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HUMAN RESOURCE MANAGEMENT FOR SECURE AND SUSTAINABLE DEVELOPMENT

Vyacheslav Makedon[1], Olha Hetman[2], Liudmyla Yemchuk[3], Nadiia Paranytsia[4], Svitlana Petrovska[5]

[1]Oles Honchar Dnipro National University, Gagarin avenue, 74, Dnipro city, Ukraine*
[2]Kharkiv National University of Civil Engineering and Architecture, Kharkiv, Sumska str., 40, Ukraine
[3]Khmelnytskyi National University, 11 Instytutska Str., 29016, Ukraine
[4]Business Analysis and Statistics University of State Fiscal Service of Ukraine, 31, Universytetska str., Irpin city in Kiev Region, 08201, Ukraine
[5]National Aviation University, Kosmonavta Komarova 1, Kyiv, 03058, Ukraine

E-mail: [1]koaduep@gmail.com*

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Abstract. A set of criteria has been substantiated for evaluating the effectiveness of the implementation of the functions of the mechanism for ensuring the leadership effectiveness of the managerial staff of enterprises. The set gives a chance to make a comprehensive evaluation of the integral indicator of human resource management. This makes it possible to determine the effectiveness level of human resource management. The study carried out allowed to propose a functional and structural approach that includes the following functions: analysis and planning of personnel, recruitment and selection of personnel, attestation and evaluation of personnel, organization of labor relations, motivational support, creation of working conditions, information provision, development and training of personnel. Under uncertainty, its application makes it possible to evaluate the impact of the effectiveness of the human resource management on the level of productivity of the studied enterprises.

Keywords: secure and sustainable development, human resource management, life cycle, effectiveness, motivation, management

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1. Introduction

The world economy has changed considerably in the last decade. The globalization brought issues of security. The transition from the industrial to the post-industrial (information) world, about which many analysts have spoken, has finally happened, and most importantly - the balance between the roles of economic agents has radically changed. In the post-industrial society, the leading role passes to the owner of intellectual property rights, in other words, the main approach of ensuring the effectiveness of the enterprise becomes personnel. Experts associate this transition from the "Detroit" production model to the "Hollywood" one. According to the "Detroit" model, the owner of an enterprise organizes jobs, production and hires workers to perform simple operations, for which he pays them small wages (compared with the main income received by the owner of production methods). The personnel depend on the employer (because they are able to make a living by using only production methods they have in the production process); workers are easily interchangeable; their role in the production process is to add value to the product.

As for the so called "Hollywood" model, it is not a process in the center of production, but a product whose main part of value is intangible assets. For its creation, a team is put together, the composition of which, as a rule, varies from product to product, and the structure may be non-formalized. Since the role of personnel in the creation of intangible assets is significant, each employee has the right to a final product, which is expressed in the payment of his labor due to the proper wage. According to the "Hollywood" model, the employee (managerial staff) has specific individual capacities that make it impossible for him to be replaced by other employees (Markoulli et al. 2017).

2. Literature Survey

During the last decade and today, researchers, analyzing the issues of human resource management, pay attention primary to the motivation of personnel (Kaźmierczyk, Chinalska 2018; Pritvorova et al. 2018; Plenkina, Osinovskaya, 2018; Ciobanu et al. 2019; Škuflić et al. 2018; Saleem et al. 2018), knowledge management (Kubak et al. 2018; Tvaronavičienė et al. 2018), performance management (Androniceanu et al. 2017), etc. Human resource management now has to be implemented with awareness of rapidly emerging wide range of threats (Tvaronavičienė 2018). Analoui (2017) believes that the key for the specialists in human resource management of enterprises is the following issues: the human factor of labor. It is foreseen that the requirements of psychology and physiology should be taken into account in the rational organization of employees' work, improvement of selection processes, personnel evaluation, rationalization of the work regime, rest; the methodology of human resource management includes the improvement of organizational structures, functional subsystems of the management system, development of principles and methods for building HR systems based on system and morphological analysis, decomposition, goal structuring, expert-analytical, balance methods; the system of human resource management involves careful construction of the goals and functions of the management system, organizational structure, organizational design of the management system based on HR, record keeping, information, technical support; strategic human resource management is carried out on the basis of the formation of the mission, goals, criteria of the effectiveness of the management system, analysis of factors of the internal and external environment; HR planning, HR management technology and its development, HR behavior management, evaluation of the results of its activities, etc.

Korff et al. 2017 reveal in their work the two key components of effective human resource management. The first one is a rational model of labor relations based on an effective system of wages and is intended to increase discipline, productivity and quality of work at every workplace. The second one is a rational model of enterprise management that allows managers to plan the work of an enterprise, taking into account the rational use of all available resources, to correctly develop the management structure, the regulations on the divisions, job descriptions and internal document flow of enterprise (Liu et al. 2017).

The concept of organizational management, developed by the authors (Hilorme 2016; Hilorme, Shachanina 2017, Tetiana et al. 2018, is called "resource management concept". It is based on the disclosure of human capabilities, the analysis of social and psychological problems, the evaluation of alternative approaches to organizational management. The scientist proposes to consider the following aspects of the organization's activities that affect the effectiveness of its functioning: innovative, bureaucratic, technocratic and other managerial orientations, image behavioral norms, cultural behavior with customers, behavioral types, employee's initiative, management of conflict, severe, unfavorable, favorable, optimal and other situations, risk minimization in decision-making, introduction of innovations.

Ones et al. 2017 offer an interesting approach to evaluate the evolution of HR practices and transforming it into HR management. If one splits the development of the company into five main stages (the life cycle of an enterprise), it becomes possible to illustrate the relationship between these stages, the company's main production and structural characteristics, and the evolution of HR management into HR management.

Ensuring the effectiveness of HR management is the most important condition for improving the business effectiveness and ensuring enterprise sustainability. In the conditions of limited resources and time, it is necessary to identify the ways in which it is possible to achieve the greatest results in the shortest time on the

way to improving the business effectiveness, in other words, to outline the best ways to increase the business effectiveness of the managerial personnel of the organization.

3. Methods

Based on the concept of a functional approach, a generalized measure (integral indicator) of human resource management can be provided by describing the interrelationships between different indicators and parameters, bringing them to a single computing platform (Tetiana et al. 2018). By the indicator of the effectiveness of human resource management, we mean the quantitative level of personnel activity, which takes into account the social and economic state of enterprise's activity. Indicator is the quantitative expression of a specific characteristic of the indicator of the effectiveness of human resource management, which provides an opportunity to evaluate progress, increase the efficiency and effectiveness of decision-making by simplifying and aggregating large volumes of information and presenting it in a concentrated form to decision makers (Hilorme et al. 2018). The analysis of the aforementioned indicators for the determination of indicators is a prerequisite for the calculation of an appropriate indicator of the effectiveness of HR management of the enterprise (Nakashydze et al. 2015).

There are many reasons for the crisis of HR management at the microeconomic level, the main ones can be: conflict of interests of those interested in the activities of enterprises; disadvantages in HR management; insufficient motivation; low level of qualification and training; bad working conditions; contradictions between the goals of the organization and the interests of certain groups of workers; outdated organizational structures and management style; lack of resources and information; shortcomings in the control of the personnel work; violation of ethics; underestimation or miscalculation of performance; the discrepancy between the type of organizational culture and the behavior of the organization's new operating environment. The crisis of personnel determines the inconsistency of its activities with the new conditions that appeared during the development of the organization. The main "symptoms" of crisis of HR management at the enterprise are: low productivity; high turnover rate of personnel; shortage of skilled personnel; lack of a clear, rational distribution of functions among employees, duplication of work; redundant human resource; non-compliance of the qualification structure of the personnel with the needs of the enterprise; poor motivation of staff; absence of employees initiative; a tense emotional atmosphere in the team, associated with the critical mass of demotivating factors in the enterprise and a large number of conflict situations. In a crisis situation, enterprises began to look for ways to minimize negative impacts, by resorting to operational measures to reduce costs, revise budgets, and temporarily discourage investment and recruit new workers (Brewster 2017).

On the basis of the systematization of theoretical studies, the author established that for the stable functioning of enterprises, more attention should be paid to the mechanism of HR management, since it is the human resource of the enterprise in the market economy that is the main factor of successful entrepreneurial activity, which requires significant investments. In this regard, the key issue of improving the competitiveness of the enterprise at any stage of the life cycle is the effective management of enterprise and personnel, as well as the search for new forms and methods of its organization.

4. Results

In the modern environment, it is increasingly difficult to provide a constantly rising cost of labor and to seek not only the fulfillment of official duties, but also to stimulate the activity of personnel, providing a significant increase in labor productivity. The new economy requires proactive managerial staff, which seeks to increase its competence and innovation activities, focuses on maximum achievements in labor and takes responsibility for the activities of the company as a whole. On the theoretical basis, the author determined that the main directions of activity in the field of effective HR management of the enterprise or its components are: the definition of the need in personnel (the planning of quantitative and qualitative needs in the personnel, the choice of methods for calculating the number of needs in personnel); selection of personnel (analysis of sources of personnel selection, establishment of relations with external organizations, business assessment of personnel at the time of selection); placement of personnel (current periodic assessment of personnel, purposeful movement of personnel); personnel

development (adaptation, training, professional and career advancement, employee redundancy); maintaining a comfortable social and psychological climate (regulating the relationship between the leader and the team, working relationships, reducing the level of conflict in the team); motivation for behavior (adequate payment, creating a creative atmosphere, supporting a career, raising the "corporate spirit"); management of personnel safety (creation of normal working conditions, protection of labor, implementation of training programs aimed at creating safe actions for employees, providing social infrastructure); legal and informational support of HR management process (legal regulation of labor relations, accounting and personnel statistics, communication).

In the course of the research, the author found that most of the competing enterprises are technically equipped approximately alike, they use similar techniques and methods of marketing and production organization, but the competitive advantages depend on the qualitative characteristics of the personnel and the tools used in the formation of the HR management system. Therefore, adaptive, flexible and mobile HR management system is one of the main factors of the enterprise's competitiveness in modern conditions.

The personnel is a valuable and significant strategic resource of the organization, and its formation and use are factors of competitive advantages. The predominant orientation towards managerial staff requires the creation of conditions for the expansion of knowledge, competencies and self-improvement, increasing the creative, innovative activity of employees and job satisfaction (Collings et al. 2018). Effectiveness of the personnel, as well as the other factors of ensuring the effectiveness of the company, can be influenced, since the business effectiveness of the organization as a whole significantly depends on the effectiveness of the managerial staff, and one of the main tasks is to determine the directions of its increase. These directions, in particular, include: promotion; providing an acceptable level of education; acquiring practical experience; advanced training of management personnel; carrying out periodic certification.

The increase of the effectiveness level of the managerial staff is not limited only by the directions considered, it is also affected by the improvement of the production structure of the organization, rational organization of production and labor, including all personnel, optimization of organizational structure, forms and methods of management, communication processes, etc (Delery et al. 2017).The modern managerial concept should take into account the features of a market economy, which can be distinguished by comparing in general the systemic factors of a political, economic and social nature in the developed countries (Jabbour et al. 2016; Masum et al. 2016; Zhou et al. 2017. This analysis does not claim to be comprehensive and profound, its purpose is to show the limited use of models produced in the countries with developed markets, the presence of similar problems and solutions to them, taking into account differences in conditions and systems that are at different stages of development. The above comparison shows that the world countries are on the way of creating a civil society as an active force, and the enterprise's HR management as part of this society should be seen as an important element of social development (Zhou et al. 2017). It should be said that this goal is quite complex and requires solving a number of problems: updating the domestic theory and practice of modern HR management ideas and methods of scientific schools of all their previous adaptation; raising the level of organizational culture and quality of working life; implementation of a systematic approach in the HR management, departure from the simplified "staff" understanding of personnel; improvement of effectiveness and competitiveness of the enterprise at the expense of full use and development of HR potential - both individual and group; raising the level of self-assessment and self-esteem of personnel, implementation of methods of development management, aimed at actualizing the needs of people in self-realization and professional growth.Thus, one can assume that the main directions of increasing the productivity of managerial staff are: the formation of a stable quality of managerial staff; determination of criteria and indicators of the efficiency of their work; organization of constant accounting and control over the results of managerial and production personnel; increase in training costs; learning flexibility and speed of sales of goods by cashiers; increase of standards of production and quality of service; deepening of specialization, not connected with the implementation of new technology; reduction of unproductive loss of working time; ensuring a fairly high material and moral interest of employees in the results; formation of a new social and psychological climate in a team aimed at creating conditions for productive labor; formation of a poly-criterial system of activation of the personnel of the enterprise. Increasing the effectiveness level of enterprises is possible through the construction of an effective mechanism for ensuring the effectiveness of HR management.

Thus, according to the determined expert assessments, nine functions of HR management were selected that maximally characterize the HR management of the studied enterprises.Table 1 presents the functions of human resource management and the corresponding indicators used to model business processes of human resource management.

Table 1. Indicators of evaluation of human resource management functions

№	Functions	Indicator	Indicator mark
1	Personnel analysis and planning	I_{app}	*z1 — z4*
2	Personnel recruitment	I_{pp}	*z5 — z7*
3	Personnel selection	I_{vrp}	*z8 — z11*
4	Personnel certification and assessment	I_{aok}	*z12 — z15*
5	Organization of labor relations	I_{otv}	*z16 — z18*
6	Personnel motivation	I_{tp}	*z19 — z23*
7	Creation of working conditions	I_{sup}	*z24 — z25*
8	Information support	I_{iz}	*z26 — z27*
9	Personnel development and training	I_{rpp}	*z28 — z30*

Indicators *(z1 — z30)* determine the directions of the effectiveness of HR management, namely the personnel effectiveness in terms of increasing productivity level (Table 2).

Table 2. Indicators and indices of human resource management functions

Indicator	Mark	Indices	Unit
I_{app}	*z1*	Wages fund	*Thousands of US dollars*
	z2	Expenses of wages with accrual to the hryvnia of commodity and sold products	*Thousands of US dollars*
	z3	Yearly output per worker	*Thousands of US dollars / person*
	z4	Expenses of wages per hryvnia of sold products	*Thousands of US dollars*
I_{pp}	*z5*	Number of employees to provide the work	*people*
	z6	Average wage category of performed work to the average personnel wage category	*%*
	z7	Turnover from personnel reception and dismissal	*%*
I_{vrp}	*z8*	Provision of enterprise personnel	*people*
	z9	Increase in the number of personnel by educational level	*people*
	z10	The coefficient of personnel variability	*%*
	z11	Loss of working time	*hour*
I_{aok}	*z12*	The coefficient of quality of products on the fact of consumer complaints	*%*
	z13	Productivity	*Thousands of US dollars*
	z14	Professional qualification level of personnel	*people*
	z15	Increase the coverage of work with standards and norms	*%*
I_{otv}	*z16*	Increase in the number of personnel by educational level	*people*
	z17	Labor costs of personnel	*Thousands of US dollars*
	z18	Social expenditures	*Thousands of US dollars*
I_{tp}	*z19*	An increase in the share of profits, surcharges and allowances in the total wages fund of personnel	*Thousands of US dollars*
	z20	Growth of the basic and additional payment, incentives and compensatory payments in the wages fund of personnel	*Thousands of US dollars*
	z21	The average monthly salary	*US dollars /people*
	z22	The coefficient of productively used working time	*people/hour*
	z23	Incentive and compensation payments	*Thousands of US dollars*

I_{sup}	*z24*	Number of employees working in conditions that do not meet sanitary-and-hygienic standards	*Thousands of people*
	z25	The level of occupational diseases and injuries	*%*
I_{iz}	*z26*	The level of integration of management processes and management business systems	*%*
	z27	Underutilization of personnel capacity	*%*
I_{rpp}	*z28*	Personnel constancy	*%*
	z29	Personnel turnover	*%*
	z30	Personnel movement	*%*

Based on the calculation of the integral indicator of the effectiveness of HR management of enterprises and the established scale of evaluation of the effectiveness level of personnel, the state of the mechanism for ensuring the effectiveness of HR management has been determined. The above-mentioned scale for evaluating the effectiveness of HR management is given in Table 3.

Table 3. The scale for evaluating the level of the integral indicator of the effectiveness of HR management of enterprises

Levels (range of values)	Features of the level of integral indicator of the effectiveness of HR management (group characteristics)
High [0,7—1]	Minor adjustments are needed as well as investments to improve individual processes, additional study of the indicators of other groups will make it possible to determine in which one it is needed, and assign responsible managers. An enterprise operates stably, the opportunities for effective development exist, it does not require the development and implementation of additional measures for motivation and information provision.
Medium [0,5—0,69]	The state of an enterprise is relatively stable, it has values close to the threshold, indicating the need to develop measures (organizational, motivational and informational) in order to avoid deterioration of the situation at the enterprise.
Low [0,3—0,49]	An enterprise has a low level of effectiveness of HR management, which largely does not meet the conditions for ensuring the effectiveness of personnel activities. The situation requires corrective action in the field: development of normative and methodical personnel documentation; the implementation of measures aimed at establishing a clear link between wages and results of work; the implementation of technology for professional orientation management and adaptation (possible creation of mentoring system); the implementation of the method of business assessment and attestation of personnel for employees and its improvement for managerial personnel. It is advisable to improve the mechanism of ensuring the effectiveness of personnel activities, the implementation of which should ensure the effectiveness of an enterprise.
Weak (limited) [0—0,29]	The state of an enterprise is extremely unstable, development is complicated. The situation requires a comprehensive development of measures and significant corrective actions: improvement of the system of non-material stimulation; raising the level of the organization of work; raising the professional qualification level of employees and creating a system for identifying learning needs (developing criteria); study of causes of personnel turnover; stimulation of initiative and creative development of the personnel; increasing the effectiveness of management of working time, active actions to increase the level of labor discipline and working conditions; improvement of the organizational structure in the field of personnel management. It is advisable to take measures to identify the optimal way of HR management to achieve the optimal level of effectiveness of the enterprise's personnel in the coming years.

On the basis of the data obtained, we can conclude: in order to ensure the effectiveness of HR management, it is necessary to promptly make optimal decisions in the field of organizational, motivational and informational support of personnel, to develop and implement measures for the effective operation of employees of the enterprise, to guarantee increase of productivity and labor productivity, and also to improve the system of the personnel development. Separately, one should pay attention to the cards of motivators. Managerial activity requires the development of new progressive methods and mechanisms for ensuring the effectiveness of HR management. Rational managerial decisions made by the managerial bodies of different levels, have a decisive influence on improving the social and economic state of business at the enterprise. The main condition for the correctness of decisions is an exhaustive awareness. Ensuring the effectiveness of HR management is a complex process, the implementation of which must be based, first of all, on reliable and comprehensive information at all levels of management. In this connection, the information support of the HR management system and an enterprise as a whole, whose effectiveness determines the ultimate performance and productivity, plays a special role. Under the prevailing conditions, an important direction in the functioning of information provision is the constant search for effective ways of improving the activities of the enterprise and its personnel based on continuous processing of information flows in order to ensure rational business (Xing et al. 2016). Effective management of

the components of information provision creates a basis for maximally effective use of information available to enterprises and personnel in order to achieve its strategy and current goals, the formation of a personnel supply mechanism and the acquisition of competitive advantages in a dynamic market environment. The calculation of the statistical integral indicator of the effectiveness of HR management is proposed to be used in order to evaluate the activity of the personnel of an enterprise. This methodical approach makes it possible to take into account all functions of HR management and thus reflects the relationship between the three inseparable areas of ensuring the effectiveness of the enterprise's personnel: organizational, informational and motivational one. Enterprises must have access to the necessary information in order to turn it into knowledge that will be used to achieve the goals set, to control the sources of its receipt, to search for the necessary data in an array of received information, to adapt to the needs of users the profiles of news and other demanded information, actions, aimed at performing specific tasks (compiling reports, carrying out research, comparing different results, etc. (Viswesvaran, Ones, 2017; Koev 2018a). Taking into account the dynamism of the organizations, there is a growing possibility of making of suboptimal managerial decisions due to the lack of time that could endanger the very existence of an enterprise. This is especially important at the stage of choosing a strategy. A simple reproduction of known solutions, even the most advertised ones, tends to take an enterprise off into a "catching-up" mode. Therefore, the provision of competitive advantages of an enterprise is primarily due to the formation in the management of the idea of new possibilities of modern technology, which requires the use of intellectual elements in an integrated information system. Based on research, the author proposed the creation and use of the information support system by enterprises as an intellectual center. This is one of the prerequisites that will ensure effective managerial decisions and the development of managerial innovations (Koev 2018b). Thus, managers of modern industrial enterprises need effective tools to ensure the successful development of both the entire enterprise and its individual subsystems, especially in terms of diagnostics, assessment, build-up and use of potential for development of managerial personnel and acquisition of new competencies.The information support system is practical, simple and convenient in operation and does not require any specialist knowledge in the field of psychology of the individual and the group, sociology and other disciplines, since it is a "thinking" system capable of self-learning and adapting to any production situation (Wehrmeyer 2017).

5. Discussion

Thus, the priority and effectiveness of management depends on the availability and level of use of professional qualification, creative potential and organizational capacity of the enterprise's management. However, one of the disadvantages of human intelligence is that it is not adapted to the accumulation of a huge amount of information, the implementation of grandiose computations in the analysis of complex production, labor or financial processes at the enterprise. The information support system will ensure the creation and development of intellectual centers of an enterprise with a cross-cutting information environment for the accumulation and exchange of knowledge between managers who, in cooperation with virtual intelligence agents, will select a set of diverse textual and analytical information on the state of the market, the activities of competitors, contractors, opportunities for improvement of document circulation, performance of tasks by subdivisions and achieved the final results of activity of enterprises in general.

Taking into account the considerable number of tasks of the managerial personnel of an enterprise aimed at defining its mission, values, policy, formation of the structure and management system, representation in negotiations with public authorities and main contractors, as well as performance of functional duties, the complexity of controlling the activities of each divisions of an enterprise and making managerial decisions by middle and lower level managers, it is advisable to identify users of the information support system, among which should be managers of the upper, middle and lower levels of managerial decision-making. In order to ensure the development of managerial personnel, the implementation of managerial innovations and the effective making managerial decisions at the enterprise, the information support system has three main tasks: development of the intellectual center; provision of activity of intellectual agents; simplifying the process of document circulation and informing management. The personnel is the determinant of the successful functioning of any organization, and therefore, the main factor in the formation and ensuring its competitiveness. The result of implementation of the mechanism of ensuring the effectiveness of HR management of enterprises is the achievements of the

objectives of the enterprise, structural changes on it, increase the level of productivity of managerial personnel and gaining competitive advantages.

The effective activity of an enterprise depends not only on the high level of competitiveness, sufficient property potential, but also on the competence of managerial personnel and the effectiveness of its internal organization. The effectiveness of staffing is manifested in the highly productive use and development of material means of production, meeting the needs and expectations of customers. In order to achieve such results, an enterprise must have certain goals and objectives, be appropriately staffed with the appropriate number of workers who have the necessary capacity for which the necessary conditions are created that contribute to improving the efficiency of labor. Until today, practice requires from the personnel the results of vocational education not only in the form of acquired knowledge, but also their practical readiness and ability to solve problems, both in typical and non-standard situations of professional life.

Conclusions

In contemporary conditions, characterized by emerging unsecurity, the contribution to personnel becomes a long-term factor of competitiveness and resilience of an enterprise. The effectiveness of the personnel component of the success of an enterprise depends on the chosen strategy of personnel development. The modern mechanism of ensuring the effectiveness of HR management should be aimed at increasing the competitiveness of an enterprise, its long-term development, the maximum profit level and the increase in productivity. In today's conditions, most experts believe that the formula of success is human resources, and therefore their value is constantly increasing day by day. Accordingly, the mechanism of ensuring the effectiveness of HR management is constantly changing, replacing the stereotypes. Continuous improvement of the processes of effective HR management is necessary based on implementation of scientific methods, advanced technologies of personnel work, standardization and unification of personnel documentation, application of technical means. Innovative approaches to evaluating the effectiveness of human resources management, depending on the method of achieving the economic effect of production activity, should be implemented at the enterprises. Thus, the proposed mechanism of ensuring the effectiveness of the personnel of enterprises makes it possible to: increase the productivity of personnel; improve the quality and timeliness of the work performed; ensure participation in development and advanced training programs (employee interest in the company); reduce the outflow of personnel; ensure the organization of innovation activities and increase the level of effectiveness of an enterprise. As we can see, with the help of the proposed methodical approach to the evaluation of the effectiveness of the management of the enterprises, it is possible to determine the directions of solving administrative problems and improve the mechanism of ensuring the effectiveness of the personnel activities that will increase the level of labor productivity and competitiveness of an enterprise.

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Short biographical note about the contributors at the end of the article:

Vyacheslav MAKEDON, Dr. Hab. (Economics), Associate Professor, Oles Honchar Dnipro National University
ORCID ID: orcid.org/ 0000-0001-8131-0235

Olha HETMAN, Ph.D. (Economics), Associate Professor, Kharkiv National University of Civil Engineering and Architecture
ORCID ID: orcid.org/0000-0003-4538-5736

Liudmyla YEMCHUK, PhD in Economics, Senior Lecturer, Khmelnytskyi National University
ORCID ID: orcid.org/0000-0003-4931-8004

Nadiia PARANYTSIA, Associate Professor of the Department of Management Accounting, Business Analysis and Statistics University of State Fiscal Service of Ukraine
ORCID ID: orcid.org/0000-0003-3682-4979

Svitlana PETROVSKA, PhD (Economics), Associate Professor, National Aviation University
ORCID ID: orcid.org/0000-0001-5354-1343

Register for an **ORCID ID:**
https://orcid.org/register

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