

problems from the standpoint of developing effective responses to changes in the environment, contributing to strengthen the position of the university, raising the level of functional and structural organization of the system, improving the mechanisms of self-organization.

The basis of assessment of quality management formed the following principles: mandatory quality assessment management to monitor the effectiveness of the university; evaluation of quality management based on generalized set of parameters that are hierarchical; methodical approach to assessing the quality of management that takes into account changes in the conditions of the university; practical approach to the quality management [4].

Measuring and assessment of the results based on indicators reflecting the quantitative aspect of establishments is not difficult, because there is method of economic analysis. However, for quality control not only know the value and level of the economic indicators should also evaluate their structure, that is location (ratio) in sequence depending on the selected priorities in the change of their values.

It should be noted that the quality management process of educational services depends not only on the legal aspects. Logistical educational process support has an important impact on the delivery of educational services. Technical content and computer classrooms, laboratories, libraries, classrooms allow improving the quality of educational services. Therefore, public funding of specialist training should be directed not only to compensation costs (wages, electricity, heat, etc.) the training of specialists, but also on the development of (provision new hardware and software, new laboratories and research centers, etc.). Currently, the university is not able to provide funding for the development of logistics. This is particularly true of technical and natural university.

The quality of the teaching staff and the support staff is an important aspect of educational services. Of course, the system of training highly qualified specialists needs improvement. This problem is called to decide the National Agency for Quality Assurance in Higher Education (NAQAHE). However, this is not enough, so necessary to proceed at once to a radical reform of the system of retraining and professional development of the teaching staff.

Equally important, in addition to theoretical aspects listed, has a period of educational services. Students' knowledge of first-year in the fourth year may already be outdated. Therefore it is very necessary to create training courses last system update students' knowledge.

Conclusions. Thus, the transformation of Ukraine higher education should be comprehensive, capable to overcome all the discrepancies between the educational product and the needs of society.

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OPTIMIZATION CRITERION IN TECHNOLOGIES OF PERSONNEL MANAGEMENT IN ENTERPRISES

O.V. BORYSIK

PhD Student

Ternopil National Economic University

Abstract. *The article deals with the trends of personnel management in enterprises. The role of implementation of innovation technologies of personnel management is determined. The optimization criterion in technologies of personnel management in enterprises is established.*

Keywords: *optimization criterion, technologies of personnel management, personnel management system, labor market.*

Introduction. Modern challenges of globalization, dynamic information and technical development are the conditions to transformation processes in the social and economic environment. Approval of innovative principles in business processes, creating of competitive advantages in the market, risk management is often treated as priority strategic objectives of enterprises in Ukraine and abroad. The efficiency of the implementation of these objectives accompanied by the formation of corporate dynamic capabilities.

Such conditions of functioning of modern enterprises demonstrate the increasing of importance of intellectualization of labor and creative abilities of employees. In the result, this becomes the basis for review of approaches of personnel management system, including the analysis of technologies that are directed on opening the employee potential, formation of talents.

The analysis of previous research and publications. Theoretical, practical and methodological aspects of personnel management system in enterprises are researched by such scholars as M. Armstrong, L. Balabanova, V. Brych, S. Vojtovič, P. Drucker, Z. Joniaková, R. Kocianová, A. Kachaňáková, O. Nachtmannova, G. Nazarova, O. Sardak etc. The personnel management technology and its components are established by E. Lykholobov, L. Mazhnyk, M. Novikova ets. In turn, L. Ivankina, S. Nehrul, O. Tretiak underline the need to study the technologies of personnel management (staff technologies, personnel technologies).

The presence of numerous scientific studies of personnel management, shows the strategic nature of this subsystem in the management of enterprises. In the context of this aspect, pressing issue is the implementation of technologies of personnel management. On the one hand, this would help to reveal the hidden capabilities of employees, on the other – would be economic advantages for enterprises. According to this indicators, there is a need to research on this technologies in the context of optimization.

The aim of the article is to analyze the features of implementing of technologies of personnel management and select the optimization criteria of this technologies.

The presentation of research results. Such current trends as knowledge economy, virtual economy, economic globalization, innovative economy indicate on dynamic and varied social and economic development, changes in geopolitical priorities. However, much more important is strengthening of the principles of sustainable development, socialization of economic processes, formation of corporate social responsibility. In conditions of progressive development of digital technologies, automation business processes, the personnel is the strategic resource in enterprises.

J. Vveinhardt and R. Minkute-Henrickson pay attention on the processes of transformation of a learning organization into a smart organization. Continuity of education and development process of employees directly influence on the implementation of corporative aims. Intellectual capital of an organization is one of the most important components of a learning organization, which, if they are properly developed, create the real possibility for becoming a smart organization [1, p. 172]. In this context, we consider that an important place in the reengineering of strategy development of enterprises towards the creation and implementation of innovative technologies of personnel management.

The concept of “technology” is increasingly used in our lexicon as professionally and so in everyday life (“information technology”, “educational technology” etc.). The Great Dictionary of the Modern Ukrainian Language treats “technology” term as a combination of knowledge, information about the sequence of individual production operations in the production of something; a set of methods of handling or processing of materials, information, products manufacturing, various manufacturing operations, services [2, p. 1448].

In scientific and practical environment, term “personnel management technology” is interpreted in two contexts: improving of the enterprise management system and improving of the personnel management system. In turn, L. Ivankina, S. Nehrul distinguish such concepts as “staff technologies” (professional methods that are in the most rational way are reached in order to work with staff to ensure that the targets of personnel policy) and “personnel technologies” (a set of methods of personnel management which are focused on assessment and improvement of “human resource” organization; they are developed for the specific situation and realized through the consultation process; they are interdisciplinary in nature and provided by a team of specialists) [3]. Definition of the latest term clearly reflects the principles of the concept of human resource management, the strategic role of personnel while choosing the vectors of the enterprise. In our opinion, this term is a harmonious conceptual addition to the category “technologies of personnel management” that absorbs technologies in all functional areas of personnel management.

The growth in rate of socio-economic and political crises, encourages managers to conduct a thorough analysis of possible risks, to search the alternative sources of operation under uncertainty. This shows the urgency of optimization of the business processes, including in the system of personnel management.

In Great Dictionary of the Modern Ukrainian Language “optimization” is a process of providing to anything optimal and the most favorable properties, correlation; improving of system performance, to optimize – choose the best (optimal) option of possible ones [2, p. 851]. In mathematical modeling, optimization problem occurs in the case, if there are: at least two options (selection process); economic system operates efficiently and therefore target setting can be formulated for choosing the action plan; options differ with each other in the degree of realization of the goals and (or) material – cash expenses; it is unknown in advance, which options suit the formulated goals the best [4, p. 39].

The process of planning personnel policy in enterprises and the implementation of innovation technologies of personnel management is complicated by solving of such two tasks as maximize revenue of use this technologies and minimizing resource costs of personnel management.

Usually, managers, taking into account, the saturation of the labor market by experts in various fields, consider the budget item related to the cost of personnel management in general and personnel formation in particular, as a paragraph in which you can save money. Considering that the main source of innovative development of enterprises is personnel, we believe that this anomalous trend in the personnel policy is not conducive to the formation of competitive advantage in the market. As a result, it is important to consider such categories as “optimization criterion in technologies of personnel management”, the essence of which is the base of indicators, application of these technologies that characterize the best of the enterprise.

According to this, the optimization process in personnel management is not the direct reduction of costs related to a project, but is to analyze the available resource capacity, their comparison with the challenges of the environment and develop appropriate programs for the implementation of technologies to achieve the best results. In the result, the

main task of strategic management as the enterprise in general and in particular the personnel should be analyze of technologies of personnel management on the base of optimization criterion, choose technologies that would promote to the successful development of the enterprise in the business environment.

Conclusions. Deterministic-stochastic nature of the business processes in the modern enterprises as open economic systems is determined by external and internal factors. This pattern of development causes the concentration of attention on formation of corporate dynamic capabilities. In this context, innovative springboard of enterprise is creative workers as its talents. Instead, the frequency of the socio-economic crises affects on the difficulty of forecasting of revenues and costs, including the use of technologies of personnel management through the introduction of optimization criterion. According to this, the following researches should be directed to the development of base of indicators which describe this criterion.

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TENDENCIES OF BUSINESS DEVELOPEMENT IN IT FIELD

V.H. DULYUK

PhD in Economics, Associate Professor of the Economic Theory Department
Ivan Franko National University of Lviv

I.A. LYAPANDRA

Student in the Faculty of Financial Management and Business
Ivan Franko National University of Lviv

Abstract. *The article examines characteristics of the IT industry development in Ukraine. The authors analyzed basic factors influencing the development of IT sphere. The current trends in the IT industry of Ukraine are proposed; key vectors for further development of the domestic IT industry are grounded.*

Keywords: *outsourcing, software development, system integration, IT services market.*

In recent years IT industry has significantly strengthened its position as a strategic sector of the Ukrainian economy. Founded on more than 60-year history of evolution, the Ukrainian software development and IT outsourcing services industry is rapidly developing into one of the most influential parts of the Ukrainian economy. In 2016 the volume of software development has reached \$3,5 billion, which validates the importance of research of this area.

Ukraine has been a leading player in the software development space starting from the year of 2000. It has been frequently ranked at the top of IT outsourcing service providers in the global market. Strong engineering education, popularity of engineering professions among the youth, and rich history of the software development industry make Ukraine one of the most attractive Europe destinations for the IT outsourcing and software development businesses.

An important Ukraine's advantage is its accessible geographical location along with and cultural proximity to the European Union countries. Also, it is an convenient location for businesses to expand both locally and regionally as a result of large quantity of its consumers and the physical size of the country. Membership in WTO and a free trade agreement with the EU accelerates trade and provides another layer of protection of investments.

IT outsourcing industry in Ukraine is developing rapidly. It has been growing by the average of 20% every year for the last ten years. Nowadays, more than 25,000 IT professionals are involved in the IT outsourcing and software development industry in Ukraine, and this figure is likely to continue increasing [1].

85% of all IT resources in Ukraine are represented by five main outsourcing centers: Kyiv, Kharkiv, Lviv, Dnipropetrovsk and Odesa. The remaining 15% of resources are concentrated in other smaller Ukrainian cities, located all over Ukraine [2]. A range of new companies actively penetrate into so called "unpopular" regions such as Poltava, Ivano-Frankivsk, Kirovograd, Ternopil, Zhitomyr, Chernigiv, Lutsk, where there were no appreciable companies until recently.

Ukraine's software development and IT outsourcing service industry is the largest in Central and Eastern Europe. A major part of the industry is oriented towards external markets. The share of Ukrainian export of IT has