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FEATURES OF PERSONNEL MANAGEMENT IN THE ENVIRONMENT OF DIGITAL TECHNOLOGIES

In human resource management, the connection of human resources technologies with the electronic component, up to artificial intelligence, is being strengthened. And this radically changes HR management. The article identifies three levels of digitalization of the personnel management system.

At the first level, on the surface, the use of information technology is increasing in order to increase labor productivity. Information technologies make it possible to actively respond to changes in the external environment, to structure all business processes taking into account the peculiarities of human management in the context of regional processes in the economy. At the first level, visible factors and processes, observable communication methods and fixed management technologies are monitored and optimized. It is important to constantly implement high requirements for digital technologies and take into account the possible damage from the failure of integrated digital systems, since it will be more significant compared to the management model adopted so far.

At the second level, we can consider a new economic model of business functioning, its strategic vision. Here, digital technologies are changing the entire structure of the business. HR management is not just on the path of productivity growth, but on the path of its qualitatively different vision.

The third “deep” level includes fundamental provisions. This attitude, “as” – to being in general, the perception of time and space, the general attitude to man and work, to the basic values of society, capturing not only the professional life of people – otherwise the very existence of society, civilization remains in question. It is these basic values that ensure the stability of development.

Keywords: human resources, human resources technologies, digital technologies, three levels of digitalization, artificial intelligence.

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ОСОБЕННОСТИ УПРАВЛЕНИЯ ПЕРСОНАЛОМ В СРЕДЕ ЦИФРОВЫХ ТЕХНОЛОГИЙ

В управлении человеческими ресурсами усиливается связь кадровых технологий с электронной составляющей, вплоть до искусственного интеллекта. И это кардинально меняет систему управление персоналом. В статье выделены три уровня цифровизации системы управления персоналом.

На первом уровне, на поверхности, увеличивается использование информационных технологий с целью повышения производительности труда. Информационные технологии позволяют активно реагировать на изменения внешней среды, структурировать все бизнес-процессы с учетом особенностей управления человеком в разрезе региональных процессов в экономике. На первом уровне отслеживаются и оптимизируются видимые факторы и процессы, наблюдаемые методы связи и фиксированные технологии управления. Важно постоянно реализовывать высокие требования к цифровым технологиям и учитывать возможный ущерб от выхода из строя интегрированных цифровых систем, поскольку он будет более значительным по сравнению с принятой до сих пор моделью управления.

На втором уровне можно рассмотреть новую экономическую модель функционирования бизнеса, его стратегическое видение. Здесь цифровые технологии меняют всю структуру бизнеса. Управление персоналом идет не по пути роста производительности, а по пути ее качественно иного видения.

Третий «глубинный» уровень включает в себя фундаментальные положения. Это отношение «как» – к бытию вообще, восприятию времени и пространства, общее отношение к человеку и труду, к базовым ценностям общества, охватывающее не только профессиональную жизнь людей, но и само существование общества. Именно эти базовые ценности обеспечивают стабильность развития цивилизации.

Ключевые слова: человеческие ресурсы, технологии управления человеческими ресурсами, цифровые технологии, три уровня цифровизации, искусственный интеллект.

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Introduction. At the center of the personnel management system there have always been issues of both the internal environment of the company and problems associated with the requirements of the external environment in which the business unit operates. Competition forces us to build the most effective strategies for interaction not only with external agents (consumers, suppliers, intermediaries, regulators), but also with internal ones (employees), i. e. all stakeholders. Coordination of interaction at the external and internal levels becomes the basis of the company's dynamism, and, consequently, survival and prosperity in a competitive environment.

Two trends can be seen in HR systems in the global economy: the increasing importance of communicative competencies and the increasingly informatization of the economy.

Digital transformation covers the issues of changing business processes through information and communication technologies (ICT) in all spheres of life of modern society, including the development of human capital, e-education, e-commerce, e-health, e-employment and social protection of the population, a single settlement and information space to pay for services.

Digital transformations in the economy have led to a rethinking of the functions of human resource management at the operational and strategic levels. The use of digital technologies in the personnel management system is a necessary condition for ensuring the future competitiveness of the organization and its investment attractiveness.

In this regard, there is a need to develop a strategy for digital transformation in the personnel management system, to determine the main elements of this strategy and the principles of construction.

As e-business grows in various fields, it is necessary for organizations to find electronic infrastructure as well as integrated e-governance to automate workflows according to structured e-applications. Countries are presenting major e-business initiatives, including but not limited to the United Arab Emirates, Egypt, Jordan and Lebanon, but these initiatives need to be further deepened, sustained, accelerated and more funded than they are today. To keep up with what is happening in the world, especially in terms of R&D support, it is impossible to guarantee endemic or absorbent rights in this new economy.

Main part. The process of digital transformations in the field of human resource management

is a priority task, since it is the staff that is the bearer of the ability to perceive innovations, the main source and generator of ideas.

It should be noted the increased investment in the global market of technical solutions in the HR area: from 2014 to 2019 y. attracted 2.3 billion US dollars. According to a study conducted by the consulting company Deloitte, 11.74% of more than 7,000 companies in 130 countries note the importance of HR-Digital.

If we consider the impact of digital technologies on personnel processes, we can distinguish three levels. At the first level, visible, superficial, one can see the increasing use of information technology in order to increase labor productivity. At the same time, the growth of labor productivity is the result of the effectiveness of all traditional processes associated with managing people. Information technologies make it possible to actively respond to changes in the external environment, to structure all business processes, taking into account the peculiarities of enterprise management in the context of global processes in the economy.

The first level is the question "How?". These are visible, external factors and processes, observable ways of communication and fixed control technologies.

In this case, the most important thing is to implement the constantly high requirements for digital technologies and take into account the possible damage from the failure of integrated digital systems, since it will be more significant compared to the management model adopted so far.

The second level of digitalization, subsurface – this new economic model of business functioning, can be called its strategic vision of the business. Here, digital technologies are changing the entire structure of the business – the question "Why?".

The third deep level includes fundamental assumptions that are difficult for members of society to realize without a thorough focus. The question "Why?". This is an attitude, as Shane has about organizational culture – to being in general, the perception of time and space, a general attitude to a person and work [1]. Basic values that predetermine – "Why?" and "How?". At this level, the introduction of digital technologies changes not just the professional life of people – their introduction is associated with a change in the values of society – otherwise its very existence will be in question.

Basic values are always the most stable and remain unchanged for a long time, ensuring the stability of development.

Values are understood as the properties of certain objects, processes and phenomena that have emotional appeal for most members of society, they are the models that build people's behavior, this is a business philosophy that is now changing very quickly – the generation that has grown up and comes to the control navigates in the digital space better than in conventional business building models, which, in addition, are neither interesting nor important to them. It is they who will determine the entire philosophy of life on the planet in the near future, including values, purpose, activities and forms of business.

At each level, changes are associated with the demand for certain processes, and therefore, certain professions. It is not only and not so much about the forms of employment and employment structures within the organization, but also about spatio-temporal parameters at the global level.

So, let's see what is at stake at each of these levels. The first most visible one that everyone is talking about.

We highlight the main features of personnel management in the context of digitalization, the surface level:

- 1) processing, analysis and forecasting of large data arrays;
- 2) receiving and processing data in real time;
- 3) increasing the speed of decision-making;
- 4) the ability to make decisions "one touch";
- 5) focus on a specific user, client, any stakeholder;
- 6) interactivity of the internal and external environment;
- 7) the possibility of forming a digital ecosystem as an option for further development;
- 8) high speed of response to changes, the possibility of eliminating intermediate steps in decision-making, network form of business relations, and not a hierarchical one;
- 9) the possibility of embedding, when moving to the second level, methods of personnel management in the digital environment, which leads to their complete transformation when personalizing impacts.

Transformation of basic HR processes such as recruitment, performance management, corporate training and talent management. The change is especially noticeable with regard to mass hiring. Until now, more than half of their working time, HR specialists of large companies were engaged in recruitment.

The growth in the number of users of mobile applications makes them the main platforms for HR tools: feedback from employees increases 10 times

in the presence of corporate mobile applications in the field of HR.

Today, routine operations are automated, such as a telephone invitation to an interview of candidates according to a pre-compiled list, which allows HR employees to avoid peak workloads.

Firstly, the initial screening of candidates using online tools significantly reduces the number of interviews. Secondly, the use of HR IT systems simplifies mass recruitment procedures and reduces the number of personnel responsible for hiring new employees.

For example, using the SAP SuccessFactors program, you can set an interview date, book meeting rooms, and upload a package of documents. Programs like these allow HR managers to focus on optimizing their assessment tools.

E-Staff recruiter, experium, FriendWork Recruiter, Staffium, etc. are also among the main software solutions in the field of recruitment. Synchronize databases with social networks (search and check employees), offer options for booking meeting rooms, preparing analytical reports, maintaining a calendar, etc.

Big Data technologies open up unlimited possibilities for analyzing the flow of unstructured data. For HR, the main benefit of big data is to modernize and simplify the search and hiring process. Digital solutions help analyze large amounts of information about employees, in particular, work experience, social connections, personal interests, skills, and even involvement in social activities. All this allows HR managers to identify the qualities that determine the importance of an employee for the company. Based on the collected data, a search model for suitable candidates is built.

Big Data technologies are also used in evaluating employee sentiment, measuring brand perception by employees of the company itself, identifying the reasons for employee dismissals and the damage caused to the company by excessive staff turnover. The use of Big Data technologies in the field of human resource management requires large capacities for storage, processing and analysis, as well as investment in the development of employee competencies.

Modern IT resources make it possible to reduce the number of transactions, use the latest systems for evaluating performance and setting goals. Automation enables continuous performance management and real-time feedback. Mobile applications are especially popular because of their ability to work remotely, which is especially important for project teams and network structures. The need for lengthy procedures for agreeing on goals and debriefing is reduced.

In the field of remuneration of employees, companies are switching to automatic adjustment,

setting specific characteristics for IT systems, taking into account the experience, performance and qualifications of the employee. Many large companies are moving away from the annual goal-setting cycle and employee performance appraisal in favor of a continuous management system that allows you to effectively track the achievement of goals and increase productivity in the company. With the help of CPM, it is possible to evaluate the results and update the goals of work more objectively and faster than before.

The development of human resources is a factor in the success of the company, therefore, special attention is paid to the implementation of continuing education programs, digital solutions have appeared that facilitate this process.

Massive Open Online Courses (MOOCs) and Social Learning are gaining popularity. Gradually refusing to study according to approved programs, companies encourage employees to self-study from external resources.

In Social Learning, learning is led by practitioners, not by professional teachers. The concept of career building is closely intertwined with the concept of lifelong learning.

Information technology is changing all forms of work with personnel – from human resource planning, HR marketing and HR branding to communications with internal and external stakeholders. These are talent management, innovation and HiPo and, in general, HR analytics and HR efficiency.

Benchmarking of companies actively using digital technologies in HR made it possible to present a variety of practical world experience:

Uber Technologies Inc. – meeting the needs of people in flexible employment and ensuring continuous development of the business by increasing the staff.

Mail.Ru Group Limited, a holding company for a number of subsidiaries, including Russian operating companies, uses the developments of IBS (Agil implementation of an HR system). Provided: management of the processes of personnel movement, personnel records and wages, access through the corporate portal of managers to all data about employees.

CTC Media (Russian media holding) – using the DaOffice20 platform allows CTC Media to store the best projects and experience of all employees, manage such HR processes as internal communications, corporate culture, HR brand development, compensation system, motivation and talent management.

Sberbank is implementing unparalleled innovative projects in the field of personnel training based on a new training paradigm: “Training anywhere, anytime, from any device”. Digital solutions at the corporate university and virtual school have increased the e-learning format by up to 90% and

allowed newcomers, bank consultants, to achieve planned productivity in 5 days. Corporate mobile applications are available from the same tablets used by consultants in customer service.

SAP CIS and Ecopsy Consulting have identified how automated personnel management is at 350 Russian enterprises and how much the degree of automation depends on the maturity of personnel management processes. In general, more than half of the surveyed companies (57%) have partially automated HR processes and still maintain paper-based HR records management, while 28% do not have them automated at all.

Full automation of HR, including with the help of integrated information systems, is observed only in 15% of companies. Of these, 7% of HR processes are organized taking into account the needs, results and potential of employees (the highest level of maturity), 34% of respondents have processes based on universal procedures, 48% of companies launch HR processes on the initiative of managers (who, for example, you need to recruit employees to the department, promote an employee in a position or reward), and in 11% of companies the processes are not organized.

In the global market, HR processes are best developed in banks, consumer goods manufacturers and in the service sector, they are also leaders in the automation of personnel management.

In 2020, Evraz, an international vertically integrated steel and mining company, introduced an automated collection of HR indicators for 150 shops: now the head of each shop has an automatically generated panel with nine indicators, including the rate of filling vacancies, the number of sick days, indicators staff efficiency, labor productivity. This information allows shop managers to make personnel decisions faster.

In 2018, Decathlon, a French company specializing in the development, production and retail of sports goods, introduced an HR platform based on SF SAPC, as well as integrated other services: Contour, Diadoc electronic document management system, Skillz recruitment system and etc. As a result, the network automated all personnel processes: calculation and revision of salaries, recruitment, adaptation and integration of new employees, online training, personnel assessment, talent pool management and reporting. After the implementation, the company reduced the costs of HR processes by 3 times: the time that employees spent on paperwork decreased by 50%, the risk of errors decreased, and all processes became completely transparent for each employee. The platform was accessed by 2,700 employees of the company from anywhere in the world.

As a result of the use of digital technologies, the productivity of employees improves and the

efficiency of the personnel management system increases, which in general leads to an increase in the competitiveness of organizations and a more stable position in the market.

Thus, we can say that the digitalization of business has influenced the formation of a new cluster of companies that develop products and provide services in the field of human resource management using digital technologies.

Changes in the field of human resource management affect three key areas: digital workforce, digital workplace and digital HR management.

Digital workforce is the introduction of new management practices, including talent management. The digital workplace involves the creation of a highly productive work environment equipped with modern communication tools. Digital HR involves the transformation of human resource management and innovation.

The following principles of digital HR can be distinguished:

- measurability and analysis of the management model in real time;
- technological and organizational flexibility;
- cellular structuring of the human resource management model and, at the same time, its integrity and coherence of functioning;
- increasing the efficiency and structure of communications while enhancing their transparency;
- the use of artificial intelligence, social networks to increase business efficiency;
- flexibility and transparency of HR capital management, similar to the management of any company assets.

A large number of HR products and solutions focused on mobile applications, cloud services and artificial intelligence are appearing on the market. It is these changes that define the second level of digital HR. The future will be about artificial intelligence and personnel management. According to the portal hh.ru, 11% of employers in Russia are already using artificial intelligence when dealing with personnel issues, about 50% are studying this topic. The companies using AI are, for instance, Coca Cola, HBC Russia, PepsiCo, IKEA Retail Russia, MTS, Beeline, Alfa-Bank, Eldorado, Sberbank, etc. [2].

As a rule, products with elements of artificial intelligence for conducting electronic recruitment are most often used so far – “Robot Vera”, “Virtual Recruiter”. These chatbots determine the target audience, look for resumes, call up, conduct an initial interview, record the results, set a time for a meeting with an HR specialist, remind them of it, issue an opinion on the information received. In addition, they do not forget to call those who did not pass the interview and maintain

a database, constantly updating it and re-search it if necessary.

Also, artificial intelligence can already be used not only for hiring, but also when accompanying a candidate to a job, adapting staff, training, evaluating, and even when forming and organizing the work of project teams. Subjectivity is removed, when using artificial intelligence there is no place for “intuition”.

Risks – systematization and storage, and from this it follows – the possibility of using information that is very important for the organization. At the same time, it is necessary to configure and adapt chatbots to a specific organization, its problems, culture, and management specifics.

Today more companies recognize that executive expertise does not always determine what key performance indicators (KPIs) should be considered the best. It is where data can help based on predictive analytics such as machine learning [3].

For example, IBM created a machine learning algorithm in order to better assess which employees intend to leave the company. The algorithm analyzes variables and millions of data to offer recommendations to managers about what to do to retain personnel. Such kind of analysis is far more accurate than pure management intuition. Using the algorithm, managers can identify the individuals to target to have development conversations regarding cultivating of skills and careers within IBM. Such kind of analysis may be called predictive alignment because the tool provides perspective to managers and workers alike about skills and career development opportunities that are aligned with strategic objectives across the IBM portfolio, in such areas as cloud computing, AI, and quantum computing [4].

On the other hand, using AI, we are increasingly abdicating our power to make decisions based on our own judgement and our moral convictions. What we believe is “right” risks is no longer a question of ethics but simply what the “correct” result of a certain mathematical calculation is.

Computers already make decisions for us on a daily basis, and they seem to be doing a good job. But it is bad that we now gradually rely on machines to make data-driven decisions for us which are not based on human judgement.

Through a process of reckoning, the machines make decisions that are precise and indisputably correct. The risk is that we may eventually end up fashioning ourselves and our society based on the image that the technology has formed of us.

But such reckoning, which is based on a technical image, can never reveal the full truth, because this is not what it has been made for. Instead, we need to learn what AI really is and how to work with it. Specifically, we need to learn how to understand and use it for each particular case.

In practice, that means that managers should judge on a case-by-case basis whether, how, and why to use artificial intelligence. We need to remember that in the absence of vigilance and doubt, we might miss the moment when our decision-making has transitioned from judgement to reckoning, which would mean that we would hand over our power to make moral decisions to the machine's algorithmic reckoning [5].

New structures are emerging, providing the organization with an external environment; clusters are being formed that can function on a single digital platform. The technological revolution 4.0 and its explicit forms – the Internet of Things (IoT), robotics – are a new level, based on artificial intelligence (AI) and virtual reality (VR), creating new forms of production and economic relations.

The goal of personnel management in the context of digital transformation is the ability to automatically convert arrays of accumulated data into management decisions. It is digital platforms that will compete with each other, defining the contours of national economies.

Digital platforms make it possible to algorithmize the interaction of an arbitrarily significant number of economic entities, creating new rules for doing business, as well as new professions.

Such technological platforms can associate needs with resources (suppliers of service products with consumers, etc.) through various interaction formats: “people-to-people”, “people-to-machines”, “machines-with-machines” [6].

The set of communities of various participants that create value through interaction and competition within the platform, as well as the system of relations between them, constitute the platform ecosystem. One of the main advantages of the platform business model lies in the reduction of the role of the institution of traditional mediation and, accordingly, transaction, operational, time, as well as other costs for the subjects [7].

Technological platforms can function at micro, macro, and global levels. They can be used within individual companies as internal platforms, various value chains, as well as like industry (external) platforms, forming industry ecosystems based on the leader platform. At the same time, external platforms are often more competitive because of the use of network effects and their greater openness to innovation [8].

The widespread use of digital platforms focused on service formats for the provision of products and services leads to trends in the exploitation of the workforce as a service, while platform participants receive much less legal and economic protection for their rights (including minimum wage, protection against unfair dismissal, social security and bene-

fits, training, etc.). This conceptual phenomenon has been called “human-as-service”.

There is less and less direct interaction of managers and this interaction becomes more and more significant. Possession of a variety of knowledge, skills, experience, at the junction of various professions and fields of knowledge is becoming in demand. Of particular importance is the presence of general intelligence (IQ), emotional intelligence (EI), creative intelligence (CI) among employees.

We can talk not about static knowledge and skills, but about the ability to transform and produce them. There is a demand not only for the ability to detect and analyze a problem, to generate ideas, including non-standard ones in accordance with a rapidly changing situation, but also to quickly organize a solution to a problem, while effectively communicating with all stakeholders, including virtually.

The ability to work in a virtual team, temporary or long-term, building work of a high level of complexity, in a constantly changing environment, the need to work out a large level of information, at the intersection of technology, the economy, taking into account the needs of society and ethics – these are the needs of the professional skills of the future.

P. Senge singled out 5 technologies necessary to create a developing and changing organization, considering thought creation as a collective phenomenon [9]. Systems thinking – structure determines behavior and relationships. Digital platforms require changes in people's behavior patterns and systems thinking allows one to detect problems in people's behavior and understand the direction of change. It is the main discipline that allows you to connect disparate events into a clear picture.

1. Personal continuous improvement of each employee. Personal improvement leads to increased initiative and business success, and this process should become a constant practice.

2. Mental intellectual models of what a person sees, how he perceives and how he behaves. Certain mental models can hinder the transition to a new business model. It is necessary to be aware of the selectivity of thinking, mental clichés and be able to change them. Systems thinking allows you to be aware of a large number of relationships and see the whole picture. This way you can see mental models, weak points and eliminate them.

3. Create a shared vision. A shared vision of the present and future for all members is needed to connect the benefits of digital platforms with the creativity of people. A shared vision is formed on the basis of individual views and is constantly changing as the organization evolves.

4. Teaching teams. The synergy of teamwork leads to coherence and empowers everyone. There are three aspects here – increasing the complexity of group tasks in order to unlock the team potential;

creative potential is revealed more strongly, which has a huge effect with coordinated actions; effective team work motivates other teams.

We are talking about the key competencies of a network structure operating on a digital platform, allowing to coordinate and integrate the various resources of all stakeholders, which must correspond to each other, which increases the competitiveness of the digital platform and, accordingly, the national economy [10].

Speaking specifically, according to experts, 65% of modern schoolchildren will work in professions that are not yet known today, which will lead to the transformation of the education system, the employment system and the emergence of an excess labor force.

The above processes predetermine the formation of the next level of HR processes, the third.

The third level – the interaction of ecosystem participants will be carried out on the principles of neurocommunications. And here we come to the main question – being determines consciousness or consciousness determines being.

Being determines consciousness, which builds the forms of being. Personnel – as participants in changes, as their main part. Relationships are unstructured, which involves changes in attitudes, both managers and subordinates. Education is aimed at the formation of a Personality capable of organizing information flows to achieve certain personal and social goals. There is a choice – focus on the Person, Personality or economic efficiency, leading to the victory of artificial intelligence and the futuristic visions of science fiction writers of the past will become the future. A more optimistic forecast nevertheless speaks of the choice of a future business model based on the ethical principle of economic relations in relation to the entire ecosystem.

The mental model of a person about the organization and his place in it determines what a person sees, how he perceives and how he behaves. No external consultants and training staff can do a huge job of adapting, training and developing employees, as those who work in this organization, namely, the “dynamic abilities” of the company depend on these qualities of personnel.

Such adaptation increasingly binds the parties to each other and, thanks to this, facilitates subsequent interaction, and also prevents penetration into the emerging system of relationships of other companies, which develops into interdependence – building new relationships is long and expensive and not always effective. The protrusion of the interests of an individual subject of the network of interaction can lead to the death of a partner, the destruction of a network formation. Therefore, the coordination of motivations at various levels of network education

becomes the basis for the complex interaction of the entire structure. The relations themselves are considered as a resource, and their presence, respectively, as a competitive advantage. The closer these relationships, the greater the competitive advantage, since stable connections between agents in the network create barriers for other firms to enter this market and provide exclusive access to resources.

It follows from this that investment in relationships is preferable, as this allows one to strengthen their position and competitive advantages [9].

However, one should not lose sight of the fact that the more one invests in relations with a partner, the higher the costs of their break, but the organization has income (rent) from the high quality of its intangible assets, turning them into its competitive advantage.

There is a need for revaluation of assets, their ranking according to the degree of strategic importance, taking into account its new understanding, development and creation of conditions conducive to the growth of priority assets.

The ability to build interaction in a business network is the most important strategic resource. There are three options: you know how to build effective relationships, you are forced to do it, built into your structure, or you leave.

The Harvard Business School talks about the qualities necessary for the leaders of the future: persuasiveness – the ability to form one’s own belief in future advantages and support it among supporters; high pace of activity, which is directly related to the speed of perception and processing of information.

Strategic vision and the ability to describe it to all stakeholders; focus on the client or an organized community; involvement in the process at an emotional level of all stakeholders, ensuring broad support, as well as innovation and creativity; the desire to go forward all the time and build a vision of ever higher goals; sincerity – it is very difficult to produce it now and it will be impossible to falsify in the future, with the development of all electronic methods of observation and generalization of data using Big Data technology; inspiration and motivation – and this is emotional intelligence and nothing more.

The last World Economic Forum in Davos considered the need for a “great reset” – the renewal of all aspects of our society and economy, from education to social contracts and working conditions.

It’s about changing your lifestyle. We are talking about the idea of redistributing world wealth, changing the way of life and, in general, the forms and even the goals of being. We are talking about the further development of the world – technocratic or ethical – where conservation, sustainability and equal opportunities become the defining goals of the global economy. Profit or the existence of civilization? Paths of Existence: technologies outside

or technologies for the development of human capabilities? Artificial organs, artificial intelligence, as the only alternative or the development of human internal capabilities? This is the choice that humanity faces now. Economics or ethics?

According to Trapp (2000), the HR function will become the main focus of outsourcing in the future. As a result, the organization's resistance to new changes related to the use of E-HRM applications is minimized and customer satisfaction is increased. Researchers and HR professionals have developed many methods to help you succeed in E-HRM. These include:

- when a company implements a new E-HRM system, some HR processes need to be redesigned to make the E-HRM system more efficient. For the unavoidable alignment of processes and tasks with the requirements of the new system;

- these reengineering mechanisms are used to transform the manual process of people management into a paperless format. Before choosing a software system, reengineering should begin to ensure that the stakeholders accept the changes and that the process can actually match the new system. Lee and Lee (2007) argue that good plans take a considerable amount of time to be implemented;

- training and training are important steps in change management as employees need to understand how new systems are transforming business processes;

- training is the catalyst that brings the user's knowledge to a level where they can quickly and fully familiarize themselves with the new E-HRM system;

- organizational change management can be a full-time job in itself as it must resist change, duplication and error, and manage people and expectations;

- for E-HRM implementation to be successful, senior management must identify and provide ongoing support to those responsible during the implementation phase to ensure that there are no obstacles impeding or impeding progress.

Conclusions. The era of digital technologies is changing the minds of managers and dictates the need to search for new and adapt existing management models that are the basis of future competitiveness.

New business and HR strategies based on digital technologies increase the efficiency of management decisions: automated recruiting, transition to virtual workplaces, individualization – creating an environment for self-realization and development for each employee, managing HiPo and engagement, HR analytics and performance management.

However, no matter what priorities in approaches and technologies are used, it is the human potential of the company that is of key importance – people who are able to generate and manage them. Intellectualization is fundamentally changing the work of HR departments: from functional performers to strategic business partners.

The digital economy is transforming the main HR processes: it simplifies mass recruitment procedures, the process of corporate training, and opens up new opportunities in the field of managing the effectiveness of human resources. In addition, the spread of digital technologies increases the demand for digital skills, setting new trends in education.

Thus, today, those companies that are able to determine the practice of the future and, in accordance with this, introduce new digital solutions, in particular in the field of HR receive a clear competitive advantage.

References

1. Kukartsev V. V. Use of information technologies in the field of personnel management. *Menedzhment sotsial'nykh i ekonomicheskikh sistem* [Social and economic systems management], 2017, no. 3, pp. 62–65 (In Russian).
2. Kiron D. AI Can Change How You Measure – and How You Manage. *MIT Sloan Management Review*, 2022, March 8.
3. Novikova I. V. Digital techno-economic paradigm in changing the digitalization strategy of the Republic of Belarus. *Trudy BGTU* [Proceedings of BSTU], issue 5, Economics and Management, 2020, no. 1, pp. 5–12 (In Russian).
4. Lebedeva T. E., Egorov E. E. HR: development trends in the digital economy. *Moskovskiy ekonomicheskij zhurnal* [Moscow Economic Journal], 2018, no. 5, pp. 423–430 (In Russian).
5. Moser C., Hond F. What Humans Lose When We Let AI Decide. *MIT Sloan Management Review*, 2022, February 7.
6. Geliskhanov I. Z. Digital platform as an institution of the economy of a new technological generation. *Lomonosov – 2018: materialy Mezhdunarodnogo molodezhnogo nauchnogo foruma* [Lomonosov – 2018: materials of the International youth scientific forum]. Moscow, 2018, pp. 20–26.
7. Geliskhanov I. Z., Yudina T. N., Babkin A. V. Digital Platforms in the Economy: Essence, Models, Development Trends. *Vestnik Sankt-Peterburgskogo gosudarstvennogo politekhnicheskogo universiteta. Ekonomicheskije nauki* [St. Petersburg State Polytechnical University Journal. Economic sciences], 2018, vol. 11, no. 6, pp. 22–36. DOI: 10.18721/JE.11602 (In Russian).

8. Gawer A. Bridging Differentiating Perspectives on Technological Platforms: Toward an Integrative Framework. *Research Policy*, 2014, vol. 43, no. 7, pp. 1239–1249.
9. Senge P. M. The fifth discipline. Art and practice of the self-learning organization. New York, Doubleday Publ., Revised & Updated edition, 2006. 445 p.
10. Meshcharakova E. V., Tulekbaeva A. K. Business interaction in network business organizations. *Trudy BGTU* [Proceedings of BSTU], issue 5, Economics and Management, 2018, no. 2 (202), pp. 57–63 (In Russian).

Список литературы

1. Кукарцев В. В. Использование информационных технологий в сфере управления персоналом // Менеджмент социальных и экономических систем. 2017. № 3. С. 62–65.
2. Kiron D. AI Can Change How You Measure – and How You Manage // MIT Sloan Management Review. 2022. March 8.
3. Новикова И. В. Цифровая техноэкономическая парадигма в смене стратегии цифровизации Республики Беларусь // Труды БГТУ. Сер. 5, Экономика и управление. 2020. № 1. С. 5–12.
4. Лебедева Т. Е., Егоров Е. Е. HR: тенденции развития в цифровой экономике // Московский экономический журнал. 2018. № 5. С. 423–430.
5. Moser C., Hond F. What Humans Lose When We Let AI Decide // MIT Sloan Management Review. 2022. February 7.
6. Geliskhanov I. Z. Digital platform as an institution of the economy of a new technological generation // Ломоносов – 2018: материалы Междунар. молодеж. науч. форума. Москва, 2018. С. 20–26.
7. Гелисханов И. З., Юдина Т. Н., Бабкин А. В. Цифровые платформы в экономике: сущность, модели, тенденции развития // Вестник Санкт-Петербургского государственного политехнического университета. Экономические науки. 2018. Т. 11, № 6. С. 22–36. DOI: 10.18721/JE.11602.
8. Gawer A. Bridging Differentiating Perspectives on Technological Platforms: Toward an Integrative Framework // *Research Policy*. 2014. Vol. 43, no. 7. P. 1239–1249.
9. Senge P. M. The fifth discipline. Art and practice of the self-learning organization. New York: Doubleday Publ.: Revised & Updated edition, 2006. 445 p.
10. Мещерякова Е. В., Тулекбаева А. К. Деловое взаимодействие в сетевых бизнес-организациях // Труды БГТУ. Сер. 5, Экономика и управление. 2018. № 2 (202). С. 57–63.

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