneurship.

Conclusion

The enterprise of the future realizes that it cannot drive innovation with the same tools and processes that drive its core product. As a result, such companies develop a clear innovation framework that guides innovators and sets the right expectations. For example, a good innovation management framework will encourage innovators to test their ideas before large-scale implementation. An innovation framework is suitable for providing general guidelines to help innovators understand where they are on the innovation journey and make decisions effectively. An innovation framework can help leaders guide innovators by putting the right emphasis at the right time. The elements of scientific novelty in the article are the development of a scheme for the functioning of an innovatively active enterprise in conditions of economic instability. This scheme considers the proposed scheme of phase transitions with increasing

foreign economic, external, and internal instability at the enterprise. The allocated zone of stable functioning of the enterprise allows for the formulation of a management policy focused on responding to changes.

In enterprises with a low level of innovation, all investment decisions are based on a business plan for a five-year profit forecast. This often leads to significant investments in several large projects. The enterprise of the future is focused on non-linear change in the external environment, especially when transformational innovations need to be implemented. Therefore, they require many small stakes with additional investments. This process allows the future enterprise to introduce small bets on many ideas and only double those with a potential appeal. Accounting for innovation and an effective innovation framework gives innovation managers the resources to make the right decisions at the right time. Managers can also ask the right questions to track progress and make decisions about additional investments if needed.

The article presents several aspects of innovation in future firms, all of which are connected and, when combined well, can boost operational efficiency. They are a strategy for achievement in order to raise equity capital's value. External circumstances heavily influence a modern business' chances of success. These include demographic factors, swift technological advancement, and intense global rivalry. Businesses must properly and promptly include these changes in their development plans to succeed in building a flexible and mobile organization.

This significantly impacts the ability to hire, train and keep qualified, adaptable, and innovative people to produce high-quality products with maximum added value. All characteristics of future enterprises are extremely important, but they have different priorities depending on the situation in different countries, industries, and markets.

Thus, there is a transition to a new management model based on the integration process of enterprises unified through global information systems, the formation of strategic alliances, and other alliances of various types. Globalization of business geopolitical instability, networks of enterprises, and the use of information technology contribute to the creation of the future enterprise, where all functions and processes are implemented on a global scale, which is impossible within an enterprise with a low level of innovation.

The results published in the article can be applied to enterprises operating in conditions of economic instability and aimed at introducing innovations. Also, the results can be used by representatives of local authorities and local self-government bodies in the development of regulations on the conditions of enterprise functioning under external instability.

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References

- Bulturbayevich, M. B. (2021). Development of innovative activities of enterprises based on vertical integration processes. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(10), 5020–5031.
- Bushman, I. (2021). The development of the intellectual economy of the future: trends, challenges of the future. *Futurity Economics & Law*, 1(3), 33–42. https://doi.org/10.57125/FEL.2021.09.25.04
- Demirel, P., & Danisman, G. O. (2019). Eco-innovation and firm growth in the circular economy: Evidence from European small-and medium-sized enterprises. *Business Strategy and the Environment*, 28(8), 1608–1618. https://doi.org/10.1002/bse.2336
- Dumitrache, I., Caramihai, S. I., Sacala, I. S., Moisescu, M. A., & Popescu, D. C. (2020). Future enterprise as an intelligent cyber-physical system. *IFAC-PapersOnLine*, *53*(2), 10873–10878. https://doi.org/10.1016/j.ifacol.2020.12.2817
- Global Innovation Index Data, v10 (2022). World Intellectual Property Organization Url: https://www.globalinnovationindex.org/analysis-indicator, (accessed 30 September 2022).
- Ingaldi, M., & Ulewicz, R. (2019). How to make e-commerce more successful by use of Kano's model to assess customer satisfaction in terms of sustainable development. *Sustainability*, 11(18), 4830.
- Järvis, M., Tambovceva, T., & Virovere, A. (2021). Scientific innovations and advanced technologies in higher education. *Futurity Education*, 1(1), 13–22. https://doi.org/10.57125/FED.2022.10.11.2
- Karlibaeva, R., Kurbonov, K., Bekimbetova, G., & Shaturaev, J. (2022). The effectiveness of investment projects in development of innovative activities of enterprises. *European Business Management*, 8(3). http://www.ebmjournal.org/article/324/10.11648.j.ebm.20220803.11
- Kay, J., Ferns, S., Russell, L., Smith, J., & Winchester-Seeto, T. (2019). The emerging future: Innovative models of work-integrated learning. *International Journal of Work-Integrated Learning*, 20(4), 401–413. https://eric.ed.gov/?id=EJ1238315
- Korneiko, Y., Tarangul, L., & Dovzhuk, V. (2023). Traditions and innovations: two poles of education of the future. *Futurity Education*, 3(1), 5–14. https://doi.org/10.57125/FED.2023.25.03.01
- Leng, J., Sha, W., Wang, B., Zheng, P., Zhuang, C., Liu, Q., Wuest, T., Mourtzis, D., & Wang, L. (2022). Industry 5.0: Prospect and retrospect. *Journal of Manufacturing Systems*, 65, 279–295. https://doi.org/10.1016/j.jmsy.2022.09.017
- Li, X., & Hou, K. (2019). R&D based knowledge capital and future firm growth: Evidence from China's Growth Enterprise Market firms. *Economic Modelling*, 83, 287–298.
- Panetto, H., Iung, B., Ivanov, D., Weichhart, G., & Wang, X. (2019). Challenges for the cyber-physical manufacturing enterprises of the future. *Annual Reviews in Control*, 47, 200–213. https://doi.org/10.1016/j.arcontrol.2019.02.002
- Pakhucha, E., Sievidova, I., Siadrysta, I., Mohilevsky, L., Oliynik, T., & Bogdanovych, O. (2021). Financial risks in the conditions of unstable market economy. *European Journal of Sustainable Development*, 10(1), 432. https://doi.org/10.14207/ejsd.2021.v10n1p432
- Park, W., Sung, C. S., & Byun, C. G. (2019). Impact of unlisted small and medium-sized enterprises' business strategies on future performance and growth sustainability. *Journal of Open Innovation Technology Market and Complexity*, 5(3), 60. https://doi.org/10.3390/joitmc5030060

- Prokopenko, O. (2021). Technological challenges of our time in the digitalization of the education of the future. *Futurity Education*, *I*(2), 4–13. https://doi.org/10.57125/FED/2022.10.11.14
- Sanetra-Półgrabi, S., & Tetłaka, Z. (2022). Protection of consumer rights in the advertising of the future in conditions of economic instability. *Futurity Economics & Law*, 2(3), 12–18. https://doi.org/10.57125/FEL.2022.09.25.02
- Sapiński, A. (2022). Analysis of the role of international organizations in the process of regulating the rights of the fourth generation: the main directions, the challenges of the time. *Futurity Economics & Law*, 2(2), 14–24. https://doi.org/10.57125/FEL.2022.06.25.02
- Sapiński, A., & Ciupka, S. (2021). Pedagogical discourse in the higher professional education of the future. *Futurity Education*, *I*(1), 4–13. https://doi.org/10.57125/FED.2022.10.10.1
- Satalkina, L., & Steiner, G. (2020). Digital entrepreneurship and its role in innovation systems: A systematic literature review as a basis for future research avenues for sustainable transitions. *Sustainability*, 12(7), 2764. https://doi.org/10.3390/su12072764
- Shao, S., Hu, Z., Cao, J., Yang, L., & Guan, D. (2020). Environmental regulation and enterprise innovation: a review. *Business Strategy and the Environment*, 29(3), 1465–1478. https://doi.org/10.1002/bse.2446
- Soloducho-Pelc, L., & Sulich, A. (2020). Between sustainable and temporary competitive advantages in the unstable business environment. *Sustainability*, 12(21), 8832. https://doi.org/10.3390/su12218832
- Souza, R., Ferenhof, H., & Forcellini, F. (2022). Industry 4.0 and Industry 5.0 from the Lean perspective. *International Journal of Management, Knowledge and Learning*, 11. https://doi.org/10.53615/2232-5697.11.145-155
- Tavana, M., Hajipour, V., & Oveisi, S. (2020). IoT-based enterprise resource planning: Challenges, open issues, applications, architecture, and future research directions. *Internet of Things*, 11(100262), 100262. https://doi.org/10.1016/j.iot.2020.100262
- Qu, Y. J., Ming, X. G., Liu, Z. W., Zhang, X. Y., & Hou, Z. T. (2019). Smart manufacturing systems: state of the art and future trends. *The International Journal of Advanced Manufacturing Technology*, 103(9–12), 3751–3768. https://doi.org/10.1007/s00170-019-03754-7
- Vashkiv, O. P., & Vashkiv, O. O. (2019). Creation of firm's competitive advantages in the influence of unstable environment. http://dspace.wunu.edu.ua/bitstream/316497/34431/1/Vashkiv%20%D1%82%D0%B5%D0%B7%D0%B8.pdf
- Zinchenko, V., Dorosheva, A., & Mosiy, I. (2023). Innovative and cultural transformations of the educational environment of the future: digitalization, barriers for traditional learning. *Futurity Education*, *3*(1), 41–57. https://doi.org/10.57125/FED.2023.25.03.04