

UDC 331.101.262

TARASEVICHOLENA,

*Candidate of Science (Economics), Associate Professor Institute of Economic and Legal Studies,  
National Academy of Sciences of Ukraine, Kyiv*

## THE ISSUE OF EVALUATING THE PERSONNEL POTENTIAL OF INDUSTRIAL ENTERPRISES

The article notes that the activities of industrial enterprises in modern conditions should be based on a high level of human resources. The model of estimation of personnel potential of industrial enterprises as one of the most important factors of influence on economic and financial results of enterprise activity is offered. The conclusion is made on the necessity of attracting, in order to increase the level of personnel potential of enterprises, to the staff of graduates of higher educational institutions, able to give optimal solutions for innovation and investment development of Ukrainian enterprises.

**Key words:** *personnel potential; industrial enterprises; estimation; personnel; management; activity.*

**Introduction.** Activities of modern industrial enterprises in the conditions of a dynamically changing economy of the country should be based on high personnel potential, in close interaction of individuals as potential employees, enterprises of various forms of ownership as potential employers, educational institutions, employment centers, local authorities as forming entities quantitative and qualitative characteristics of the human and labor potential of the enterprise. Such interaction will ensure the development of a joint decision on identifying the most promising directions for the development of a modern enterprise.

In connection with the necessity to solve the above-mentioned problems, the construction of an appropriate model for assessing the potential of the staffing of industrial enterprises and solving problems with its application in the practical activities of industrial enterprises in Ukraine becomes relevant.

### Analysis of recent research and publications.

Significant contribution to the development of theoretical and general methodological problems of improving the system of personnel management of industrial enterprises made by domestic and foreign scientists, in particular, V. Heyets, A. Kolot, S. Kalinina, S. Bandur, D. Bohynya, N. Volgin, L. Lisogor, V. Bulanov T. Zayats [1-9] etc. At the same time, issues of strengthening the personnel potential of industrial enterprises and their estimation remain insufficiently defined.

**The purpose of the article** is to solve the problems of formation and evaluation of personnel potential of industrial enterprises as one of the most important factors influencing the economic and financial performance of the enterprise.

**Presentation of research results.** Formation of staffing and estimation of personnel potential of an enterprise is one of the most important administrative decisions, since the financial stability and competitiveness of industrial enterprises of Ukraine depends on the timely and complete solution of socio-economic and organizational tasks.

The term "staffing" reflects a set of qualifications (knowledge, skills) and individual values of the productivity of employees and employees involved, through which the latter exercise a certain set of works and services. The potential of the personnel community is the existing set of employees of the enterprise, which is considered together

with their qualitative characteristics. This concept makes it possible to estimate the degree of use of potential opportunities as a separate employee (individual staffing capacity) and their aggregate (capacity of personnel) in order to ensure the economic development of the enterprise.

The proposed model of the estimation of the potential of the staffing of the enterprise makes it possible to compare the real level of staffing with its ideal value. Such a model for estimating the potential of a company's aggregate is based on statistical data on staff composition and structure.

The sequence of actions to evaluate the staffing potential of a model is as follows:

- Assess the level of staffing and-th functional unit of the airline by the formula:

$$R_i = \sum_{j=1}^6 \sum_{k=1}^{\max k} a_{ijk} \cdot r_{jk} \quad (1)$$

where  $R_i$ , estimation of the staffing level of the  $i$ -th functional subdivision of the enterprise;  $f_i$  is the functional subdivision of the enterprise,  $and = 1, 12$ ;  $r_j$  is the indicator of the staffing of the enterprise in points,  $j = 1, 6$ ;  $p_{jk}$  sub-indicator of the staffing of the enterprise in points;  $a_{ijk}$  the number of employees of the  $i$ -th functional unit, in accordance with each sub-index  $j$ -th indicator in the personnel of the enterprise;  $r_{jk}$  the weight of the  $k$ -th sub-index of the  $j$ -th indicator in the personnel of the enterprise system.

The indicator of the staffing of the enterprise in points ( $r_j$ )  $1 = 1, 6$ . The sub-indicator of the staffing of the enterprise in points ( $r_{jk}$ ) was estimated by a group of experts on a scale from 1 to 60 points, depending on the criterion of this component.

- Determine the ideal value of the level of staffing and-th the functional unit of the airline according to the formula,

$$R_i = \sum_{j=1}^6 a_i \cdot r_{j \max} , \quad (2)$$

$$a_i = \sum_{j=1}^6 \sum_{k=1}^{\max k} a_{ijk} \cdot r_{j \max k} = \max \{r_{jk}\} \quad (3)$$

where  $R_i$  is the ideal value of the staffing level of the  $i$ -th functional unit of the enterprise; the number of employees of that functional unit;  $r_{j \max k}$  - maximum weight of the  $k$ -th sub-index of  $j$ -th indicator;  $\max k$  is the maximum value of the sub-indicators for each indicator of the staffing population  $p$  of the enterprise.

- We evaluate the potential of the personnel unit of the enterprise division by comparing the real staffing level with its ideal value.

$$\Pi i = \frac{R_i}{R_i} = \frac{\sum_{j=1}^6 \sum_{k=1}^{\max k} a_{ijk} \cdot r_{jk}}{\sum_{j=1}^6 a_i \cdot r_{j \max}}, 0 < \Pi i < 1, \quad (4)$$

where  $\Pi i$  - estimation of the potential of personnel of the  $i$ -th unit of the enterprise.

The results of the analysis of the real and ideal levels of the personnel of the  $i$ -th unit of the enterprise, as well as the assessment of the potential of the personnel unit of the enterprise's division, are summarized in the general table for the purpose of further management decision regarding the compliance of the personnel with the applicable requirements. The analysis of the received data testifies to the existence of negative tendencies, characteristic for all structural divisions of the enterprise.

The degree of coincidence of the qualification requirements of the enterprise and the corresponding capabilities of the personnel community can be considered an assessment of the capacity of the staffing population. Let  $K_i$  have the skill level of the  $i$ -th personnel unit;  $V_{fi}$  the required potential and level of the capabilities of the  $i$ -th personnel unit for the requirements of the unit with the number  $j$ ;  $V_{ki}$  available potential (level of capabilities of the  $i$ -th personnel unit according to the requirements of the unit with the number 1 enterprise); This individual staffing capacity is some 1 personnel unit.

$$C_i = \frac{K_i}{V_{fi} - V_{ki}} \quad (5)$$

$$C_j = \sum_{i=1}^N c_j = \sum_{i=1}^{m_j} \frac{k_i}{v_{fi} - v_{ki}} \rightarrow \max \quad (6)$$

where  $C_j$  is the personnel capacity of the unit with the number  $j$ ;  $m_j$ , the number of employees of the unit with the number  $j$ .

If adopted,  $C$  for the assessment of the capacity of the personnel,  $n$  - the number of divisions of the enterprise, then you can build a target function in relation to the capacity of the staff:

$$C = \sum_{i=1}^N c_j = \sum_{j=1}^n \sum_{i=1}^{m_j} \frac{k_i}{v_{fi} - v_{ki}} \rightarrow \max \quad (7)$$

Unlike the estimation of the potential of the staffing of the enterprise, the assessment of the staffing capacity takes into account the relationship between the requirements and the available capabilities of the personnel community.

In order to increase the level of personnel potential of the enterprise, it is necessary to involve the personnel of graduates of higher educational institutions in a personnel

collectivity, able to accumulate a considerable amount of information and issue optimal solutions for innovation and investment development of industrial enterprises of Ukraine.

Most large companies understand the relevance of this issue and are already working with higher education institutions on the training of young professionals. The most widespread model of interaction is the targeted training of specialists, which is funded by the future employer. In some cases, employers and institutions of higher education jointly develop programs aimed at meeting the needs of a particular enterprise.

Both parties are interested in establishing close contacts that enable higher education institutions to track the changing requirements of enterprises from different sectors to professionals and to quickly adjust educational programs, which in turn contributes to increasing the competitiveness of an educational institution. At the same time, it is possible for industrial enterprises to influence the training process, to obtain specialists trained for a "special order", as well as to directly participate in their preparation.

The quality of the training of specialists is one of the main indicators that determine the competitiveness of both the higher educational institution and the enterprise. Therefore, the positioning of a higher educational institution in the local labor market depends to a large extent on the effectiveness of its interaction with enterprises-consumers of graduates of higher educational institutions.

The company, which wants to achieve and maintain a leading position in the market, needs such services constantly, which requires long and stable contacts with higher educational institutions of Ukraine. The interest of the enterprise and higher education institutions in the cooperation is obvious, and the sides of the touch and even the penetration of education and industry are so many that there is an urgent need to create a special structure for their coordination, which can combine the financial resources of the enterprise and the intellectual potential of higher educational institutions, provide a favorable environment for solving educational problems.

The criteria for integrating cooperation between higher education institutions and business structures are: maximum employment of graduates of a specific institution of vocational education; the number of long-term cooperation agreements; availability of additional sources of funding and alternative ways to compensate for the costs of maintaining an institution of vocational education; co-ordination of business structures, research projects and educational programs; creation of basic educational and scientific-production centers for the provision of personalized programs and technologies for the training of young professionals; improvement of educational process and development of innovation-investment technologies.

### Conclusions

On the basis of the conducted research, a statistical model was developed for estimating the potential of the staffing of the enterprise and a theoretical model for estimating the capacity of the staffing population was constructed.

The conducted studies give an opportunity to assess the actual state of the staffing of the enterprise, as well as to identify the priority ways of development and effective use of the personnel community to identify the nature of the necessary managerial decisions on the development of the personnel community, taking into account its capacity for industrial enterprises.

Managing the appropriate number of specialists from

different categories can help to optimize wages, achieve a certain level of economy, thereby providing additional opportunities for addressing economic and social problems of industrial enterprises.

Thus, the focus on long-term and mutually beneficial relations with actors-participants in using the mechanism for balancing the local labor market as partners who recognize common goals and are ready to work together to solve them requires a new approach. The improvement of the forms and methods of managing their activities in this area, the introduction of modern means of evaluation and analysis of managerial situations in the interaction of higher education institutions with business structures, with local self-government bodies in the local labor market of Ukraine.

#### REFERENCES

1. Heyets, V. (2014), Modernization in the system «Society - State - Economy», *Journal of the European economy*. Vol. 13. No. 2. 111-124. Available at: [http://nbuv.gov.ua/j-pdf/jee\\_2014\\_13\\_2\\_3.pdf](http://nbuv.gov.ua/j-pdf/jee_2014_13_2_3.pdf).
2. Heyets, V. (2014), Modernization in the system «Society - State - Economy», *Journal of the European economy*. Vol. 13.

No. 3. 221-235. Available at: [http://nbuv.gov.ua/j-pdf/jee\\_2014\\_13\\_3\\_3.pdf](http://nbuv.gov.ua/j-pdf/jee_2014_13_3_3.pdf).

3. Kolot, A.M. (2013), Social dialogue as an institute for increasing social responsibility, *Labor market and employment of the population*. № 1. 21-24. Available at: [http://nbuv.gov.ua/j-pdf/zprn\\_2013\\_1\\_7.pdf](http://nbuv.gov.ua/j-pdf/zprn_2013_1_7.pdf)
4. Kolot, A.M. and Grishnova, O.M. and Gerasimenko, O. and others (2010), Socialization of relations in the field of labor in the context of sustainable development, KNEU Press, Kyiv, 348 p. (ukr).
5. Kalinina, S.P. and Kovalevskaya, V.V. and Lanskaya, S.P. (2010), Formation of labor quality in the system of human resources management, Donetsk National University, 354 p. (ukr).
6. Bohynya, D.P. and Kulikov, and Shamot, V.M. and others (2001), Socio-economic mechanism of regulation of the labor market and wages, IA NAS of Ukraine, Kyiv, 300 p. (ukr).
7. Lisogor, L.S. (2012), Forecasting the development of the labor market in Ukraine: problems and perspectives, *Labor market and employment of the population*. No. 1. 54-56 (ukr).
8. Bulanova, V.S. [ed.] and Volgina, N.A. [ed.] (2003), The labor market, *Ekzamen Publishing*, Moscow, 480 p. (rus).
9. Zayats, T.A. (2013), Modernization of Ukraine's Social-Labor Relations: Priority Areas and Principles of Implementation, *Demography and Social Economy*. № 2. 179-192 (ukr).

**Тарасевич Олена,**

*кандидат економічних наук, доцент,*

*Інститут економіко-правових досліджень НАН України, м. Київ*

### ОЦІНКА КАДРОВОГО ПОТЕНЦІАЛУ ПРОМИСЛОВИХ ПІДПРИЄМСТВ

В статті відзначено, що діяльність промислових підприємств в сучасних умовах має бути заснована на високому рівні кадрового потенціалу. Запропоновано модель оцінки кадрового потенціалу промислових підприємств як одного з найважливіших чинників впливу на економічні та фінансові результати діяльності підприємства.

*Ключові слова:* кадровий потенціал; промислові підприємства; оцінка; персонал; управління; діяльність.

**Тарасевич Елена,**

*кандидат экономических наук, доцент,*

*Институт экономико-правовых исследований НАН Украины, г. Киев*

### ОЦЕНКА КАДРОВОГО ПОТЕНЦИАЛА ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ

В статье отмечено, что деятельность промышленных предприятий в современных условиях должна быть основана на высоком уровне кадрового потенциала. Предложена модель оценки кадрового потенциала промышленных предприятий как одного из важнейших факторов влияния на экономические и финансовые результаты деятельности предприятия.

*Ключевые слова:* кадровый потенциал; промышленные предприятия; оценка; персонал; управление; деятельность.

© Тарасевич Олена

Надійшла до редакції 09.10.2017