Economics, Entrepreneurship, Management

UDC 658:65.011.55 DOI: 10.56318/eem2023.01.040

#### Halyna Zakharchyn\*

Doctor of Economics, Professor Lviv Polytechnic National University 79000, 12 Stepan Bandera Str., Lviv, Ukraine https://orcid.org/0000-0002-4081-7926

#### Yosyf Sytnyk

Doctor of Economics, Associate Professor Lviv Polytechnic National University 79000, 12 Stepan Bandera Str., Lviv, Ukraine https://orcid.org/0000-0001-8718-5738

# Construction and development of corporate knowledge in modern conditions

Abstract. The study deals with issues related to the construction and development of corporate knowledge in modern conditions caused by transformational processes in the socio-economic sphere of Ukraine conditioned by the war and other challenges that stimulate the need for new knowledge. The need for rapid response to these requests actualises in theoretical and applied terms the definition of the subject segment of new knowledge and its use. The purpose of the study is to highlight the features of construction and the necessity of developing corporate knowledge in modern conditions. To achieve this goal, the study uses the following methods: analysis, synthesis, system method, combinational grouping, modelling, and statistical method. As a result of the study, the need for new corporate knowledge is generalised and the following main groups are identified: knowledge on reorientation of the labour market through war; on security activities; related to mental health and emotional stability; related to the skills of psychological adaptation and flexibility in war conditions; knowledge on the strategy of change, and their characteristics are given. It is proved that new corporate knowledge acquired during the war changes the labour market and reorients the current business processes, social processes, communication and worldview processes in various types of economic activity, which requires a revision of the principles of corporate knowledge construction. As a result of the research, a model of the life cycle of corporate knowledge management was created, the use of which will increase the efficiency of knowledge exchange and the use of intellectual resources, and the process of constructing corporate knowledge based on the factor of intellectual culture was proposed. The conclusions obtained from the results of the study are of applied value and can be useful for representatives of business, the public sector, educational and scientific institutions in developing strategies for change and development and forecasting trends in order to improve and update the corporate knowledge base

**Keywords**: knowledge economy; intellectual assets; knowledge management; labour market; personal development; change strategy; knowledge life cycle; intellectual culture

#### Article's History:

Received: 21.02.2023 Revised: 19.04.2023 Accepted: 30.06.2023

#### Suggested Citation:

Zakharchyn, H., & Sytnyk, Yo. (2023). Construction and development of corporate knowledge in modern conditions. *Economics, Entrepreneurship, Management*, 10(1), 40-50. doi: 10.56318/eem2023.01.040

\*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

40

### INTRODUCTION

The construction of corporate knowledge should take place in accordance with modern challenges. For Ukraine, these are, first of all, challenges caused by a full-scale Russian-Ukrainian war - security, economic, environmental, energy, social, national identity, etc. These challenges are compounded by globalisation and systemic crises that also affect political and socio-economic processes. Under these conditions, it is necessary to simultaneously solve a whole range of tasks - operational, tactical, and strategic, which often require new knowledge and generate unexpected knowledge. Due to objective factors, problems are changing, and business strategies that were effective during the peace period are losing their relevance and need to be adapted to new realities. In the context mentioned above, there is a need to construct corporate knowledge based on new experience, which must be systematised, accumulated, and formed into appropriate knowledge bases, enriching the established theories of knowledge management and knowledge management practices, considering current challenges, transformational changes, and forecasting future trends.

For this reason, it is advisable to distinguish two main aspects of the problems outlined in the paper. The first aspect is related to the identification of the exact knowledge, that corporations need today to maintain their functioning and have a perspective of development in the post-war period; the second aspect is related to management procedures, that is, the process of construction and development of knowledge, which are components of the knowledge management cycle. The answer to the question of what kind of knowledge is relevant today has not only applied significance, but also a theoretical value, since it will complement the existing classification of knowledge. The second aspect reflects the features of transformation of the knowledge management life cycle model under the influence of current factors.

The analysis of recent publications indicates the presence of a wide range of scientific developments that reflect the conceptual, methodological, technological, and applied aspects of the outlined problems. Researchers pay considerable attention to the problems of knowledge management, which is obvious given their role in increasing the competitiveness of the organisation, as stated, in particular, by N. Butenko (2015), noting that "the concept of knowledge management in corporations today is an integral part of the strategic process, and its implementation creates objective prerequisites for acquiring sustainable competitive advantages, which is especially important in the context of unpredictable changes in the market environment." This idea is supported by M.V. Rudenko & V.O. Kryvoruchko (2016), who substantiate the need to create a "new management model" based on knowledge. T.G. Busareva (2019) examines the creation of corporate knowledge through the prism of globalisation challenges and draws attention to the strategic tasks of knowledge management in multinational corporations. Corporate knowledge significantly affects the activation of innovative development, as stated in a paper by S.M. Illiashenko et al. (2017), which emphasises that "the competitiveness of individual organisations and national economies as a whole is largely ensured by the ability to produce and effectively use new relevant knowledge that allows quickly identifying and strengthening comparative competitive advantages, bringing internal development opportunities (innovative development potential) into line with external ones." Similar opinions are expressed by V. Korolkov et al. (2021) in a paper in which the researchers emphasise the managerial aspects of knowledge construction for innovative renewal of enterprises. Knowledge performs its important role as an activator of innovation and an important factor of competitiveness due to functions that have also become the subject of inquiry by many researchers, in particular, the essential understanding of knowledge through functions is illustrated by I.G. Shavkun & Ya.S. Dybchynska (2013), highlighting the following main functions of knowledge: analytical, distribution, security, integration, and the function of creating new knowledge. Theoretical aspects of organisational knowledge management are covered in the monograph by M.V. Martynenko (2013), which combines knowledge management theories and knowledge management methods. A fresh look at knowledge already in the conditions of "shock changes in the external environment" is offered by O.A. Doronina & A.V. Aliarova (2022), who considered problems of knowledge renewal in the context of personnel strategy, logically substantiating this by the fact that the carrier of knowledge and the creator of new knowledge is a person.

Thus, classical and modern scientific developments in the subject sphere of economics and knowledge management reflect the evolutionary path of transformation of the economy and the life cycle of knowledge construction. Dynamic changes in economic processes require the addition of these theories and concepts, considering new challenges, problems, and applied tasks, which was the goal of this study.

#### MATERIALS AND METHODS

The methodological base of the study is formed in accordance with the goal and contains a regulatory component, a theoretical component, presented by monographic studies, periodicals, and the results of expert assessments in the subject area. Legislative and regulatory acts of the Verkhovna Rada of Ukraine (Law of Ukraine No. 2732-IX, 2022) and the Cabinet of Ministers of Ukraine (Draft Law No. 2710-IX "On the State Budget of Ukraine for 2023", 2022), official materials of the State Statistics Service of Ukraine (n.d.), which reflect trends and forecasts of the socio-economic situation in Ukraine caused by the war, and focus on the feasibility of building corporate knowledge necessary for developing a strategy for changes and anti-crisis measures. Statistical information on the state of the Ukrainian labour market in regional and segment terms (Tarasovsky, 2023) has become the basis for assessing the consequences of transformation processes in the market and predicting demand for new corporate knowledge.

The methodological basis of the study is a set of methods that ensure the methodological integrity of the research, in particular: analysis and synthesis - to analyse modern challenges and their impact on the development of new knowledge; combinational grouping - to determine current requests for new knowledge and group them by priorities; system method - to reveal the essence of corporate knowledge through the prism of knowledge economics and knowledge management, that is, the unity of content (corporate knowledge) and form (the process of construction and development of corporate knowledge), and to streamline the principles of the development of corporate knowledge. In the context of the process of corporate knowledge construction, a model of the knowledge management life cycle based on the use of the modelling method is proposed. The use of the statistical method allowed forming a statistical base, highlighting informative data on the state of the labour market in modern conditions, threats and problems of an economic, social, and security nature.

### **RESULTS AND DISCUSSION**

Considering the dynamic influence of the knowledge economy on the transformation processes of society, the authors of this study developed the hypothesis that corporate knowledge is not just the sum of individually acquired professional knowledge of each employee of the corporation, but it is the synergy of effective joint action of the entire team aimed at implementing its mission. This conscious joint action begins with the first step, from the start and ends at the "finish line", to which all team members must come. In fact, awareness of joint action is the key note for achieving an effective result and a happy finish, since it implies not only a desire to share your knowledge, but also creates a sense of personal responsibility for the entire life cycle of knowledge. At the same time, a synergistic joint action generates the emergence of corporate knowledge, when through the prism of the exchange of various personal experiences and acquired knowledge that is not yet inherent in the corporate system and its subsystems, new corporate knowledge, system-forming connections, properties and behaviours arise. In this context, researchers have drawn attention to the need to group corporate knowledge.

The study suggests considering new knowledge that has become relevant in the context of a full-scale Russian-Ukrainian war in Ukraine, and which allows updating sources of corporate knowledge.

1. Knowledge of labour market transformations to reorient business processes and determine a place in the market. The source of this knowledge is statistical information that provides data on the state of the economy, demography, ecology, etc. As of 1 January 2022, Ukraine's population stood at 34.5 million people, as evidenced by Draft Law No. 2710-IX "On the State Budget of Ukraine for 2023" (2022). Russia's full-scale invasion on February 24, 2022, caused the biggest crisis in the Ukrainian labour market. As of 10 January 2023, there were 7.96 million Ukrainian citizens abroad who fled Ukraine due to Russia's invasion, according to UN data (Operational data portal, n.d.). Of these, about 4.93 million Ukrainians live in Europe. More than 3 million people may be in Russia and Belarus. Before the war, employers in Ukraine posted more than 100,000 vacancies on Internet sites every month. But already in March, the number of labour offers decreased by 15 times. Since then, the labour market has gradually grown on a monthly basis and entered 2023, recovering by half from pre-war levels. In general, in 2022, vacancies in the labour market decreased several times, and at least 5 million (up to 40%) Ukrainians lost their jobs. In December 2022, there were 35% fewer new candidates on the labour market than in December 2021 (The "bleak" state..., n.d.). Against the background of migration of Ukrainians abroad, joining the ranks of the Armed Forces of Ukraine, and power outages, the total number of people of working age in the labour market has decreased. Employers have already announced a forecast for 2023 about a possible shortage of qualified personnel if Ukrainians do not start returning from abroad. If hundreds of thousands of Ukrainians remain abroad after the war, then soon Ukraine may face not the problem of unemployment, but a shortage of labour (The "bleak" state ..., n.d.). And overcoming this challenge requires new corporate knowledge of the Ukrainian business environment.

Ultimately, Ukrainians are actively integrating into the European labour market, paying taxes there, and European employers are interested in specialists from Ukraine. "The Czech Republic will hire thousands of specialists from Ukraine to work in its military factories," said a representative of the Czech Defence Ministry T. Kopechny (Thousands of Ukrainians..., 2022) - "for decades, specialists have been trained in Ukraine that our country does not have now. Therefore, the work of Ukrainian engineers and technicians will strengthen the defence capabilities of the Czech Republic, Ukraine and NATO at the same time". According to a survey conducted by UNHCR (United Nations High Commissioner for Refugees), the adult population of migrants from Ukraine consisted mainly of women (87%), 65% of whom were of working age (18-59 years), almost 70% had higher education (Operational data portal, n.d.). Therefore, in Poland, since the beginning of a full-scale war, according to an expert assessment by the Centre for Migration Research at the University of Warsaw, Ukrainians have paid PLN 10 billion (about USD 2.4 billion) of taxes (Ukrainian refugees uphold..., n.d.). According to the calculations of the National Bank of Ukraine, the additional contribution of Ukrainian migrants to the annual GDP growth rates of the Czech Republic, Poland, and Estonia will be about 1.2 percentage points per year, to the GDP (gross domestic product) of Hungary, Latvia, Slovakia, Lithuania and Romania - almost 0.8 percentage points (Tucha et al., 2022). The European Central Bank predicts that the participation rate of Ukrainian refugees of working age in the labour force of Eurozone countries will be from 25% to 55% in the medium term. Estimates of potential labour force growth across the EU (European Union) are 0.2-0.8%, or 0.3-1.3 million people (Botehlo, 2022). The situation in the Ukrainian labour market is shown in Table 1.

Dynamics of restoration of frontline regions	Offer leaders	The most necessary specialists
Kherson Oblast – 66%	Kyiv Oblast – 155,990 vacancies	Sales consultant – 4,273 vacancies with an average salary of UAH 12,000.
Mykolaiv Oblast – 34%	Lviv Oblast – 5,916 vacancies	Sales manager – 3,725 vacancies with an average salary of UAH 20,000.
Donetsk Oblast – 30%	Dnipropetrovsk Oblast – 4,782 vacancies	Accountant – 2,042 vacancies with an average salary of UAH 15,000.
Kharkiv Oblast – 10%	Odessa Oblast – 3,173 vacancies	Driver – 1,859 vacancies with an average salary of UAH 22,000.
	Ivano-Frankivsk Oblast – 1,912 vacancies	Cook – 1,596 vacancies with an average salary of UAH 14,000.

 Table 1. Ukrainian labour market as of December 2022

Source: created by the authors based on Yu. Tarasovskiy (2023)

The average salary in Ukraine during 2022 was at the level of UAH 15,000. At the same time, the largest salary was offered in the Kyiv Oblast – UAH 17,500 and remotely – UAH 22,500. In the forecast for 2023, employers include salary increases from 8% to 30%, depending on the type of economic activity, but it will depend on the military and economic situation in Ukraine. It is worth noting that the largest salaries in December were offered for the following positions: international driver – UAH 40,000, car painter – UAH 35,000, realtor – UAH 30,000, diesel mechanic – UAH 29,000 (due to the increase in the use and need for maintenance of autonomous generators); cleaners – UAH 8,000 (Tarasovsky, 2023).

Another new example of corporate knowledge acquisition in 2022 is that the labour market has almost completely Ukrainised. In December 2022, employers posted 89% of vacancies in Ukrainian and only 8% in Russian, but in 2014 the circumstances were almost the opposite: 16% of vacancies in Ukrainian and 80% in Russian (Tarasovsky, 2023). The growth of natural Ukrainocentrism in the national business environment is a good sign of national unity and a guarantee of future economic achievements.

New corporate knowledge acquired during the war transforms the labour market and develops current business processes, social processes, communication and ideological processes in various types of economic activity. In particular, the executive director of the Association "IT Ukraine" K. Vasyuk notes that "in the face of war and numerous challenges, the IT industry, together with the whole country, demonstrates phenomenal resilience. The industry remains the only export industry in Ukraine that fully operates in wartime, maintains the country's economic front, actively helps the army and supports a powerful volunteer movement" (IT Ukraine, 2022).

Most technology companies were able to ensure the continuity of business processes and maintain productivity at the level of 85-90% in the first month of the war, and starting from April, restore positive growth dynamics. Absolutely all IT companies faced problems related to the war. According to the study "IT in the economy of Ukraine", more than 34.3% of companies have successfully adapted to the new realities of martial law, 61.3% – that is, the

vast majority of IT companies have not overcome all the challenges, but in general they work stably. As of the beginning of 2022, almost 307 thousand IT specialists worked in the Ukrainian IT industry (IT Ukraine, 2022). In the spring of 2022, up to 57,000 specialists (20%) left Ukraine, 7,000 people (2.5%) were mobilised, and 228,000 specialists (80%) remained in Ukraine, according to calculations by the Lviv IT Cluster (Dudko, 2022). However, there is a risk that after the opening of borders, up to half of the industry will decide to emigrate. As a result of Russia's full-scale invasion of Ukraine, 70.8% of IT companies carried out unplanned relocation, a quarter of them - complete. Another 16.7% of companies have fully or partially moved abroad (IT Ukraine, 2022). The geography of the movement of enterprises changed and at the beginning of December 2022, most of all it was to the following countries: Poland, Germany, USA, Portugal, Bulgaria, Czech Republic, Romania, Moldova, Spain, and Canada. Almost 81.5% of IT companies displaced abroad still plan to return their business to Ukraine, subject to the abolition of martial law and the complete cessation of hostilities, and 93.4% of IT companies plan to continue investing in Ukraine (IT Ukraine, 2022).

Among the biggest challenges for Ukrainian enterprises during the war were: migration of personnel; movement of business entities; prohibition of departure of those liable for military service abroad; mobilisation of specialists. At the same time, during the war, Ukrainian entrepreneurship has acquired new experience, skills, and new business processes that are rapidly forming modern multidimensional corporate knowledge. Therefore, a significant component of modern corporate knowledge and corporate culture was the regular transfer of funds to help the state, the purchase of military ammunition, equipment, drones, necessary equipment and weapons to accelerate the victory over the Russian enemy (IT Ukraine, 2022).

2. Knowledge on security activities is multifaceted and covers a wide segment of knowledge on financial and economic security; information security; psychological and behavioural security, environmental safety, etc. In conditions of war, security activities are considered differentially not only in accordance with different categories of personnel, but also in the region, that is, highlighting relatively calm areas where business is present and dangerous, where organisations have completely curtailed their activities or moved, restructuring to safe places (Botehlo, 2022). Ensuring the safety of organisational personnel requires knowledge of how to act in extreme conditions and how stress factors affect people's mental health, and what priority measures can mitigate this impact.

3. Knowledge related to mental health and emotional stability. In addition to assessing the situation, which is dynamically changing, there are questions about the safety of personnel and knowledge related to mental health and emotional stability is needed here. Since the psychological security of the individual depends not only on the organisationally formed preventive measures, but also on the psychological structure of each person, therefore, knowledge about those qualities that form the psychological structure of personal security and knowledge that are responsible for ways to acquire skills, skills of safe behaviour is necessary (Zaitseva-Chipak, 2021). This is cross-knowledge at the intersection of psychology and management, which in the conditions of war and post-war times are a priority because statistics on the psychological state of the population is disappointing and many people need psychological and emotional support (Government portal of Ukraine, 2022). Knowing what tools should be used to maintain mental health allows preserving the internal resources of a person and the human potential of the organisation.

4. Knowledge related to the skills of psychological adaptation and flexibility in war conditions is a continuation of the previously identified category of priority knowledge today and in the near future. This knowledge is intended to help a person reach such a level of adaptation that it will ensure the dominance of rational thinking and perception of the situation over emotional feelings. The task of adaptation is to consciously adapt to the situation and find a way to respond to the new reality. This task requires the search for a new adaptation mechanism that can use constructive protection tools and reduce stress, and save energy for the revival of working capacity. The rate of adaptation varies, and in war conditions, the intensity of adaptation is much higher than in a peaceful period. There is a significant change in values and priorities, so knowledge from the adaptation mechanism is supplemented by the study of the motivational structure of the individual. In the corporate knowledge system, it is necessary to integrate knowledge from the cognitive and behavioral sphere and management and economics. This combination of this knowledge will contribute to individual and collective psychological stability. The sources of acquiring this knowledge are different - their own, quickly acquired experience, or using the experience of countries experiencing military consequences, such as Israel or Georgia.

In this context, it is worth paying attention to a number of studies (Microsoft Japan's 4-day..., 2019; Haraldsson & Kellam, 2021; Workers in Belgium..., 2022), in particular a large-scale international experiment on the transition to a four-day working week. In one of these experiments, 33

companies from countries such as the United States, Ireland, Australia and 903 employees participated in 2022 (4 day week pioneering..., 2022). Companies that participated in the experiment rated their experience at 9 points out of 10 possible. None of them returned to the five-day working week, because for employees, the extra day off turned out to be so valuable that 70% are not going to return to the "5 for 8" mode if they are not offered a salary increase from 10% to 50%. The study shows that: an additional day off without a salary reduction does not reduce the income of companies, but on the contrary, their revenue increased by 38% compared to the same period of the previous year, and the number of absenteeism and layoffs decreased. Under these conditions, employees experience less stress and burnout and are generally more satisfied with their lives. Participants in the experiment did not feel an increase in the intensity of work and they did not have to work "through force" for an additional weekend. "Employees have become more focused, interested, and dedicated," and the four-day week "has changed both business and people" (4 day week pioneering..., 2022).

Recommendations and initiatives for business entities on how to support their team emotionally and psychologically, show flexible adaptive policies and corporate social responsibility are relevant in war conditions. They have become a role model and an example of integrity that helps strengthen the reputation capital of organisations and government agencies, in particular public service institutions (The psychology of war..., 2022). The adaptability and productivity of using new corporate knowledge, and readiness for any scenario of events and the availability of several options for responding to the risks of Ukrainians, along with modern transformations in the national labour market, impresses the international community, partners and clients of Ukrainian enterprises.

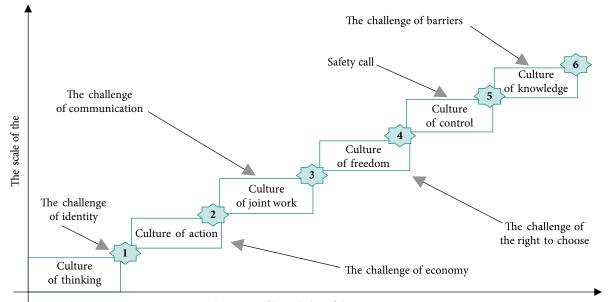
5. Knowledge of change strategy. New working conditions during the war prompted the need to review working conditions and form new standards and change the principles of work and management style. The experience gained quickly in these conditions has already laid the foundations and transformed into new knowledge, supported by practice. The modern strategy of change should comprehensively combine the main elements of crisis management, anti-stress management, and adaptive management, which will contribute to the development of antifragility, develop the ability to see the situation holistically from different angles, quickly assess it and make non-standard decisions due to the emergence of unexpected knowledge that can appear on an intuitive level, arise from semi-consciousness or already acquired experience during the war. In this context, corporate knowledge about the procedure for reserving employees who are not subject to conscription for military service during mobilisation is important. In particular, enterprises, institutions and organisations that have mobilisation tasks, if the reservation is necessary for their implementation, will be able to reserve their personnel for a period of half a year with the possibility of extension for up to six months. Heads of such enterprises and their deputies are subject to reserving regardless of their military rank, age, or military speciality. No more than 40% of the staff must be reserved for military service. It is possible to raise the limit with the separate approval of the General Staff (Law of Ukraine No. 2732-IX, 2022). The combination, both systematic and dynamic, of all elements of the change strategy will allow not only preserving the business, but also solving problems economically and forming anti-crisis plans in advance.

The above and other types of knowledge that were needed during the war become basic knowledge; this is knowledge about the present. For the development of business entities, it is already necessary to think about what knowledge will become a priority in the future. Thus, the strategy of change should be supplemented by a development strategy: individual, corporate, intellectual, human capital development, and corporate potential development. And having identified priority corporate knowledge in the conditions of modern realities, proceed to the process of knowledge construction, considering the stages of the corporate knowledge management life cycle model, in which the stage of knowledge exchange and transfer is distinguished.

Mentoring plays an important role in the transfer of knowledge, and therefore it is advisable to develop an intellectual culture of relationships to effectively transfer knowledge in the process of their corporate development.

Intellectual culture reflects the ability to work together and create in the process of knowledge exchange (culture of joint work), since knowledge is a value. People's relationships around the value of knowledge, which is the foundation of any culture, also arise at other stages of the knowledge life cycle. Therefore, intellectual culture should be present at all stages. In the context of management intellectualisation and ideological and value transformations of society, it is advisable to lay the cultural foundation at the stage of creating new knowledge, new innovations, and maintain it up to the stage of using knowledge. In particular, this is conditioned by the rapid spread of artificial intelligence, which is to a certain extent associated with economic security (intellectual security as a separate type). It is important to consider the culture of freedom and the culture of control and the culture of knowledge in the context of creative development and construction of corporate knowledge, the essential characteristics of which are highlighted by G.M. Zakharchin & Yu.M. Kosmina (2018).

Given the above, the process of constructing corporate knowledge in the context of developing the intellectual culture of an organisation can be considered through a sequence of time challenges (Fig. 1).



The scope of knowledge of the organisation

**Figure 1.** The process of constructing corporate knowledge in the context of the development of the organisation's intellectual culture through a sequence of challenges **Source:** created by the authors

Considering new challenges, it is possible to develop the principles of corporate knowledge construction in these conditions, which are reflected in Table 2.

The principles listed in Table 1 provide a purposeful direction for the construction and development of corporate knowledge, showing not only strategic guidelines, but also relevant rules and procedures embodied in the mechanism of knowledge generation and differ from those proposed in the literature not only in content, but also in their relevance. For example, T.G. Busareva (2019) draws attention to the strategic principles of corporate knowledge construction, limiting itself to three principles: "the principle of innovation orientation, economically feasible cooperation and specialisation, technological linking of production and activities". Systematicity contributes to the process of ordering spontaneously acquired knowledge in difficult war conditions and turning it into a complete system. Promptness shows how quickly new knowledge is updated and emerging in time and space. In the process of forming corporate knowledge, the creative role is played by principles that reflect the synergistic effect of joint action and joint creation of new ideas.

Table 2. Principles of construction and development of corporate knowledge in modern conditions

Principles	Interpretation	
Systematicity	Ensures the integrity of the knowledge system about the present in order to reduce risks in the future	
Promptness	Fast filling of the knowledge base based on unexpected knowledge that spontaneously arose during crisis situations	
Joint activity and creation	A conscious desire to share individual knowledge, which contributes to the creation of new knowledge, enriches the collective experience	
Universality	Reflects the degree of dissemination of corporate knowledge within the organisation	
Purposefulness	Provides a business recovery and development strategy	
Adaptability	Reflects the ability to operate knowledge bases in critical environments	
Courses as multiply by the a	with any	

**Source:** compiled by the authors

The principle of universality reflects not only the dissemination of knowledge to the entire corporate community, but also the compliance of the purpose and content of the process of knowledge creation and development with the requirements for conditions that are constantly changing. The principle of purposefulness provides for a clear vision of the purpose of forming a knowledge base (this is in the general sense) and defining a range of specific problems and tasks that require knowledge to solve. The ability to efficiently operate knowledge bases in critical conditions, quickly make decisions in non-standard situations reflects the principle of adaptability. The principles described above are part of the overall knowledge management process to ensure the effectiveness of using corporate knowledge in the new environment, the correct sequential-systematic process of creating a corporate knowledge management lifecycle model, which is shown in Figure 2.

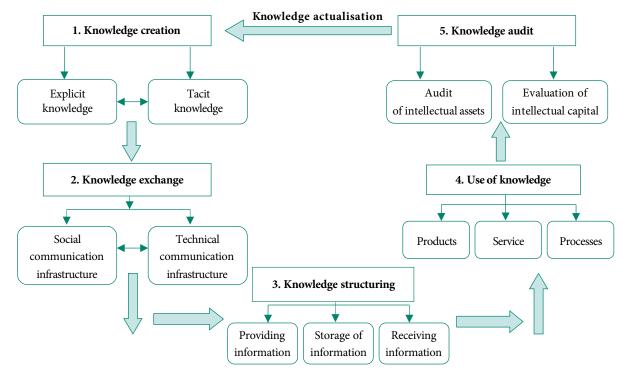


Figure 2. The model of the life cycle of corporate knowledge management

**Source:** created by the authors

The model of the corporate knowledge management life cycle proposed in Figure 2 expands the list and content of the stages of knowledge circulation, reflects the classification aspects of knowledge (explicit knowledge and tacit knowledge at the stage of knowledge creation) to structure them, highlights the features of knowledge exchange based on the principles that are reflected in Table 1, contains the stage of using knowledge in the context of the product segment, the segment of providing services and processes, and updating knowledge in accordance with new conditions. Thus, the knowledge management process covers not only the stages and tasks of knowledge construction, but also the possibilities of knowledge development through knowledge audit, assessment of their role in the implementation of the change strategy.

Scientific publications offer knowledge management systems, stages, and models that differ in structure, purpose, and content. In particular, the process of knowledge management through the prism of the structural and logical scheme of knowledge production is covered in the paper (Illiashko et al., 2017). Since the researchers considered corporate knowledge as an object of innovative development, they focused on the stage of knowledge production, which is only one of the stages of the knowledge life cycle. A similar approach to considering the process of forming corporate knowledge flows, based on the tasks and functions that knowledge performs in ensuring innovative economic development, is presented in a paper (Korolkov, 2021). A generalised model of knowledge management was proposed by K. Wiig (1997), highlighting the stages: creation and application of knowledge in production technologies and procedures, systematic research of knowledge, assessment of knowledge for each type of business. M.V. Rudenko & V.O. Kryvoruchko (2016), noting the complexity of adapting foreign knowledge management models to the Ukrainian environment, substantiate the feasibility of building a model based on a system-process approach that logically combines human potential, organisational procedures and business processes, but do not reflect the process of evaluating knowledge and updating knowledge under the influence of new challenges. N. Butenko (2015) suggests grouping corporate knowledge by characteristics that reflect the role of knowledge in ensuring the competitiveness of organisations, since there will always be a demand for this category of knowledge. Within this feature, the researcher identifies explicit and implicit knowledge, that is, pays attention to the form of manifestation of knowledge. O.A. Doronina & A.V. Aliarova (2022) support this opinion, but propose to supplement the grouping of corporate knowledge in accordance with new challenges and highlight knowledge that contributes to the establishment of "knowledge creators" aimed at increasing human potential, and instrumental knowledge necessary for the acquisition of digital literacy, which is requested in the context of the deployment of the digital economy. The researchers note that new competencies are needed for the development of "knowledge creators", so considerable attention is paid to the list of these competencies. Approaches to grouping corporate knowledge are different due to the multidimensional nature of knowledge and depend on the goal that the researchers laid down as the basis for grouping and highlighting corporate knowledge.

The construction of corporate knowledge takes place on the basis of communications, and at all levels: individual, group (team), and corporate. With this in mind, communication management should also become part of the strategy of change, because now the experience has clearly crystallised, when interaction at the level of emotions during the war was gradually transformed into interaction at the level of knowledge exchange. The effectiveness of using corporate knowledge depends on the courage to translate new knowledge into life practice and further develop it. Acquired reflexive knowledge (individual experience of self-defence), unformalised knowledge, and those that spontaneously arose (unexpected knowledge) in the process of exchange between people are socialised into corporate knowledge, replenishing the corporate knowledge base and enriching the intellectual assets of the corporation. Due to the acquired and jointly created knowledge, staff co-development takes place in parallel, professional growth, knowledge exchange takes place, and the mental health of staff improves. Many Ukrainian organisations did not abandon the development of personnel, but, on the contrary, found appropriate forms of training adapted to the present and safety rules. Various tools are used for this purpose. For example, Farmak company has its own internal library of distance learning courses - a specially created distance learning portal (Courses and literature..., n.d.). Due to IT, employees update their professional knowledge, learn to acquire new skills, and in the process of learning, new knowledge appears that needs to be structured. To ensure security, organisations use various forms and locations of training: places of shelter, remote meetings, field meetings through the creation of various communication platforms, clubs based on professional and personal interests to communicate with like-minded colleagues, etc.

Consequently, the papers cover various approaches to knowledge management, including models and systems that consider the structure, target area, and construction of corporate knowledge. In addition, communication management is important for sharing knowledge and using it in practice, and forms of training and communication in organisations play a key role in staff development and collaboration.

#### CONCLUSIONS

In modern conditions, organisations are reviewing the priorities of their activities towards expanding the subject area of corporate knowledge in accordance with the challenges. The analysed statistical information on changes in the structure and reorientation of the labour market in Ukraine confirmed the demand for new knowledge and became the basis for grouping and outlining relevant knowledge groups that allow effectively restoring business processes and developing intellectual resources of the organisation. The emergence of new knowledge and the adaptation of basic knowledge to existing conditions determine the need to structure knowledge and form it on a different fundamental basis. Accordingly, the paper considers the process of construction and development of corporate knowledge based on new principles (efficiency, consistency, joint work and co-creation, adaptability, universality, purposefulness) and elements of intellectual culture that should be present at all stages of this process. Effective management of corporate knowledge involves a set of organisational and economic actions embodied in the model of the life cycle of corporate knowledge management, which is presented in the study and holistically reflects the process of circulation and updating of knowledge in modern conditions.

The dynamics of processes show that in the future there will be a demand for new knowledge, new competencies, which, in turn, encourages the continuation of scientific research both in the theoretical and applied spheres. The experience gained during the war can be presented in the form of theoretical and practical knowledge, appropriately structured. With further research, it is advisable to systematise knowledge, develop the classification of knowledge, and supplement it with new knowledge acquired today. In the applied sense, analyse which sources of knowledge are updated during crisis situations, and how to create an effective mechanism for using corporate knowledge to develop a promising strategy for economic recovery and intellectual potential development in the post-war period.

## ACKNOWLEDGEMENTS

None.

#### CONFLICT OF INTEREST

None.

#### REFERENCES

- [1] 4 day week pioneering pilot program a huge success, new research reveals. (2022). Retrieved from <u>https://</u>www.4dayweek.com/news-posts/4-day-week-pioneering-pilot-program-a-huge-success-new-research-reveals.
- [2] Botehlo, V. (2022). The impact of the influx of Ukrainian refugees on the euro area labour force. *Economic Bulletin*, 4. Retrieved from <u>https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202204\_03~c9ddc08308.en.html</u>.
- Busareva, T.G. (2019). Corporate globalization of knowledge. Scientific Notes of "KROK" University, 2(54), 45-50.
   doi: 10.31732/2663-2209-2019-53-45-50.
- [4] Butenko, N. (2015). Knowledge management in corporations. *Business Inform*, 11, 414-419. Retrieved from <u>http://www.irbis-nbuv.gov.ua/</u>.
- [5] Courses and literature: Two libraries for Farmak employees. (n.d.). Retrieved from <u>https://farmak.ua/life\_with\_farmak/kursi-ta-literatura-dvi-biblioteki-dlya-spivrobitnikiv-farmak/</u>.
- [6] Doronina, O. A., & Aliarova, A.V. (2022). Personnel management strategies in the environment of the knowledge economy. *Economy and Society*, 42. doi: 10.32782/2524-0072/2022-42-2.
- [7] Draft Law No. 2710-IX "On the State Budget of Ukraine for 2023". (2022, November) Retrieved from <a href="https://itd.rada.gov.ua/billInfo/Bills/Card/40472">https://itd.rada.gov.ua/billInfo/Bills/Card/40472</a>.
- [8] Dudko, V. (2022). Is everyone running away? More than half of the IT-programmers can leave Ukraine as soon as the borders are opened. What mass IT emigration will mean for the country. *Forbes*. Retrieved from <u>https:// forbes.ua/inside/tikayut-usi-ponad-polovina-aytivtsiv-mozhe-poikhati-z-ukraini-ledve-vidkriyut-kordoni-shchooznachatime-dlya-kraini-masova-it-emigratsiya-18082022-7737.</u>
- [9] Government portal of Ukraine. (2022). The impact of war on mental health is enormous Viktor Lyashko.Retrieved from <a href="https://www.kmu.gov.ua/news/vpliv-vijni-na-psihichne-zdorovya-kolosalnij-viktor-lyashko">https://www.kmu.gov.ua/news/vpliv-vijni-na-psihichne-zdorovya-kolosalnij-viktor-lyashko</a>.
- [10] Haraldsson, G.D., & Kellam, J. (2021). *Going public: Iceland's journey to a shorter working week*. Retrieved from https://autonomy.work/wp-content/uploads/2021/06/ICELAND 4DW.pdf.
- [11] Illiashenko, S.M., Shypulina, Yu.S., Illyashenko, N.S., & Komarnytska, G.O. (2017). Knowledge management in the system of organization's innovative development. *Marketing and Innovation Management*, 1, 231-238. doi: 10.21272/ mmi.2017.1-21.
- [12] IT Ukraine. (2022). *Do IT Like Ukraine: The IT industry is growing despite everything*. Retrieved from <u>https://itukraine.org.ua/it-reports-do-it-like-ukraine.html</u>.
- [13] Korolkov, V. V., Sorina, O. O., & Telcharov, E. A. (2021). Knowledge management during the implementation of the strategy of innovative renewal of the enterprise. *Effective Economic*, 11. doi: 10.32702/2307-2105-2021.11.71.
- [14] Law of Ukraine No. 2732-IX "On Amendments to the Law of Ukraine "On Mobilization Training and Mobilization" regarding the reservation of conscripts for the period of mobilization and wartime". (2022, November). Retrieved from <u>https://zakon.rada.gov.ua/laws/show/2732-IX#Text</u>.
- [15] Martynenko, M. V. (2013). Management of organizational knowledge of the enterprise: Theoretical aspect (218). Kharkiv: INGEK.
- [16] Microsoft Japan's 4-day workweek experiment sees productivity jump 40%. (2019). Retrieved from <u>https://www.cnbc.com/2019/11/04/microsoft-japan-4-day-work-week-experiment-sees-productivity-jump-40percent.html</u>.
- [17] Operational data portal. (n.d.). *Refugees from Ukraine recorded across Europe*. Retrieved from <a href="https://data.unhcr.org/en/situations/ukraine">https://data.unhcr.org/en/situations/ukraine</a>.

- [18] Rudenko, M. V., & Kryvoruchko, V. O. (2016). Knowledge management as a competitive advantage of the enterprise. *Economy and The State*, 4, 74-78. Retrieved from <u>http://www.economy.in.ua/?op=1&z=3504&i=14</u>.
- [19] Shavkun, I. G., & Dybchynska, Ya.S. (2013). Organizational knowledge management: Approaches to understanding the essence. *Humanitarian Bulletin ZSEA*, 53, 187-195. Retrieved from <u>https://old-zdia.znu.edu.ua/gazeta/visnik 53\_185.pdf</u>.
- [20] State statistics service of Ukraine. (n.d.). The number of employed workers at enterprises by their size by types of economic activity. Retrieved from <a href="https://www.ukrstat.gov.ua/">https://www.ukrstat.gov.ua/</a>.
- [21] Sytnyk, Y., Havrychenko, D., Staverska, T., Primush, R., & Erfan, V. (2022). The main negative factors of military influence on the economic environment of the region and its financial and economic security. *International Journal* of Computer Science and Network Security, 22(6), 241-245. doi: 10.22937/IJCSNS.2022.22.6.33.
- [22] Tarasovskiy, Yu. (2023). The labor market has recovered by 50% from the pre-war level Work.ua. *Forbes*. Retrieved from <u>https://forbes.ua/news/rinok-pratsi-vidnovivsya-na-50-vid-dovoennogo-rivnya-workua-09012023-10951</u>.
- [23] The "bleak" state of the labor market and prospects for its recovery after the war. (n.d.). Retrieved from <u>https://www.ukrinform.ua/rubric-economy/3574736-nerajduznij-stan-rinku-praci-ta-perspektivi-jogo-vidnovlenna-pisla-vijni.html</u>.
- [24] The psychology of war. How to find strength and not lose common sense. (2022). Retrieved from <u>https://lb.ua/blog/</u><u>natalia\_aliushyna/512605\_psihologiya\_viyni\_yak\_znayti\_sili\_i.html</u>.
- [25] Thousands of Ukrainians to work in Czech arms factories. (2022). Retrieved from <u>https://english.radio.cz/thousands-ukrainians-work-czech-arms-factories-8769477</u>.
- [26] Tokmykova, I. V., Voitov, I. M., & Didenko, Ya.V. (2017). Development of knowledge management technologies at enterprises. *Management and Marketing. Herald of the Economy of Transport and Industry*, 60, 258-264. doi: 10.18664/338.47:338.45.v0i60.123685.
- [27] Tucha, O., Spivak, I., Bondarenko, O., & Pogarska, O. (2022). *Impact of Ukrainian migrants on the economy of recipient countries*. Retrieved from <a href="https://bank.gov.ua/admin\_uploads/article/Migration\_impact\_2022-12-15.pdf">https://bank.gov.ua/admin\_uploads/article/Migration\_impact\_2022-12-15.pdf</a>.
- [28] Ukrainian refugees uphold rather than burden polish economy. (n.d.). Retrieved from <u>https://www.ukrainianworldcongress.org/ukrainian-refugees-uphold-rather-than-burden-polish-economy/</u>.
- [29] Wiig, K. (1997). Knowledge management: An introduction and perspective. *Journal of Knowledge Management*, 1(1), 6-14. doi: 10.1108/13673279710800682.
- [30] Workers in Belgium can now switch to a four-day week but they won't be working fewer hours. (2022). Retrieved from <a href="https://www.euronews.com/next/2022/11/21/workers-in-belgium-can-now-switch-to-a-four-day-week-but-they-wont-be-working-fewer-hours">https://www.euronews.com/next/2022/11/21/workers-in-belgium-can-now-switch-to-a-four-day-week-but-they-wont-be-working-fewer-hours</a>.
- [31] Zaitseva-Chipak, N.O., Saprykina, M.A., & Hondiul, O. D. (2021). Future of work 2030: how to prepare for changes in Ukraine. Retrieved from <u>https://careerhub.in.ua/wp-content/uploads/2021/07/Future-of-Work-research-Ukr.pdf</u>.
- [32] Zakharchin, G.M., & Kosmina, Yu.M. (2018). Intellectual culture in the knowledge management system. Black Sea Economic Studies, 27(1), 129-133. Retrieved from <u>http://bses.in.ua/journals/2018/27\_1\_2018/27.pdf</u>.

# Галина Миронівна Захарчин

Доктор економічних наук, професор Національний університет «Львівська політехніка» 79000, вул. Степана Бандери, 12, м. Львів, Україна https://orcid.org/0000-0002-4081-7926

# Йосиф Степанович Ситник

Доктор економічних наук, доцент Національний університет «Львівська політехніка» 79000, вул. Степана Бандери, 12, м. Львів, Україна https://orcid.org/0000-0001-8718-5738

# Формування та розвиток корпоративних знань у сучасних умовах

Анотація. У статті розглядаються питання, пов'язані із формуванням та розвитком корпоративних знань у сучасних умовах, зумовлених трансформаційними процесами в соціально-економічній сфері України через війну та інші виклики, які стимулюють потребу у нових знаннях. Необхідність швидкого реагування на ці запити актуалізує у теоретичному та прикладному плані окреслення предметного сегменту нових знань та їх використання. Мета статті полягає у висвітленні особливостей формування та необхідності розвитку корпоративних знань у сучасних умовах. Для досягнення поставленої мети у статті використано такі методи: аналізу і синтезу, системний метод, комбінаційного групування, моделювання, статистичний метод. У результаті дослідження узагальнено потребу у нових корпоративних знаннях і виділено такі основні групи: знання із переорієнтації ринку праці через війну; із безпекозабезпечувальної діяльності; пов'язані із ментальним здоров'ям та емоційною стійкістю; пов'язані із навичками психологічної адаптації і гнучкості в умовах війни; знання щодо стратегії змін, та наведено їхню характеристику. Обґрунтовано, що нові корпоративні знання, набутті під час війни, змінюють ринок праці та переорієнтовують теперішні бізнес-процеси, соціальні процеси, комунікаційно-світоглядні процеси у різних видах економічної діяльності, що вимагає перегляду принципів формування корпоративних знань. У результаті дослідження сформовано модель життєвого циклу управління корпоративними знаннями, використання якої підвищить ефективність обміну знаннями і використання інтелектуальних ресурсів та запропоновано процес формування корпоративних знань на основі чинника інтелектуальної культури. Висновки, які отримано за результатами дослідження, мають прикладну цінність і можуть бути корисними для представників бізнесу, державного сектору, закладів освіти та науки під час формування стратегій змін та розвитку і прогнозування тенденцій із метою удосконалення та оновлення бази корпоративних знань

**Ключові слова**: економіка знань; інтелектуальні активи; управління знаннями; ринок праці; персональний розвиток; стратегія змін; життєвий цикл знання; інтелектуальна культура