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# FORMATION OF A RATIONAL STRUCTURE FOR MANAGING THE DYNAMIC CAPABILITIES OF THE ENTERPRISE'S HUMAN RESOURCES POTENTIAL

## ABSTRACT

The purpose of the study is to substantiate the methodological decision-making tools for the formation of a rational management structure of the dynamic capabilities of the company's personnel potential. It has been scientifically substantiated and proven that the formation of a rational management structure for the dynamic capabilities of the company's personnel potential is based on the development of a dynamic model of their assessment. The model is presented taking into account the integration of the dynamic capabilities of the enterprise, its personnel and processes business environment's transformation.

The research uses the methods of system analysis and logical generalizations, the statistical concept of dynamic capabilities, the methods of the theory of active systems, the theory of hierarchical games, financial mathematics, and the theory of optimal control of continuous and discrete systems. Updated directions of the managing formation process of a rational structure of the company's personnel potential.

The proposed model for assessing the dynamic capabilities of the company's personnel potential allows for optimizing the utility function of personnel resources. Optimizing the usefulness of human resources takes place on the basis of determining the level of their dynamic capabilities to integrate, create and change the configuration of internal and external competencies to achieve sustainable competitiveness of the enterprise.

The model for assessing the dynamic capabilities of the company's personnel resources determines the competencies of personnel, business systems and strategies for its development. The use of the proposed model to determine the dynamic capabilities of the enterprise regarding the reconfiguration of available human resources allows us to focus on the relevant behavioural aspects of enterprise managers and limitations, taking into account the exchange between the internal and external environment.

**Keywords:** human resources, human potential, dynamic capabilities, dynamic model, business environment

**JEL Classification:** C1, D81, J5

## INTRODUCTION

The personnel potential of the enterprise is a fundamental component of ensuring innovative growth and the main driver of the implementation of the strategy of achieving the goals of sustainable development of the state. The appropriate level of quality and qualification of labour resources determines this position process; forms of their organization, economic environment, structure of information support, education system, etc.

Institutionalization of the systematic and multi-level formation of effective human resources at the enterprise based on the use of digital technologies and information and analytical systems of the new generation is an integral condition for improving the human resources management system of the enterprise.

The process of reproduction and development of the company's personnel potential is an objectively necessary condition for its viability. The priority aspect of the implementation of the company's sustainable development strategy is the development of its personnel, and the growth of its personnel potential [1]. The level of development and use of an employee's personnel potential determines the competitiveness, adaptability of the enterprise to the conditions of the dynamic business environment, and innovative receptivity [16].

The need to adapt to the conditions of a changing business environment requires the company's personnel to demonstrate the dynamism of their capabilities in carrying out innovations in their business models, developing new products and services, and transforming the methods of organizing their work. Accordingly, business stakeholders become interested in the development of tools that ensure the ability of the human resources of the enterprise to integrate, create and reconfigure internal and external resources to effect transformational change [14].

The relevance of the study of this issue is due to the fact that dynamic models of decision-making, based on the approach of systematic assessment of the need for personnel resources, taking into account the dynamics of business processes, determine the level of efficiency of the enterprise. The effectiveness of the system assessment based on the determination of the need, selection, training, placement, retraining and upgrading of personnel becomes one of the main factors of the overall effectiveness of socio-economic systems.

## LITERATURE REVIEW

Transformational changes in the economy are characterized by a significant impact of the enterprise's personnel potential on business development. The relevance of the study of this issue is determined by the fact that dynamic models of decision-making, which are based on the approach of systematic assessment of the need for human resources, taking into account the dynamics of business processes, determine the level of enterprise efficiency. The effectiveness of the system assessment, based on the identification of needs, selection, training, placement, retraining and upgrading of personnel, becomes one of the main factors of the integrated effectiveness of socio-economic systems.

The theoretical and methodological foundations of the development of personnel potential in dynamic models were first presented in the work [2], which considered such a factor of the effectiveness of personnel potential as its dynamic capabilities. The author determined that the dynamic capabilities of human resources are the foundation for analyzing the processes of strategic development of the enterprise. It is the dynamic capabilities of the personnel component of any enterprise that underlie the relationship between the personnel management system and the effectiveness of the enterprise's functioning [2]. However, it is not determined in the work that the formation of dynamic capabilities of personnel potential should be based, first of all, on the assessment of the needs of each enterprise, taking into account the peculiarities of its functioning.

In a scientific study [3], the authors emphasized the need to assess the need for personnel resources in accordance with changes in the business environment of the enterprise, proving the need to determine the dynamic capabilities of personnel to update their internal and external competencies [3]. However, supporting the opinion of the authors, it should also be noted that the process should be carried out permanently in accordance with the constant updating of the company's development directions.

It can be mentioned in the process of increasing the efficiency of coordination processes and improving the personnel potential of the enterprise that dynamic capabilities can serve as a source of competitive advantage, improving the use of personnel resources [4]. In determining the dynamic capabilities of personnel potential, the authors do not outline how they should be evaluated.

In the scientific work [4], the authors formulated the features of the dynamic capabilities of personnel potential, which are specific to each enterprise. Their specificity for enterprises is determined by the organizational embeddedness of human resources in business processes and is intended to increase productivity and the efficiency of the use of other resources [4]. Developing the opinion of the authors regarding taking into account the specificity of the dynamic capabilities of each enterprise, it is also necessary to define their structure, which would take into account the peculiarities of the enterprise.

Scientists, in work [5], investigated the relationship between the assessment of dynamic capabilities of personnel resources and labour productivity using structural equation modelling. They came to the conclusion that the sustainable competitive advantages of the enterprise directly depend on the dynamic capabilities of employees [5]. However, the authors did not substantiate the properties of such a structure that would ensure the achievement and maintenance of the required level of effectiveness.

In studies [6, 7], the authors substantiated the need for in-depth research that combines the most solid foundations of the theory of organization and management of personnel potential based on the formation and implementation of its dynamic capabilities. Their efforts were aimed at a systematic assessment of the need for personnel, the dynamics of their internal and external competencies, and the ability to transform under the influence of the variability of the business environment. The systematization and generalization of the dynamic characteristics of the company's personnel potential are absent in the research.

In a scientific study [8], the authors determine how exactly the reproduction of one's own dynamic capabilities of personnel potential contributes to its innovative development, by focusing on the increase of one's own "functional flexibility". Therefore, the dynamic capabilities of human resources allow personnel to take a direct part in the processes of change management at the enterprise, mitigating the stresses of organizational transformation. Unfortunately, the authors have not determined exactly which properties of the dynamic capabilities of personnel potential are used to neutralize the negative impact of transformational changes.

In work [9] it is noted that the development of dynamic capabilities of the personnel component of the enterprise creates conditions and opportunities for timely adjustment of the chosen strategy of its development, and increases the efficiency of their functioning. In the work [10], the authors substantiated the importance of the dynamic capabilities of personnel potential in relation to the implementation of its creative component in the innovative development of the enterprise. However, the authors, again, do not define the main parameters and characteristics of these possibilities.

So, in the work, the impact of dynamic capabilities on the effectiveness of the enterprise's functioning, however, the rational structure of their personnel component was not determined. This would make it possible to develop a model of rational behaviour of business stakeholders within the framework of the implementation of the chosen strategy.

The analysis of publications [1-10] showed that most of the research in the field of effective management of the personnel potential of the enterprise is concentrated on the key features of personnel resources, paying less attention to the interaction of their dynamic capabilities and the formation of the competitiveness of business structures.

Thus, significant efforts should be directed to the study of how the personnel of the enterprise, its dynamic capabilities and the nature of the business processes implemented by it affect the expected results of the enterprise. It is the dynamic capabilities of the company's personnel potential that form its competitive advantages, ensuring its dynamic and balanced development.

## AIMS AND OBJECTIVES

The purpose of the study is to substantiate the theoretical and methodological aspects of the process of forming a rational structure for managing the dynamic capabilities of the company's personnel potential, which will ensure the balance of its development based on the optimization of the use of personnel resources.

To achieve the goal, the following tasks are set in the article:

- to systematize and generalize the existing approaches to updating the directions of the process of managing the formation of a rational structure of the company's personnel potential;
- to determine the dynamic characteristics of the evaluation of the rational structure of the personnel potential of the enterprise;
- to simulate the process of forming a rational structure for managing the dynamic capabilities of the company's personnel potential.

## METHODS

The object of the study is the process of forming a rational structure for managing the dynamic capabilities of the company's personnel potential to ensure the balanced development of the company based on the optimization of the rational and effective use of its personnel resources.

The hypothesis of the study was that the formation of a rational structure for managing the dynamic capabilities of the company's personnel potential through the development of a dynamic model of their assessment allows optimizing the function of the utility of personnel resources. Optimizing the usefulness of human resources takes place on the basis of determining the level of their dynamic capabilities to integrate, create and change the configuration of internal and external

competencies. This happens on the basis of determining the level of their dynamic capabilities to integrate, create and change the configuration of internal and external competencies to achieve sustainable competitiveness of the enterprise.

The assumptions adopted in the study necessitated the use of certain methods: system analysis and logical generalizations, the concept of dynamic capabilities, the theory of active systems, hierarchical games, financial mathematics, and optimal management of continuous and discrete systems.

## RESULTS

Personnel resources of enterprises should be understood as opportunities to achieve the goals of their long-term development, created by the qualitative and quantitative characteristics of personnel that this system possesses at a certain point in time [11].

The management of the personnel potential of the enterprise is aimed at the development of such management solutions that will distribute the funds of the enterprise's development funds and wages among different groups of personnel in proportions that will ensure the effective achievement of its development goals. Such proportions of distribution of funds create proposals for interest in the high-quality work of all employees who take part in the effective achievement of the goals of the development of the enterprise as an open economic system.

This means that a rational (from the point of view of the enterprise's performance) personnel structure must be determined, as well as the most desirable forms of supporting its personnel potential. For the development of management decisions regarding the formation of a rational structure of the company's personnel potential, it is advisable to determine the goals and functions of management primarily for each group of employees.

The actualization of the formation of a rational structure for managing the company's personnel potential involves the company's activities in two main directions:

- maintaining the compliance of personnel potential with the company's goals and creating favourable working conditions for the company's personnel. As a result, there are certain final products of this activity, the totality of which forms the personnel potential of enterprises;
- ensuring the quantitative and qualitative compliance of the personnel structure with the needs of the developing enterprise. An important role in the implementation of the specified line of activity is played, on the one hand, by methods of determining prospective needs in the number and quality of employees of various groups, and on the other hand, by methods of balancing these needs with real opportunities for their satisfaction. The implementation of these methods ensures the flexibility and adaptability of the enterprise in the conditions of market relations and the high dynamics of changes in the goals of its future development.

The multifaceted nature of the company's activities, and the need to predict various consequences of the decisions made, lead to the need to model the process of forming a rational structure for managing the dynamic capabilities of the company's personnel potential [15]. One of the possible approaches to the modelling of these processes is proposed to be considered below, namely, simulation dynamic models built in relation to some groups of enterprise personnel related to the management of certain types of enterprise resources. It should be noted that the personnel potential is very susceptible to the influence of organizational and economic mechanisms. The same number of enterprise personnel of different groups and categories with different incentive systems can create different amounts of resources. Unfortunately, it is practically very difficult, and sometimes impossible, to take this influence into account completely in the models. Perhaps, this influence can be most adequately reflected only by expert means based on dialogic management of personnel potential.

Therefore, the models presented in this article should be considered only as an approximate method of forecasting the "behaviour" of personnel potential under the influence of factors that can be quantified with varying degrees of accuracy.

In order to determine the dynamic characteristics of the assessment of the rational structure of personnel resources of enterprises, by personnel potential we will understand the ability of all personnel of the enterprise to qualitatively and timely solve the tasks facing the enterprise [12].

Personnel potential can be characterized through a number of indicators, which can be conditionally combined into two groups - indicators presented quantitatively and qualitative indicators (characteristics).

The first group includes [17]:

- the number and average age of employees at enterprises,

- the average length of service at the company and in this position,
- rates of the arrival of employed people from the outside world,
- rates of exit to the external environment and transitions between different categories of employed.

The quality characteristics include the following [18]:

- value orientation;
- level of culture;
- educational level.

The quantification of such indicators is determined by expert methods, and their consideration is necessary in relation to the management of personnel potential and its role in obtaining the final result of the enterprise's work since the relevant cause-and-effect relationships are quite obvious.

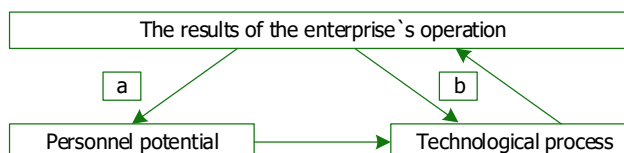
To determine the number of personnel of various categories, closed models have been developed that connect the results of production activity with the structure and number of personnel of the enterprise. Such models should consist of at least two interacting sub-models - the personnel structure model and the system activity model. In addition, the personnel structure model should reflect the dynamics of its change, which is determined by the actual state of the modelled system and the limitations imposed on its functioning [19]. Similarly, the model of production activity should simulate the process of production activity over time.

Thus, the goal of modelling the structure and number of personnel potentials of the enterprise should be to assess the dynamics of changes in personnel potential indicators. Such an assessment depends on the content and results of the enterprise's functioning, which depend, in turn, on the structure and number of labour resources employed at the enterprise.

Management of the personnel potential of the production system should be carried out taking into account the final results of its functioning [13]. This poses the task of determining the share of the results of the operation of the enterprise, determined both by the personnel employed at the enterprise and by management decisions regarding personnel potential. The solution to this problem is hindered by the fact that approaches have not yet been developed that would separate from the results of the operation of the enterprise the share caused by the costs of personnel potential or relevant management decisions.

For this purpose, we consider it appropriate to propose the following approach. Suppose that it would be possible to trace the operation of the enterprise with one initial value of personnel potential during a certain period of time. Then return to the starting point, change the initial value of personnel potential, leaving unchanged other characteristics of the enterprise's functioning. Then again trace the results of its functioning for the same period. Subtracting the first (baseline) time series from the second time series of operating results, we determine the absolute value of the change in the operating results of the enterprise, due only to changes in personnel potential. It is this value that should be the basis for choosing solutions in the field of personnel management of the enterprise [20]. Of course, this raises a number of additional questions that require appropriate processing, for example, at what time interval the results of the enterprise's operation should be considered.

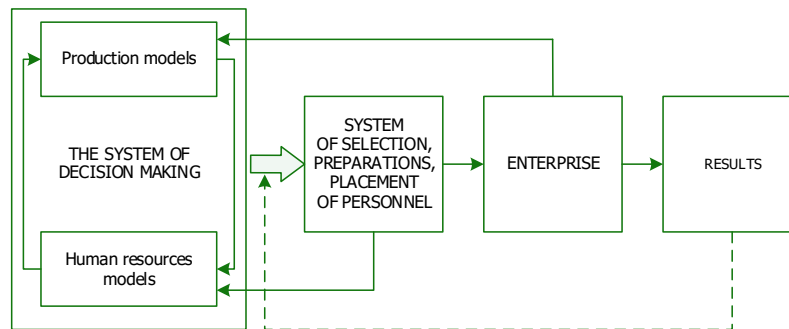
It should also be noted that such an experiment is impossible in real-time. To implement such an approach, it is advisable to turn to simulation models of the enterprise, consisting of at least two interacting elements – a model of personnel potential and a model of the production process (Figure 1).



**Figure 1. Interaction of models of personnel potential and business processes of the enterprise.** Note: a – expenses for maintenance and development of personnel potential; b – costs for updating equipment and improving technologies.

Automated information systems existing in practice should be logically combined with the proposed models into a single automated system. Such a combination will ensure the processing and issuance of retrospective information about the enterprise. And it will also provide automatic information saturation of the models, their adjustment and verification on the models of the possible results of the implementation of management decisions.

However, the system of decision-making in the field of management of the personnel potential of the enterprise, due to its specificity as a managed object, is only a part of a more complex system. This system also includes elements that ensure the implementation of solutions in the field of personnel management. Management actions reflected in models of restrictions and algorithms can be implemented in practice only in the form of a system of selection, training, retraining and advanced training of personnel. Then the structure of the personnel management system of the production system can be presented in the form of the following block diagram (Figure 2).



**Figure 2. The personnel management system of the enterprise.**

The system of recruitment, training, placement and qualification improvement of personnel is a complex of its forms and methods, which ensures the interconnection and interaction of all links and their subordination to a single goal. Such a system includes the following blocks:

- unit of planning and control of training, recruitment;
- personnel training block;
- block of retraining and advanced training of personnel.

Personnel training planning should be carried out for all types of employees at the enterprise, taking into account the prospects for its development and the dynamics of the movement of personnel between individual levels (workers, junior managers, specialists, line and functional managers).

Personnel training is carried out according to interrelated programs through professional, secondary special and higher educational institutions.

Retraining and advanced training of personnel potential is built according to the following principles:

1. Accounting of the data of socio-psychological studies regarding the evaluation of the expediency of occupying an employee of a certain position.
2. Regular (once every five years, up to 3 months) retraining of personnel in accordance with the changed level of equipment, technology and organization of production.
3. Annual (5–7 days per year) improvement of knowledge and skills by employees.

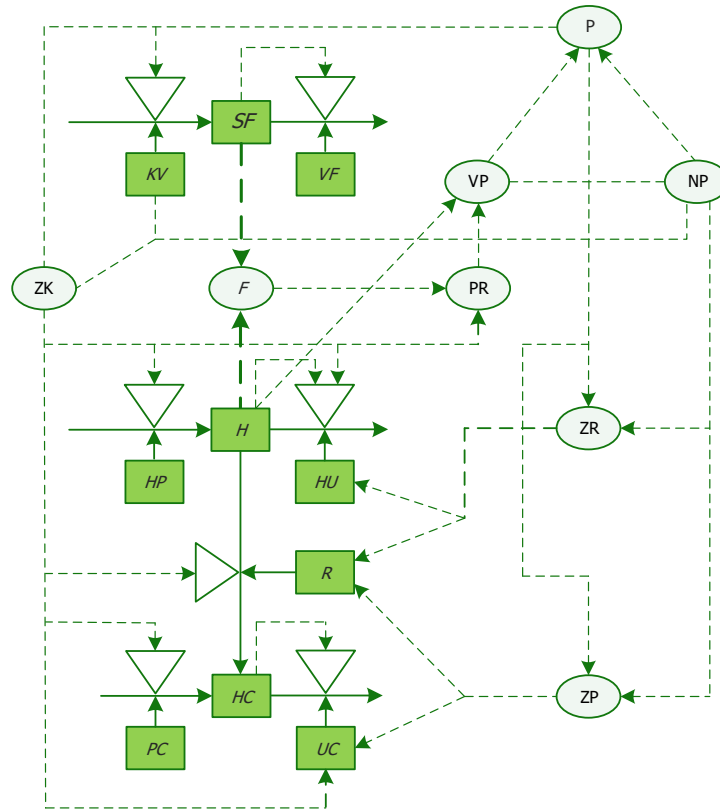
The implementation of the entire set of measures to assess the need, selection, training, deployment, retraining and advanced training of personnel at all levels can be conventionally called the personnel policy of the enterprise. At the same time, models of management of personnel dynamics and production are the basis for determining the dynamic characteristics of the personnel potential of the enterprise. These characteristics correspond to the maximum final result of the operation of the enterprise for the long term. And the system of recruitment, training and retraining of personnel ensures the achievement of these characteristics and their maintenance in the given range.

Let us consider in more detail the model of the dynamic capabilities of the company's personnel potential, built using the method of simulation dynamic modelling.

To begin with, we will present the basic principles and elements of simulation dynamic models. When using this approach, it is considered that any real system is a closed system consisting of a large number of interacting elements. Pairs of elements can form cause-and-effect relationships, which, in turn, can be combined into feedback loops – positive and negative. Causal relationships and their contours can be positive and negative. Positive polarity means that the initial change in the cause causes a similar change in the effect, and in a loop, this initial change is amplified. Accordingly, an inverse relationship is observed for negative polarity.



If there are categories of working and qualified levels and in the case when the model for this category contains elements, we will get the maximum dimension of the model  $m \times n \times k$ . As a rule, the dimension in practice will be smaller, since a number of transitions between categories are impossible. Consider the model of the relationship between personnel potential and the production of one category of workers, Figure 4.



**Figure 4. The model of the ratio of personnel potential and production for one category of employees.**

Designation of variable features, Figure 4 are given below: SF – the cost of the main means of production; KV – capital investment in the main means of production; VF – disposal of the main means of production; F – stock armament; PR – labor productivity; VP – product release; P – profit; PV – production plan; NP – non-fulfillment of the production plan; ZK – expenses for the development of personnel potential; H – the number of industrial and production personnel; HP – the arrival of trained workers from the outside environment; HU – exit of workers to the external environment; ZR – the ratio of the average salary of workers at this enterprise to the salary of workers at other enterprises; R – transition from workers to specialists; HC – number of specialists; PC – the arrival of trained specialists from the external environment; UC – exit of specialists to the external environment; ZP is the ratio of the average salary of specialists at this enterprise to the salary of specialists at other enterprises.

The formulas describing the behaviour of this model (1-15) are as follows [21-23]:

SF – the cost of the main means of production is calculated according to the formula [21]:

$$SF = SF_1 + (KV - VF); \quad (1)$$

where  $SF_1$  – the cost of the main means of production at the beginning of the period; KV – capital investment in the main means of production; VF – disposal of the main means of production.

H – the number of industrial and production personnel is calculated according to the formula [21]:

$$H = H_1 + (HP - HU) \quad (2)$$

where – the number of industrial and production personnel at the beginning of the period; HP – the arrival of trained workers from the outside environment; HU – exit of workers to the external environment.

HC – number of specialists is calculated according to the formula [21]:

$$HC = HC_1 + (PC - UC) \quad (3)$$

where  $HC_1$  – number of specialists at the beginning of the period;  $PC$  – the arrival of trained specialists from the external environment;  $UC$  – exit of specialists to the external environment.

ZK – expenses for the development of personnel potential are calculated according to the formula [21]:

$$ZK = a_1 \times P \quad (4)$$

where  $P$  – profit.

F – stock armament is calculated according to the formula [21]:

$$F = SF/H; \quad (5)$$

VP – product release is calculated according to the formula [22]:

$$VP = H \times PR; \quad (6)$$

where  $PR$  – labour productivity.

P – profit is calculated according to the formula [22]:

$$P = a_2 \times VP - a_3 \times NP \quad (7)$$

where  $VP$  – product release;  $NP$  – non-fulfilment of the production plan.

NP – non-fulfilment of the production plan is calculated according to the formula [22]:

$$NP = PV - VP; \quad (8)$$

where  $PV$  – production plan.

ZR – the ratio of the average salary of workers at this enterprise to the salary of workers at other enterprises is calculated according to the formula [22]:

$$ZR = \frac{\alpha_4 \cdot P - \alpha_5 \cdot NP}{ZR_1 \cdot P}; \quad (9)$$

where  $ZR_1$  – the ratio of the average salary of workers at this enterprise to the salary of workers at other enterprises for the previous period.

ZP – is the ratio of the average salary of specialists at this enterprise to the salary of specialists at other enterprises is calculated according to the formula [22]:

$$ZP = \frac{\alpha_6 \cdot P - \alpha_7 \cdot NP}{ZP_1 \cdot P}; \quad (10)$$

where – is the ratio of the average salary of specialists at this enterprise to the salary of specialists at other enterprises for the previous period.

KV – capital investment in the main means of production is calculated according to the formula [23]:

$$KV = a_8 \times (P - NP); \quad (11)$$

VF – disposal of the main means of production is calculated according to the formula [23]:

$$VF = a_9 \times SF; \quad (12)$$

HP – the arrival of trained workers from the outside environment is calculated according to the formula [23]:

$$HP = a_{10} \times ZK; \quad (13)$$

where  $ZK$  – expenses for the development of personnel potential.

R – transition from workers to specialists is calculated according to the formula [23]:

$$R = a_{11} \times ZK \times (ZP/ZR) \times HC; \quad (14)$$

PC – the arrival of trained specialists from the external environment is calculated according to the formula [23]:

$$PC = a_{12} \times ZK. \quad (15)$$

where,  $a_1, a_2, a_3, a_4, a_5, a_6, a_7, a_8, a_9, a_{10}, a_{11}, a_{12}$  – constants.

The cost of fixed assets can be simplified as a function of investments in these assets and disposal of fixed assets (1). With a more detailed reflection of the SF operation process, it is necessary to take into account the assessment of their replacement value, the presence of a flow of capital investments, which ensures a simple reproduction of the SF and is determined by the amount of depreciation deductions. However, if we consider the model in a stationary state, these processes can be indirectly taken into account by changing the coefficients  $a_8$  and  $a_9$ , respectively.

Another problem is accounting for the time lag between the beginning of the capital investment and the putting into operation of the main production facilities caused by these capital investments. If this lag exceeds the modelling step, then instead of the pace of capital investments, it is more correct to put a lag of the appropriate order or reduce  $a_8$  in proportion to the ratio of the lag to the modelling step. Therefore, it is expedient to adopt the second approach.

When modelling the processes of changes in the number of workers and specialists in formulas (2) and (3), the main role is played by the rates of entry and exit of the corresponding categories of employees in formulas (13) – (15).

Taking into account market relations, it can be assumed that the expansion of service areas, intensification of work with a corresponding increase in wages will eliminate this dependence. In this version of the model, the assumption is made that the arrival of workers causes the need to perform work that cannot be performed by the relevant personnel, which requires adequate costs for the preliminary training of personnel ( $ZK$ ). Personnel training costs are determined by the company's profit ( $P$ ), which, in turn, is determined by production output ( $VP$ ) and the amount of fines for non-fulfilment of the production and supply plan ( $NP$ ). In turn,  $VP$  is determined by labour productivity and the number of industrial and production personnel ( $H$ ). Under other constant conditions, labour productivity is determined by the resources and qualifications of employees, and is determined by personnel training costs.

The exit of workers from the enterprise is determined by two main reasons - natural (retirement, dismissal due to moving to another area, etc.) and transfer to other, nearby enterprises. If the first reason is easily taken into account on average, then an additional variable is introduced to reflect the second reason - the ratio of the average salary of employees at this enterprise to the average salary of employees at other nearby enterprises. Variability under market conditions directly depends on the profit received by the enterprise and penalties for non-fulfilment of the production plan and product supply contracts. Processes of arrival and departure of specialists are described in a similar way.

## DISCUSSION

The fact that the dynamism of the business environment necessitates the formation of a rational structure of the company's personnel potential is indisputable. Based on the optimization of the use of the company's human resource potential, such a structure will facilitate concentration on the relevant behavioural aspects of the company and restrictions, taking into account the exchange between internal and external environments. This becomes possible thanks to the authors' disclosure of a useful component of the company's personnel potential, in particular, the need for the company's personnel to acquire dynamic competencies for rapid adaptation to transformational changes. The authors' research was limited by modern realities and the fragmentation of scientific developments on this topic. The above made it necessary to form a comprehensive theoretical and methodological author's presentation on the research topic. Based on the review and generalization

of scientific works on the management of the personnel potential of the enterprise, this study offers an original scientific and methodological approach to the formation of a rational structure of management of the dynamic capabilities of the personnel potential of the enterprise. The proposed approach, in contrast to those highlighted in [4–7,11,12], involves determining the relationship between the effectiveness of the management of the company's personnel potential and its dynamic capabilities in the conditions of transformational changes. Reasoned, systematized and generalized dynamic capabilities of personnel resources in accordance with the current trends in the process of managing the personnel potential of the enterprise. The dynamic capabilities of personnel potential are the most productive in the process of implementing transformational changes at enterprises. This assumption has theoretical and empirical support [3]. Under these conditions, companies can take advantage of dynamic HR capabilities, as they allow the company to quickly adapt to a changing business environment.

The dynamic characteristics of the assessment of the rational structure of the personnel potential of the enterprise are determined. It is these characteristics that play a certain role in the creation of dynamic capabilities of personnel potential in the formation of its rational structure.

Conducted relevant research on the development of human resources clarified the focus of determining dynamic characteristics and suggested their consideration by quantitative and qualitative parameters. The proposed dynamic characteristics of the enterprise can be used to optimize its resources and ability to adapt in conditions of uncertainty. Adhering to this logic, proposals were developed regarding cause-and-effect relationships between the results of managing the structure of personnel potential and their consequences, based on existing theoretical and empirical studies [5].

The presented model for assessing the dynamic capabilities of personnel potential allows for optimizing the usefulness of personnel resources based on determining the level of their dynamic capabilities, and this assumption has theoretical and empirical support [4, 7]. Under these conditions, enterprises can take advantage of dynamic opportunities to integrate, create, and reconfigure internal and external competencies to achieve sustainable enterprise competitiveness.

It has been established that the implementation of the proposed approach will lead the enterprise to increase the level of achievement of the criteria of strategic development and will ensure a permanent increase in the competitive advantages of its strategic development. However, in studies devoted to the formation of a rational structure of personnel potential, the main attention was paid to providing the enterprise with personnel resources in accordance with its operational needs. This, accordingly, limits the scope of their practical use and outlines the scope of further research in the direction of the rationalization of personnel potential in accordance with the goals and objectives of the strategic development of the enterprise and the description of the dynamic possibilities of their coordination and reconfiguration. This, accordingly, will make it possible to clarify the composition and structure of the dynamic capabilities of the company's human resources within each of the forms of interaction of the company with stakeholders in the process of rationalizing its human resources. The lack of differentiation of the given approach depending on the specifics of the enterprises' activity can also be noted as a shortcoming of the study.

In further research, it would be expedient to analyze the boundary conditions and parameters of the dynamic capabilities of the company's personnel potential, which are not considered in this work. Namely, their influence on the level of determining the optimal level of investment in the management of the personnel potential of the enterprise, which will contribute to the sustainable, dynamic and balanced development of the enterprise.

## CONCLUSIONS

1. Systematized and summarized the existing approaches to the actualization of the directions of the process of managing the formation of a rational structure of the personnel potential of the enterprise, which allow to form a rational structure of the personnel potential. It has been proven that the actualization of the personnel potential of enterprises involves activities in two main directions:

- maintenance of compliance of the personnel potential with the goals of the enterprise and formation of favourable working conditions for the enterprise's personnel;
- ensuring the quantitative and qualitative compliance of the personnel structure with the needs of the developing enterprise.

Determining the directions of the process of managing the formation of a rational structure of the company's personnel potential made it possible to outline and systematize the parameters of the quantitative and qualitative nature of the dynamic capabilities of the company's personnel potential.

2. The dynamic characteristics of the personnel potential of the enterprise are determined, which correspond to the maximum final result of the operation of the enterprise in the long term. The system of recruitment, training and retraining of personnel ensures the achievement of these characteristics and their maintenance in the given range.
3. The proposed dynamic model of the formation of a rational structure of management of the dynamic capabilities of the personnel potential of the enterprise allows us to explore various variants of the structure of the personnel potential of the enterprise and its individual units. The results of this study contribute to the development of the theory of dynamic capabilities of personnel resources in terms of determining indicators. The determined indicators provide an assessment of the enterprise's ability to reconfigure existing human resources, as well as the ability to analyze changes in the external environment and respond to them in a timely manner. At the same time, the presented model for assessing the dynamic capabilities of the company's personnel potential made it possible to determine the competencies of the personnel, the system of activity and the strategy of its development.

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## ФОРМУВАННЯ РАЦІОНАЛЬНОЇ СТРУКТУРИ УПРАВЛІННЯ ДИНАМІЧНИМИ МОЖЛИВОСТЯМИ КАДРОВОГО ПОТЕНЦІАЛУ ПІДПРИЄМСТВА

Метою дослідження є обґрунтування методичного інструментарію ухвалення рішень щодо формування раціональної структури управління динамічними можливостями кадрового потенціалу підприємства. Науково обґрунтовано та доведено, що формування раціональної структури управління динамічними можливостями кадрового потенціалу підприємства базується на розробці динамічної моделі їх оцінки. Модель представлена з урахуванням інтеграції динамічних можливостей підприємства, його персоналу та процесів трансформації бізнес-середовища.

У дослідженні використано методи системного аналізу та логічних узагальнень, статистичну концепцію динамічних здібностей, методи теорії активних систем, теорії ієрархічних ігор, фінансової математики, теорії оптимального керування неперервними та дискретними системами. Удосконалені напрями процесу управління формуванням раціональної структури кадрового потенціалу підприємства.

Запропонована модель оцінки динамічних можливостей кадрового потенціалу підприємства дозволяє оптимізувати функцію корисності кадрових ресурсів. Оптимізація корисності кадрових ресурсів відбувається на основі визначення рівня їхніх динамічних можливостей до інтеграції, створення та зміни конфігурації внутрішніх і зовнішніх компетенцій для досягнення стійкої конкурентоспроможності підприємства.

Модель оцінки динамічних можливостей кадрових ресурсів підприємства визначає компетенції персоналу, бізнес-системи та стратегії її розвитку. Використання запропонованої моделі для визначення динамічних можливостей підприємства щодо реконфігурації наявних кадрових ресурсів дозволяє зосередитися на відповідних поведінкових аспектах керівників підприємства та обмеженнях, беручи до уваги обмін між внутрішнім та зовнішнім середовищем.

**Ключові слова:** кадрові ресурси, кадровий потенціал, динамічні можливості, динамічна модель, бізнес-середовище

**JEL Класифікація:** C1, D81, J5