Data about the authors Iryna Malyarchuk,

PhD in Economics, Associate Professor, Department of Financial and Economic Security, Accounting and Taxation, Ukrainian Academy of Printing

e-mail: Lotoshka@ukr.net

UDC 658

Lesia Stetsiv,

PhD in Economics, Associate Professor, Department of Financial and Economic Security, Accounting and Taxation, Ukrainian Academy of Printing e-mail: l_stetsiv@ukr.net

> https://doi.org/10.5281/zenodo.7624492 PUZYROVA P.V.

The organizational and economic aspects of management, efficiency of use and development of personnel at the enterprise under martial law

The subject of the research is the determination of the organizational and economic aspects of management, the efficiency of the use and development of personnel at an enterprise under martial law.

The aim of the research is to determine the main trends and the program of organizational and economic measures to improve the efficiency of the use of personnel at the enterprise under martial law.

Research methods. In the process of writing the article, general scientific and special methods were used to study economic phenomena and processes that are inherent in the study of enterprise personnel management under martial law.

Results of the investigation. Because of writing the article, it was found that with the start of a full– scale war between Russia and Ukraine, all processes in the state slowed down or almost stopped. It has been proven that this problem has not bypassed both employees and employers, where the latter have suffered losses due to the forced migration of their personnel in order to ensure their safety. It has been established that personnel management in the conditions of a full–scale war is manifested in a targeted impact on the organizational behavior of employees, aimed at activating their unused professional and spiritual capabilities, stabilizing the emotional state of subordinates and ensuring security for all enterprise personnel. It has been determined that one of the most important problems at present in the field of personnel management is to ensure the efficiency and further development of personnel in the enterprise, since it is the personnel, as a key factor, that will stand in the way of the country's recovery after a large–scale war.

Scope of the results. Labor economics, management, labor resources management, personnel potential, enterprise economics.

Conclusions. It has been determined that the formation, retention and development of the personnel of the enterprise, its effective use, ensuring the high quality of human resources in the future will become decisive factors in the efficiency of production and the competitiveness of products both for the enterprise in particular and for the country's economy as a whole. It has been proved that in order to determine the organizational and economic aspects of management, the effectiveness of the use and development of personnel at an enterprise under martial law, it is necessary to use the general trends in personnel management, based on the factors of influence that will take place in the post—war recovery of the country's economy.

Keywords: organizational and economic aspects, personnel management, personnel development, personnel utilization efficiency, enterprise, martial law.

ПУЗИРЬОВА П.В.

Організаційно–економічні аспекти управління, ефективності використання та розвитку персоналу на підприємстві в умовах воєнного стану

Предметом дослідження є визначення організаційно—економічних аспектів управління, ефективності використання та розвитку персоналу на підприємстві в умовах воєнного стану.

ЕКОНОМІЧНІ ПРОБЛЕМИ РОЗВИТКУ ГАЛУЗЕЙ ТА ВИДІВ ЕКОНОМІЧНОЇ ДІЯЛЬНОСТІ

Метою дослідження є: визначення основних тенденцій та програми організаційно—економіч– них заходів щодо підвищення ефективності використання персоналу на підприємстві в умовах во– єнного стану.

Методи дослідження. В процесі написання статті було використано загально—наукові та спеціальні методи дослідження економічних явищ та процесів, які притаманні дослідженню управління персоналу підприємства в умовах воєнного стану.

Результати роботи. В результаті написання статті було встановлено, що з початком повномасштабної війни Росії проти України уповільнились або майже зупинились всі процеси в державі. Доведено, що ця проблема не обійшла і найманих робітників і роботодавців, де останні понесли втрати через вимушену міграцію свого персоналу з метою забезпечення їх власної безпеки. Встановлено, що управління персоналом в умовах повномасштабної війни проявляється у цілеспрямованому впливі на організаційну поведінку працівників, що спрямована на активізацію їх невикористаних професійних і духовних можливостей, стабілізацію емоційного стану підлеглих, та забезпеченні безпеки для всього персоналу підприємства. Визначено, що однією з найважливіших проблем на даний час у галузі управління персоналом є забезпечення ефективності та подальшого розвитку персоналу на підприємстві, оскільки саме персонал, як ключовий фактор, постане на шляху відновлення країни у після масштабній війні.

Галузь застосування результатів. Економіка праці, менеджмент, управління трудовими ресурсами, кадровий потенціал, економіка підприємства.

Висновки. Визначено, що формування, збереження та розвиток персоналу підприємства, ефективне його використання, забезпечення високої якості кадрового потенціалу в найближчій перспективі стануть вирішальними факторами ефективності виробництва та конкурентоспроможності продукції як для підприємства в цілому, так і для економіки країни загалом. Доведено, що для визначення організаційно—економічних аспектів управління, ефективності використання та розвитку персоналу на підприємстві в умовах воєнного стану необхідно використовувати загальні тенденції щодо управління персоналом спираючись на чинники впливу, що матимуть місце у післявоєнному відновленні та відбудові економіки країни.

Ключові слова: організаційно—економічні аспекти, управління персоналом, розвиток персоналу, ефективність використання персоналу, підприємство, воєнний стан.

Formulation of the problem. With the beginning of the full-scale war of Russia against Ukraine, all processes in the state slowed down or almost stopped. This problem has not bypassed hired workers and employers, where the latter bear losses due to the forced migration of their personnel in order to ensure their own safety. Personnel management in the conditions of a full-scale war is manifested in a purposeful influence on the organizational behavior of employees, aimed at activating their unused professional and spiritual capabilities, stabilizing the emotional state of subordinates, and ensuring safety for all enterprise personnel. One of the most important problems at the moment in the field of personnel management is to ensure the efficiency and further development of the personnel at the enterprise, since it is the personnel, as a key factor, that will appear on the way to rebuilding the country after a large-scale war.

Analysis of research and publications on the problem. Many works of various economists

are devoted to issues of personnel policy, personnel management, increasing the efficiency of its use, evaluation and motivation, among which are: I. Hnatenko, Yu. Kulikova, I. Dashko, Yu. Kakhovych, M. Shevchenko, T. Babenko, L. Lipych, O. Hrynkevych, O. Polinkevych, O.Lozhachevska, V.Safonova, T.Navrotska, I. Olmezova, V. Derhachova, O. Olshanskyi, M. Shkrobot, H. Didur, O. Shevchenko, I. Sedikova, K. Kozak, D. Sedikov, H. Chaban, V. Chyzh, Ya. Havrylenko, A. Chkheailo, I. Tkachenko, O. Sherstiuk, N. Zhuk, O. Voloshyna and others.

Presenting main material. In the conditions of martial law, the personnel policy of any enterprise is based on the close interaction of general principles of personnel management with specific tasks of market management [1; 2; 3]. The socio-psy-chological interaction of personnel, the training of management personnel and the social policy of the enterprise, the development of social partnership as a mechanism for the interconnection of this pol-

icy and the market economy are playing an increasingly important role today [4; 5; 6]. Due to military aggression from Russia, the process of adapting personnel at enterprises has become quite complicated, but remains relevant, as it is necessary to integrate new employees into teams and work processes. Thus, personnel management is part of the functional sphere of personnel policy as the main mechanism of the organization [7; 8].

With all the variety of existing approaches to this problem in different countries, the main and most general trends are the following (Fig. 1):

These general trends must be taken into account in the post—war reconstruction and production management during the reconstruction of the country's economy. Also, in the conditions of war, one of the most urgent problems is the issue of effective use of available labor resources, which is manifested in the creation at the enterprise of a scientifically based mechanism for managing personnel of various categories in the process of production and consumption of material goods while ensuring the optimization of the costs of the resources still available in the enterprise [12; 13; 14].

Measures to increase the efficiency of personnel use should include the following stages:

1. Determination and analysis of indicators of the formation and use of the company's personnel.

2. Search and analysis of reserves for increasing the efficiency of the formation and use of personnel based on the information obtained during the analysis.

3. Development of a plan for the use of reserves to increase the efficiency of the formation and use of personnel, which should include specific terms and measures for their implementation, provide for the financing of costs for these measures and the expected economic effect of their implementation, determine the responsible executors.

4. Development of employee motivation systems for achieving planned results.

5. Control over the implementation of measures provided for in the plan and the entire program, and regulation of their implementation.

6. Measurement and assessment of the real impact of the planned measures on increasing the efficiency of the formation and use of the company's personnel.

Now let us consider what is specifically included in each of the above stages.

1. Measurement and assessment of the company's existing personnel is the initial stage of the program. Its correct and successful implementation is an important prerequisite for the success of the following stages of the entire program. The most important thing at this stage is to ensure the reliability and comparability of indicators. In order to assess the existing level of personnel, it is necessary to know, in addition to the numerical characteristics of personnel, the volume of products produced and the costs of their production. It is quite difficult to compare these indicators, because in reality the enterprise produces a significant number of various products, which are difficult to compare and add. Universal value indicators of the number of products are not exempt from the influence of inflationary processes and spontaneous fluctuations in the market situation. It should also be constantly borne in mind that the resources used in production are interchangeable. That

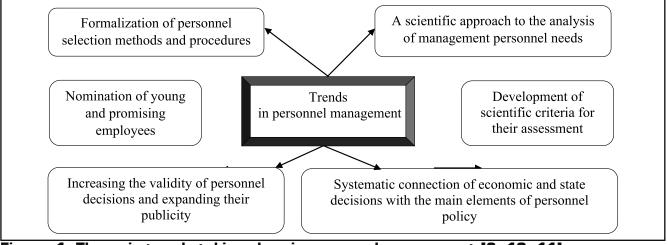


Figure. 1. The main trends taking place in personnel management [9; 10; 11]

is, it is possible to reduce the amount of labor to achieve a certain useful effect by increasing the number of used means of production [15; 16].

2. The search and analysis of reserves for increasing the efficiency of the formation and use of personnel is based on a comparison of the information obtained during the measurement and evaluation of the available personnel with the size necessary to obtain the maximum beneficial effect in this production. These reserves should also be sought in the processes of organization and personnel management.

3. When developing a plan for the use of reserves to increase the efficiency of the formation and use of personnel, it is necessary to ensure the coordination of the goals and objectives of the program. The plan should include specific measures aimed at the realization of the set goals, provide for the financing of costs for these measures.

4. The development of employee motivation systems for achieving the planned results is a necessary condition for the implementation of the program. Employees must know in advance how the planned results will affect the realization of their personal professional interests. 5. Control over the implementation of measures provided for by the plan and the entire program is necessary to identify and solve possible problems of their implementation at the initial stages, even before they become too serious. The starting point of the control process is the establishment of specific, time-bound goals that can be measured. In the control process, the actual and specified indicators or their components are compared, the scale of permissible deviations is determined.

6. Measurement and evaluation of the real impact of the planned measures on increasing the efficiency of the formation and use of the company's personnel potential is necessary in order to evaluate and compare the effectiveness of their implementation and to decide on priorities for the next period.

Among the main indicators of the social development of the company's employees in modern conditions should be increasing the qualifications of employees; improvement of working conditions and strengthening of health of employees; improvement of socio-cultural, housing, and communal conditions; social protection of members of the labor team [17; 18].

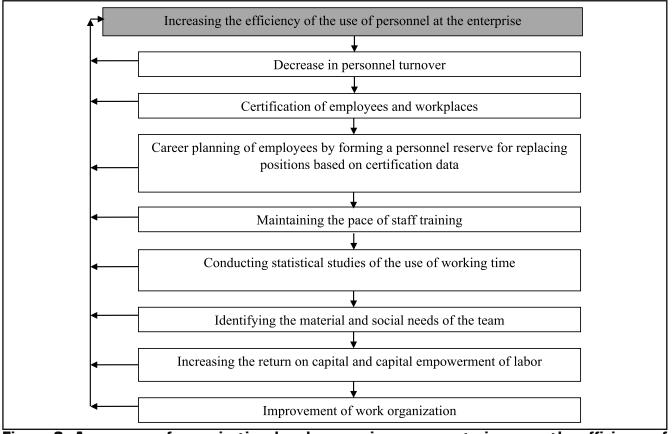


Figure 2. A program of organizational and economic measures to increase the efficiency of the use of personnel at the enterprise in the conditions of martial law [11; 14; 19; 20]

To form a program of organizational and economic measures of management, efficiency of use and development of personnel at the enterprise in the conditions of martial law, we will apply key factors that contribute to the optimization of costs for the enterprise's personnel. Thus, the intraproduction reserves for increasing the efficiency of the use of personnel will be a reduction in the labor intensity of products, an improvement in the use of working time, an improvement in the organizational structure of enterprise management, and an improvement in the personnel training system and the improvement of their qualifications, taking into account progressive methods of production and labor, with the development of the enterprise's material, technological, and information base. The conducted analysis of the formation and use of the company's personnel, the factors of improvement of these indicators provided an opportunity to form the main directions of its development. In accordance with these directions, the company is developing a program to increase the efficiency of the formation and use of personnel. Therefore, it is possible to propose a program of organizational and economic measures to increase the efficiency of the use of personnel (Fig. 2) [19; 20].

Therefore, the proposed program of organizational and economic measures to increase the efficiency of personnel use involves: determination and analysis of indicators of the formation and use of personnel of the enterprise; search and analysis of reserves for increasing the efficiency of the formation and use of personnel based on the information obtained during the analysis; development of a plan for the use of reserves for increasing the efficiency of the formation and use of personnel, which should include specific terms and measures for their implementation, provide for the financing of costs for these measures and the expected economic effect of their implementation, determine the responsible executors; development of employee motivation systems for achieving planned results; control over the implementation of measures provided for in the plan and the entire program, and regulation of their implementation; measurement and assessment of the real impact of the planned measures on increasing the efficiency of the formation and use of the company's personnel [2; 6; 10; 14].

Conclusions

The results of the activities of many enterprises during the period of military aggression show that the formation, preservation and development of enterprise personnel, their effective use, ensuring high-quality personnel potential will be decisive factors in the efficiency of production and competitiveness of products both for the enterprise as a whole and for the country's economy in general. Current issues regarding the use and development of personnel in the near future will be constantly in the center of attention of the management. Thus, to determine the organizational and economic aspects of management, the effectiveness of the use and development of personnel at the enterprise under martial law, it is necessary to use general trends in personnel management based on the factors of influence that will take place in the post—war recovery and reconstruction of the country's economy.

References

1. Bondarenko D. Yu., Puzyrova P. V. (2012). Osnovni pidkhody do formuvannia pryntsypiv ta metodiv upravlinnia personalom na pidpryiemstvi [Basic approaches to the formation of principles and methods of personnel management at the enterprise]. Poshuk : naukovoosvitnii zhurnal aspirantiv, mahistrantiv, studentiv, uchniv Yevropeiskoho universytetu = Search: scientific and educational journal of graduate students, master's students, students, students of the European University. – 2012. – No. 14 (II), May. – PP. 80–85 [in Ukrainian].

2. Hnatenko I. A., Kulikova Yu. E. (2016). Perspektyvni napriamy vdoskonalennia upravlinnia personalom v orhanizatsii [Prospective directions for improving personnel management in the organization]. Naukovyi visnyk Khersonskoho derzhavnoho universytetu = Scientific Bulletin of Kherson State University. Economic sciences. 2016. No. 16. P. 55–58 [in Ukrainian].

3. Hnatenko I. A., Petrov O. O. (2017). Osoblyvosti motyvatsii trudovoi diialnosti personalu pidpryiemstva [Peculiarities of the motivation of labor activity of the company's personnel]. Aktualni problemy ekonomiky ta menedzhmentu = Current problems of economics and management. Collection of materials of the International Scientific and Practical Conference, Zaporizhzhia, May 19–20, 2017. – Eastern Ukrainian Institute of Economics and Management, Zaporizhzhia: «SIEU», 2017. – P. 72–75 [in Ukrainian].

4. Dashko I. M. (2021). Zasadnychi imperatyvy suchasnykh pidkhodiv do upravlinnia personalom [Basic imperatives of modern approaches to personnel management].

ЕКОНОМІЧНІ ПРОБЛЕМИ РОЗВИТКУ ГАЛУЗЕЙ ТА ВИДІВ ЕКОНОМІЧНОЇ ДІЯЛЬНОСТІ

Mizhnarodnyi naukovyi zhurnal «Internauka» = International scientific journal «Internauka». Series : Economic sciences. – 2021. – No. 11(1). – P. 34–41 [in Ukrainian].

5. Kakhovych Yu. O. (2020). Novi trendy upravlinnia personalom v mizhnarodnykh kompaniiakh [New trends in personnel management in international companies]. Mizhnarodnyi naukovyi zhurnal «Internauka» = International scientific journal «Internauka». – 2020. – No. 18(2). – P. 19–24 [in Ukrainian].

6. Lipych L. (2022). Upravlinnia riznomanitnistiu v konteksti rozvytku personalu [Management of diversity in the context of personnel development]. Ekonomichnyi forum = Economic forum. – 2022. – No. 2. – P. 50–58 [in Ukrainian].

7. Lozhachevska O. M., Safonova V. Ye., Hnatenko I. A., Navrotska T. A. (2021). Upravlinnia innovatsiinoiu ekonomikoiu: stratehichni pidkhody do biznes-protsesiv, kadrovoho menedzhmentu ta konkurentospromozhnosti [Management of innovative economy: strategic approaches to business processes, personnel management and competitiveness]. Ahrosvit = Agroworld, 2021. No. 15. P. 14–19 [in Ukrainian].

8. Olmezova I. K. (2021). Upravlinnia personalom yak skladova stratehii pidpryiemstva [Personnel management as a component of enterprise strategy]. Mizhnarodnyi naukovyi zhurnal «Internauka» = International scientific journal «Internauka». – 2021. – No. 17(2). – P. 35–37 [in Ukrainian].

9. Olshanskyi O. V. (2022). Stratehichni innovatsiini napriamy upravlinnia personalom orhanizatsii na osnovi kompetentnisnoho pidkhodu v umovakh finansovykh, mihratsiinykh ryzykiv, didzhytalizatsii ta staloho rozvytku [Strategic innovative directions of personnel management of the organization based on the competence approach in the conditions of financial, migration risks, digitalization and sustainable development]. Formuvannia rynkovykh vidnosyn v Ukraini = Formation of market relations in Ukraine. – 2022. – No. 2. – P. 144–152 [in Ukrainian].

10. Puzyrova P. V. (2010). Bazovi pidkhody do formuvannia pryntsypiv i metodiv upravlinnia personalom pidpryiemstva [Basic approaches to the formation of principles and methods of personnel management of the enterprise]. Formuvannia rynkovykh vidnosyn v Ukraini = Formation of market relations in Ukraine. – 2010. – No. 1 (104). – P. 158–162 [in Ukrainian].

11. Sedikova I. O. (2022). Upravlinnia personalom v umovakh hlobalnykh informatsiinykh protsesiv [Personnel management in conditions of global information processes]. Ekonomika kharchovoi promyslovosti = Economics of food industry. – 2022. – Volume 14, Issue 2. – P. 51–57 [in Ukrainian]. 12. Chaban H. V. (2022). Innovatsiini pidkhody v upravlinni personalom [Innovative approaches in personnel management]. Ekonomichnyi visnyk universytetu = Economic Bulletin of the University. – 2022. – Issue 53. – P. 47–52 [in Ukrainian].

13. Chyzh V. I. (2021). Rozvytok personalu yak skladova stratehii upravlinnia v informatsiinomu suspilstvi [Personnel development as a component of the management strategy in the information society]. Modern economics = Modern economics. – 2021. – No. 26. – P. 160–166 [in Ukrainian].

14. Chkheailo A. A. (2020). Analiz suchasnykh sotsialno-psykholohichnykh metodiv upravlinnia personalom [Analysis of modern socio-psychological methods of personnel management]. Sotsialna ekonomika = Social economy. – 2020. – Issue 60. – P. 203–213 [in Ukrainian].

15. Sherstiuk O. (2022). Perevirka tverdzhen upravlinskoho personalu v audyti nadzvychainykh podii [Verification of statements of management personnel in the audit of extraordinary events]. Visnyk ekonomiky = Herald of Economy. – 2022. – Issue 2. – P. 86–98 [in Ukrainian].

16. Hnatenko I., Rubezhanska V., Parchomenko O. (2019). Formation of the potential of innovative enterprise by improvement of labor market infrastructure. Problemy systemnoho pidkhodu v ekonomitsi = Problems of the systemic approach in economics. 2019. № 3(71). C. 179–184 [in English].

17. Kondratiuk Yu. Yu., Puzyrova P. V. (2021). Modern aspects of labor motivation as a reason for human resources management. Innovatyka v osviti, nautsi ta biznesi: vyklyky ta mozhlyvosti = Innovation in education, science and business: challenges and opportunities: materials of the II All–Ukrainian conference of higher education applicants and young scientists, Kyiv, November 18, 2021. – Vol. 2. – Kyiv: KNUTD, 2021. – P. 18–23 [in English].

18. Chyzhevska M. (2022). The interstate development of human capital accounting: Assessment and modeling of the economic effect. International Journal of Advanced and Applied Sciences (IJAAS). – 2022. – Volume 9, Issue 4 (April). – P. 35–43 [in English].

19. Tkachenko V. (2020). Actual problems of personnel management in enterprises. Globalne konteksty poszanowania praw i wolnosci czlowieka. Wspylczesne problemy i dylematy : monografia nr 858 / red. Aleksandry Kuzior. – Gliwice : Wydawnictwo Politechniki Slaskiej, 2020. – P. 331–342 [in English].

20. Tkachenko V. (2020). The role and importance of modern education in human life. Globalne konteksty poszanowania praw i wolnosci czlowieka. Wspylczesne problemy i dylematy : monografia nr 858 / red.

ЕКОНОМІЧНІ ПРОБЛЕМИ РОЗВИТКУ ГАЛУЗЕЙ ТА ВИДІВ ЕКОНОМІЧНОЇ ДІЯЛЬНОСТІ

Aleksandry Kuzior. – Gliwice : Wydawnictwo Politechniki Slaskiej, 2020. – P. 343–355 [in English].

Список використаних джерел

1. Бондаренко Д. Ю. Основні підходи до формування принципів та методів управління персоналом на підприємстві / Д. Ю. Бондаренко ; наук. кер. П. В. Пузирьова // Пошук : науково-освітній журнал аспірантів, магістрантів, студентів, учнів Європейського університету. – 2012. – № 14 (II), травень. – С. 80–85.

2. Гнатенко I. А., Кулікова Ю. Е. Перспективні напря– ми вдосконалення управління персоналом в організа– ції. Науковий вісник Херсонського державного універ– ситету. Економічні науки. 2016. № 16. С. 55–58.

З. Гнатенко І.А. Особливості мотивації трудової діяльності персоналу підприємства / І. А. Гнатенко, О.О. Петров // Актуальні проблеми економіки та менеджменту : збірник матеріалів Міжнародної науковопрактичної конференції, Запоріжжя, 19–20 травня 2017 року. – Східноукраїнський інститут економіки та управління, Запоріжжя: ГО «СІЕУ», 2017. – С. 72–75.

4. Дашко І. М. Засадничі імперативи сучасних підходів до управління персоналом / І. М. Дашко // Міжнародний науковий журнал «Інтернаука». Серія : Економічні науки. – 2021. – № 11(1). – С. 34–41.

5. Кахович Ю. О. Нові тренди управління персоналом в міжнародних компаніях / Ю. О. Кахович, М. А. Шевченко, Т. І. Бабенко // Міжнародний науковий журнал «Інтернаука». – 2020. – № 18(2). – С. 19–24.

6. Ліпич Л. Управління різноманітністю в контексті розвитку персоналу / Л. Ліпич, О. Гринькевич, О. Полінкевич // Економічний форум. – 2022. – № 2. – С. 50–58.

7. Ложачевська О. М., Сафонова В. Є., Гнатенко І. А., Навроцька Т. А. Управління інноваційною економікою: стратегічні підходи до бізнес-процесів, кадрового менеджменту та конкурентоспроможності. Агросвіт. 2021. № 15. С. 14–19.

8. Ольмезова І. К. Управління персоналом як складова стратегії підприємства / І. К. Ольмезова, В. В. Дергачова // Міжнародний науковий журнал «Інтернаука». – 2021. – № 17(2). – С. 35–37

9. Ольшанський О. В. Стратегічні інноваційні напрями управління персоналом організації на основі компетентнісного підходу в умовах фінансових, міграційних ризиків, діджиталізації та сталого розвитку / О. В. Ольшанський, М. В. Шкробот, Г. І. Дідур, О. М. Шевченко // Формування ринкових відносин в Україні. – 2022. – № 2. – С. 144–152.

10. Пузирьова П. В. Базові підходи до формування принципів і методів управління персоналом підприєм-

S. Bebko, P. Puzyrova, V. Dovbush, N. Klymenchukova // International Journal of Advanced and Applied Sciences (IJAAS). – 2022. – Volume 9, Issue 4 (April). – P. 35–43.

19. Tkachenko V. Actual problems of personnel management in enterprises / V. Tkachenko, P. Puzyrova, A. Klochko // Globalne konteksty poszanowania praw i wolnosci człowieka. Wspylczesne problemy i dylematy : monografia nr 858 / red. Aleksandry Kuzior. – Gliwice : Wydawnictwo Politechniki Slaskiej, 2020. – P. 331–342.

20. Tkachenko V. The role and importance of modern education in human life / V. Tkachenko, I. Tkachenko, P. Puzyrova // Globalne konteksty poszanowania praw i wolnosci czlowieka. Wspylczesne problemy i dylematy : monografia nr 858 / red. Aleksandry Kuzior. – Gliwice : Wydawnictwo Politechniki Slaskiej, 2020. – P. 343–355.

ства / П. В. Пузирьова // Формування ринкових відносин в Україні. – 2010. – № 1 (104). – С. 158–162.

 Седікова І. О. Управління персоналом в умовах глобальних інформаційних процесів / І. О. Седікова, К. Б. Козак, Д. В. Седіков / / Економіка харчової промисловості. – 2022. – Т. 14, Вип. 2. – С. 51–57.

12. Чабан Г. В. Інноваційні підходи в управлінні персоналом / Г. В. Чабан, В. Г. Чабан // Економічний вісник університету. — 2022. — Вип. 53. — С. 47—52.

13. Чиж В. І. Розвиток персоналу як складова стратегії управління в інформаційному суспільстві / В. І. Чиж, Я. В. Гавриленко // Modern economics. – 2021. – № 26. – С. 160–166.

14. Чхеайло А. А. Аналіз сучасних соціально-психологічних методів управління персоналом / А. А. Чхеайло, І. А. Ткаченко // Соціальна економіка. – 2020. – Вип. 60. – С. 203–213.

15. Шерстюк О. Перевірка тверджень управлінського персоналу в аудиті надзвичайних подій / О. Шерстюк, Н. Жук, О. Волошина // Вісник економіки. – 2022. – Вип. 2. – С. 86–98.

16. Hnatenko I., Rubezhanska V., Parchomenko O. Formation of the potential of innovative enterprise by improvement of labor market infrastructure. Проблеми системного підходу в економіці. 2019. № 3(71). С. 179–184.

17. Kondratiuk Yu. Yu. Modern aspects of labor motivation as a reason for human resources management / Yu. Yu. Kondratiuk, P. V. Puzyrova // Інноватика в освіті, науці та бізнесі: виклики та можливості : матеріали II Всеукраїнської конференції здобувачів вищої освіти і молодих учених, м. Київ, 18 листопада 2021 року. – Т. 2. – Київ : КНУТД, 2021. – С. 18–23.

18. The interstate development of human capital

accounting: Assessment and modeling of the economic

effect / M. Chyzhevska, S. Sytniakivska, M. Demydova,

Дані про автора Пузирьова Поліна Володимирівна,

доцент кафедри смарт—економіки, Київський національний університет технологій та дизайну, к.е.н., доцент, Україна

e-mail: puzyrova@ukr.net

Data about the author *Polina Puzyrova*,

Associate Professor of the Department of Smart Economics, Kyiv National University of Technologies and Design, Ph.D. in Economics, Associate Professor, Ukraine e-mail: puzyrova@ukr.net

UDC 338.242.2

https://doi.org/10.5281/zenodo.7624501 KLYMENCHUKOVA N.S., HNATENKO I.A., OSTRYANINA S.V., SOKOLOVSKYI Ye.K.

Modeling the impact of production and implementation modes on the business management system in the conditions of the innovative economy

Relevance of the research topic. An important requirement of the modern innovative economy is the need to satisfy the unlimited needs of society in conditions of limited production potential and human resources. Increasingly, the methodology and tools for solving this problem are based on the use of a system of aggregated production functions – classical economic—mathematical or statistical modeling, which allows analyzing quantitative changes, correlations and ratios between various factors of production (human resources, own or borrowed capital, labor, land, innovative activity, scientific and technical progress) and the volume of products that can be produced by the subject of entrepreneurial activity under the condition of effective combination of entrepreneurial potential. However, taking into account modern trends, there is a need for uninterrupted research of the production system of the enterprise in order to adjust the management.

Formulation of the problem. Currently, there are a large number of production functions: Alain, Cobb-Douglas, Solow, Cobb-Douglas-Gray, Leontiev, Menkiu-Romer, Georgescu-Roeden, CES-function, LES-function. For our research, the Cobb-Douglas production function is of particular interest, which, by its logical construction, allows us to take into account asymmetric trends in variable production, the uneven distribution of business resources, and in this way ensure greater validity of forecasts. Therefore, the study of the specifics of the Cobb-Douglas production function, as well as the foundations of its construction, is an important problem today that needs analysis.

Setting the goal and tasks of the research – to determine the main directions of modeling the influence of production and implementation modes on the business management system in the conditions of the innovative economy.

Research method or methodology. The article uses the following methods: synthesis; modeling; abstraction; systematization and monographic generalization.

Presentation of the main material. Directions for modeling the influence of production and implementation modes on the business management system in the conditions of the innovative economy are proposed. Forecasting of the impact of factors on the dynamics of the volume of sales of economic entities over the last eleven years was determined based on the use of the Cobb–Douglas production function.

Field of application of results. The proposed modeling can be used by business entities for the purpose of diagnosing production activities and making timely management decisions.

Conclusions according to the article. Modeling of the influence of production and implementation modes on the business management system in the conditions of the innovative economy is proposed.

Key words: production function, forecasting, modeling, product realization, non-current assets, personnel, costs, entrepreneurship, economy, innovation, competitiveness