ОСОБЛИВОСТІ ВИКОРИСТАННЯ ІННОВАЦІЙНИХ ТЕХНОЛОГІЙ
В СИСТЕМІ УПРАВЛІННЯ ПЕРСОНАЛОМ

Досліджено та проаналізовано сучасні технології управління персоналом. Досліджено основні принципи інноваційної економіки. Визначено, що в умовах розвитку технологій докорінно змінився підхід до управління персоналом і стандартні методи виявляються уже застарілими та недієвими. Обґрунтовано основні напрямки застосування інноваційних технологій в системі управління персоналом. Зазначено, що на сьогодні вкрай необхідним є не тільки забезпечення належного рівня управління персоналом, але й створення ефективної системи мотивації. Досліджено, що найважливішими показниками мотивації є рівень заробітної плати. Проведено комплексний аналіз застосування системи КРІ для оцінки ефективності діяльності. Досліджено, що за допомогою системи оцінки продуктивності роботи працівника можна оцінити результат його роботи. Запропоновано матрицю КПІ для більш ефективної мотивації. Запропоновано впровадження преміювання, яке б мало прямо пропорційно вплинути на збільшення як заробітної плати й прибутку організації в цілому. Зазначено, що впровадження системи КРІ на підприємстві дасть змогу керівництву побачити реальну картину зайнятості своїх працівників.

Ключові слова: персонал, відбір персоналу, інновації, інноваційні технології, мотивація, заробітна плата, модульна система навчання, дистанційна освіта, інвестиції у людський капітал, ключові показники ефективності (КПІ)

FEATURES OF THE USE OF INNOVATIVE TECHNOLOGIES
IN THE PERSONNEL MANAGEMENT SYSTEM

Research and analyzed modern personnel management technologies. The basic principles of the innovative economy have been studied. It was determined that in the conditions of technological development, the approach to personnel management has fundamentally changed, and standard methods are already outdated and ineffective. The main technological methods of management in the conditions of technology development are analyzed. It is noted that a significant role is played today by the system of training employees using innovative technologies, which is one of the most optimal areas of investment activity of a modern organization. It was determined that the system of modular education and personnel development is gaining particular popularity.
which involves the development of a program for the development of individual categories of personnel based on a set of thematic, interconnected blocks or so-called modules. The main areas of application of innovative technologies in the personnel management system are substantiated. It is noted that today it is extremely necessary not only to ensure the proper level of personnel management, but also to create an effective motivation system, which is mainly based on the application of various bonuses and bonuses that stimulate the employee to work more efficiently to achieve a certain result. It has been studied that the most important indicator of motivation is the salary level, which depends on the employee's desire to work in the organization. A comprehensive analysis of the application of the KRI system for evaluating the effectiveness of activities was carried out on the example of a sales manager. It has been studied that with the help of the employee's performance evaluation system, it is possible to evaluate the result of his work. A KPI matrix is proposed for more effective motivation, using the example of sales managers. The introduction of bonuses is proposed, which should have a directly proportional effect on the increase of both the salary of sales managers and the profit of the organization as a whole. It is noted that the implementation of the KRI system at the enterprise will allow the management to see the real picture of the employment of its employees and introduce a bonus for the sales manager based on the effectiveness of the work performed.

**Key words:** personnel, personnel selection, innovations, innovative technologies, motivation, salary, modular training system, distance education, investment in human capital, key performance indicators (KPI)

The formulation of the problem in general and its connection with important scientific and practical tasks. Personnel is the most important resource of an enterprise that ensures the efficiency of its functioning to achieve the goal, and its high competence is the main part of competitiveness in the era of the knowledge economy, so to improve the educational level of personnel and maintain a high level of the enterprise's image, it is necessary to constantly engage in personnel development at all levels (Dashko, Bekhter and Skyba, 2022; Parmenter, 2007). The study of the development of new technologies in enterprise management allows the manager to manage his employees remotely and track their performance indicators using compatible information programs and technologies.

The analysis of recent studies that began to address the problem. Research on the development of new technologies in personnel management was covered by such Ukraine’s scholars as: Akymenko O. Yu., Honcharova O. M., Novikova M. M., Petrova I. L., Tretiak O. P., Kholodnytska A. V. and many other scientists in this field, as well as special economic literature, materials of scientific conferences, periodicals, Internet resources of specialized professional portals, etc.

The aims of the article are to study the role of the essence and use of innovative technologies in the system of personnel management and to formulate recommendations for ensuring an increase in the efficiency of an organization.

The presentation of the main research material with full justification of the scientific results obtained. It is obvious that the success of leading organizations in developed countries is primarily due to the creation of highly effective human resource management mechanisms based on a comprehensive and strategic approach to the use and development of labor potential. In view of this fact, Ukraine’s enterprises need to develop and implement new programs aimed directly at improving the efficiency of the HR function based on foreign experience and modern innovative technologies in the HR management system. This will make it possible to focus all HR management processes on solving the strategic tasks of the enterprise, provide attractive conditions for recruiting, attracting and retaining the best employees, their professional and personal development (Dashko, 2022).

Modern HR management technologies provide new opportunities for solving many problems. The basic principles of the innovation economy include the following (Fig. 1).

Thus, the main condition for an innovative economy is the availability of professional specialists who are able to work with new technologies or are willing to learn them (Акименко та Шкарлет, 2006). Moreover, an anti-crisis program should include significant changes in the face of extremely limited resources, especially financial and time. Thus, when implementing this program in the field of human resources management, the priority tasks are: retention and involvement of some employees in the implementation of anti-crisis program measures; minimization of the risks of conflict situations during dismissal of others.
Figure 1. Basic principles of the innovation economy [developed by the authors].

Low-quality personnel can be avoided by using basic technological management techniques (Fig. 2).

1. When selecting personnel, pay special attention to the business and personal qualities of the applicant
2. Finding highly qualified HR professionals who know and use a variety of recruitment technologies
3. Helping new employees to make an effective onboarding process
4. The systematic assessment of labour performance, retraining and advanced training of personnel as required

Figure 2. Characteristics of the main technological management techniques in the context of technology development [developed by the authors].

Thus, modern human resources management technologies are based on the active use of innovations.

Every company needs innovations in HR management that are understandable to all employees and that meet the economic and managerial needs of the organization.
To determine the possibility of using innovative technologies in HR management, a manager must diagnose the work of a modern organization, identify advantages and disadvantages, and establish areas for innovation.

Innovations can be introduced into the HRM system in the following forms: with gradual improvement of individual qualities of employees (now); as a constructive, leapfrog improvement of the entire HRM system in general (breakthrough) (Третяк, 2014).

Innovative technologies in the human resources management system can be implemented in the following areas (Fig. 3).

Figure 3. The main directions of application of innovative technologies in the personnel management system [developed by the authors].

- Improving the individual qualities of employees, increasing their professionalism
- The formation of an effective training mechanism
- The creation of an effective motivational mechanism for personnel management
- The formation of high-quality interaction between a manager and a subordinate

One of the most important innovative approaches to human resources management, as opposed to classical approaches, is the employee selection system, as working in an innovative organization places additional demands on a potential employee. In addition to the traditional qualities (skills, experience, diligence, theoretical knowledge), they must have creative potential, flexibility and mobility of thinking, the ability to adapt to rapidly changing conditions, their nature and ability to learn and retrain (Новікова та Мажник, 2012).

Today, traditional forms of interviewing and psychological tests designed to determine an employee's psychotype are widely used in personnel selection. Today, the primary task of a manager is to form the staff in such a way that they are interested in career growth, professional development and self-education.

Another important component is employee motivation. The system of motivation and incentives at the enterprise ensures the solution of a number of critical tasks, the implementation of which practically leads to an increase in the company's competitiveness and sustainability in the market.

Firstly, a well-designed incentive system helps to promote the cooperation of the right personnel with the right level of qualifications, who have certain ambitions and are interested in the effective implementation of their tasks. Motivation helps to maintain the stability of the staff and retain valuable employees.

Secondly, motivation should be based on a study of employees' interests and preferences. The system of incentives and motivation to work should have a positive impact on the final financial results of the organization as a whole.

Thirdly, the motivation system directly affects labor productivity. If a manager is able to build the necessary motivation system, combining tangible and intangible incentives, this guarantees the quality of services or work, meeting deadlines, and increasing the company's competitiveness.

Fourthly, motivation minimizes the risk of employee burnout. The motivational mechanism should be flexible and adapted to the needs of the individual, as well as to the trends of the external environment and the modern labor market (Гончарова).
Motivation is a very important tool for managing a modern organization, as it ensures the effective development of the organization based on a fair assessment of employees’ labor contribution.

Thus, motivation is a set of internal (motives, needs) and external (incentives) driving forces that encourage a person to act and give this activity a focus, an orientation towards achieving certain goals. Among the innovative technologies used in managing the motivation system are gamification, individual employee incentives, and non-material forms of motivation.

As for the level of salary, it should be based on a percentage of sales of a service or product, which, firstly, will motivate employees to do their job more efficiently, and secondly, will inspire confidence in the manager. It is wrong to pay a low and stable salary that does not motivate employees to achieve the best results every day.

The salary of a modern company will be based on a rate, in other words, a stable income that an employee will receive in a permanent position, which will amount to 25 thousand hryvnias. An employee's bonus will be 5% of the service or product sold. For example, a year of schooling is purchased, the annual cost of which will be UAH 80,000 per student and in monetary terms will be UAH 4,000 per year, in other words, UAH 333 per month. Since the course is planned to enroll 80 students, the monthly salary supplement will be UAH 26,666. That is, the more students there are in the course, the more my employee will earn.

The figure shows a visualization of the formation of a teacher's salary in a business school.

Figure 4. Stages of salary formation in a modern organization [developed by the authors].

It should be noted that an employee should be paid a decent salary, as this is a sign that the company values you. And when a person feels valued, he or she will live for the work and give 200%. The best motivation for an employee is the level of salary, no matter how cynical it may sound. Of course, the human attitude and the atmosphere in the company and the team are important, but the best motivator is salary.

The system of employee training using innovative technologies plays a significant role today. This form is one of the most optimal areas of investment activity for a modern organization. The system of modular education and staff development is gaining in popularity. A modular system of staff development involves the development of a program for certain categories of staff based on a set of thematic, interrelated blocks or so-called modules.

The advantage of a modular system of staff training is the fact that for certain groups of staff, you can choose to use only certain modules, which will partially save the organization's time and financial resources.
The modular training system used for the enterprise also allows newcomers to join the personnel development program at each stage of the personnel training program.

In some cases, the modular system of staff training can be used and implemented in the form of distance learning. This form of training has the following advantages: flexibility, mobility, and focus on the requirements and existing skills of the learner.

The disadvantage of the modular form of training is the fact that this system is used for mass recruitment. This training system is best suited for large enterprises that require employees on a rolling basis. Or this form of training can be used at a newly established enterprise to familiarize employees with existing methods, techniques and technologies. In this case, employees can only access certain modules if they do not need to study others (Петрова, 2015).

Distance education is understood as a form of learning when employees remotely, while keeping their jobs, receive a set of new knowledge that reveals modern techniques and technologies for developing learning (Холодницька, 2015).

Distance education has a number of advantages over off-site education. The main advantages are accessibility, a wide range of training systems offered, and the ability to complete training at any time and place with only remote access to programs. Along with many advantages of distance learning, it also has a number of disadvantages. This form of training is mostly suitable for more disciplined employees who are inclined to self-development.

When implementing distance learning, the main disadvantage is the limited communication system between the student and the course instructor. Face-to-face communication is usually the most effective, as it allows you to ask a number of questions and practically understand the implementation of the tasks.

When implementing distance learning, students must have an extremely high level of motivation, as well as be strictly disciplined and responsible for their own self-development of professional skills in their work.

To determine the amount of investment in human capital, the head of a modern organization must diagnose the level of professional development of employees, identify the weaknesses and strengths of employees, develop strengths through innovative educational programs, and eliminate professional deficiencies.

With the development of scientific and technological progress, it is becoming increasingly difficult to manage people from the outside. The result of each employee's activity is increasingly dependent on the employee's will and capabilities, which are determined by qualifications. In such conditions, each person must determine his or her own behavior. Motivation is becoming one of the central problems of human resources management, and creating conditions for a fuller revealing of its labor potential is becoming key to the viability of organizations (Волянська-Савчук та Царук, 2018).

Today, the introduction of a system of key performance indicators (KPIs) is extremely popular among companies, which allows managing employees based on the most important indicators of their work (Parmenter, 2007). We propose to analyze the KPI system on the example of studying the main performance indicators of a sales manager.

The KPI matrix is drawn up by the head of the sales department based on average annual sales plans, taking into account growth, and the indicators are selected individually according to the specialty and profession.

Sales volumes in accordance with the set plan, which is determined on the basis of last year's sales with a +5% growth rate, which takes into account inflationary fluctuations and increases in prices for raw materials and other related costs.

1. The new client indicator, which will encourage the paving manager not only to work with existing clients but also to expand their number, which will have a positive impact on minimizing the risks of losing clients.

2. Production volume, this indicator is important, because when accepting orders, the sales manager must take care of production and constantly provide it with sufficient orders. Therefore, he or she also needs to make efforts to fulfill the production plan.
3. Timely payment of accounts receivable. A sales manager should not only take care of sales, but also monitor the timeliness of payments. After all, an increase in accounts receivable and late payments will negatively affect the repayment of accounts payable to suppliers and the payment of wages. So, having studied the main indicators, let’s show the KPI matrix for a sales manager in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Indicator.</th>
<th>Monthly performance</th>
<th>Weight of the indicator, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales volume, UAH per month</td>
<td>900000</td>
<td>45</td>
</tr>
<tr>
<td>The number of new customers (signed contracts)</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>The number of commercial offers sent</td>
<td>350</td>
<td>10</td>
</tr>
<tr>
<td>The number of meetings with potential clients</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>The number of overdue payments for existing customers</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>The number of phone calls made regarding the offer of cooperation</td>
<td>500</td>
<td>5</td>
</tr>
</tbody>
</table>

| The importance of everything | | 100 |

*[Developed by the authors]*

Thus, from the analysis of Table 1, we see that the greatest weight will be given to the sales volume indicator, which will ultimately determine the level of wages. The least important will be the number of overdue payments for existing customers and the number of phone calls made regarding cooperation offers, which do not affect the company's activities as much as sales.

**Conclusions.** Thus, innovative HR management technologies are designed to improve the efficiency of the organization by increasing the human resources potential and professionalism of employees. These issues are regulated through the formation of effective mechanisms for recruitment, motivation and professional development. Already at the stage of selecting employees for their team, a manager should use not only traditional forms of interviewing, but also innovative mechanisms for assessing individual qualities of employee development. It is necessary to think through motivational mechanisms of personnel management, to establish the relationship between training and professional development of employees.

**Authors’ contributions**

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