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ECONOMIC SCIENCES

МОТИВАЦИЯ ТРУДА ИТ-СПЕЦИАЛИСТОВ ПОД ВЛИЯНИЕМ ЦИФРОВИЗАЦИИ

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MOTIVATION OF WORK OF IT-PROFESSIONALS UNDER THE INFLUENCE OF DIGITALIZATION

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Аннотация
Статья посвящена исследованию особенностей системы мотивации труда ИТ-специалистов. Уточнены подходы к трактовке понятия «мотивация» отечественными учеными. Определены три группы методов осуществления мотивации работников, указано, что в любых сферах деятельности методы мотивации подобны, однако существует ряд факторов, которые влияют на степень удовлетворения потребностей работников. Также исследована динамика изменения количества работников ИТ-сферы и выделены ппрофессиональные компетенции ИТ-специалистов. Приведены четыре основные этапы создания системы мотивации работников ИТ-сферы и факторы, определяющие уровень комфорта работы в компании. Рассмотрены основные мотивационные факторы в разрезе работы с IT-персоналом.

Abstract
The article is devoted to the study of the features of the labor motivation system for IT specialists. Approaches to the interpretation of the concept of "motivation" by Ukrainian scientists have been clarified. Three groups of methods for motivating employees have been identified, it is indicated that in any spheres of activity, the methods of motivation are similar, but there are a number of factors that affect the degree of satisfaction of the needs of employees. Also, the dynamics of changes in the number of IT workers is studied and the Professional competencies of IT specialists are highlighted. The four main stages of creating a motivation system for IT workers and the factors that determine the level of comfort in a company are given. The main motivational factors in the context of working with IT-personnel are considered.

Ключевые слова: мотивация, система мотивации, стимулирования, потребности, работники, ИТ-сфера, ИТ-специалисты.

Keywords: motivation, system of motivation, stimulation, needs, workers, IT sphere, IT specialists.

Problem statement. Ukraine's economy is becoming more open and globalized. New enterprises, goods and services that use or are the product of the latest technologies appear on the Ukrainian market. Today in Ukraine, as well as around the world, it is difficult to find a large company that would not think about the possibilities of digitalization of business. Industry-leading companies are already actively implementing digital transformation programs to increase productivity, launch new products and develop digital channels of interaction with customers and suppliers.

At the same time, the requirements for the speed of launch of new goods and services are growing. Companies are actively attracting additional employees in IT and digital specialties, but today there is a shortage of highly qualified personnel in many areas. The IT sector is characterized by a particularly high level of competition for the best staff. Unlike other industries, the labor market in IT is unlimited geographically: the possibility of remote work is one of the features of this area, not only Ukrainian companies compete for specialists, but also companies operating in foreign markets. Given the shortage of staff needed to implement strategic initiatives, there is a problem of attracting and retaining IT professionals.

However, the complexity and contradictions of the transformation processes in modern society has led to significant interest in new social realities in the field of labor, including the development of new industries in the labor market. Information technology today is one of the most dynamically developing areas. The demand for IT specialists is quite high, including from foreign companies. Thus it is possible to speak that in the given branch the features of work with the personnel, including its motivations are formed also. Due to this, the scientific and practical interest in the study of labor motivation of employees in the IT field is explained by its specifics, different levels of motivation to work, the peculiarities of social stratification and the state level for themselves.

Analysis of recent research and publications. The issue of staff motivation in the field of labor is the subject of study of many domestic and foreign scientists. The study was based on the works of foreign scientists - the founders of the theory of motivation, including J. Adams, V. Vroom, V. Gerchikov, F. Herzberg, I. Il'yin, E. Lokk, E. Louler, D. Mak-Hrehor, D. Mak-Klelland, A. Maslou, E. Meyo, M. Meskon, H. Murrey, D. Nadler, V. Ouchi, L. Porter, F. Teylor and others. The scientific basis of the study was also the ideas of the founders of Ukrainian economic thought - V. Vernadsky and M. Tugan-Baranovsky. Among the

modern authors who have devoted their publications to the problems of staff motivation, we should mention such as Hrin′ko I.M., Zolotar′ova D.R., Kaletnik H.M., Mazur A.H., Maslosh O.V., Ovsyuk N.V., Sikun O.A., Chernyavs′ka YE.I., Yurchuk N.P. and other. Such Ukrainian scientists as H. Fedoryshyn, YU. Boyarchuk and others dealt with the problem of motivating the work of IT specialists.

However, the dynamic development of this area determines the need for further research in this area. At the same time, empirical measurements that allow for a clearer organization of staff motivation in the field of IT remain rare.

Formulation of the goals of the article. The purpose of the article is to study the content, structure and features of the motivation of IT professionals at the present stage of development.

Presentation of the main material of the research. In recent years, the demand for qualified IT professionals is not just stable, but constantly growing and now it far exceeds supply (because in today's conditions, the development of any enterprise is associated with its IT infrastructure, which, of course, requires service).

The draft Strategy for the Development of Higher Education of Ukraine, developed by the Ministry of Education and Science of Ukraine, states that the trend towards neo-industrialization, implementation of the concept of Industry 4.0, pervasive development of IT technologies, environmental problems in the next 5-10 years will change the landscape of most popular professions. Among the most popular specialties will be those related to IT and data: design "smart environment", "smart buildings"; programmer; data analyst; specialist, cybersecurity analyst; block chain technology developer; virtual, augmented reality developer; digital content specialist; digital linguist [1].

Today, the demand for IT professionals is higher than the supply, it is very difficult to find and retain qualified professionals in the company. And this is the situation not only in Ukraine, but in the whole civilized world.

The specificity of the IT sector is that IT companies regularly hire new employees and with the same regularity for various reasons, employees leave it. The average term of an IT specialist at one place of work is one and a half to two years. Thus, every year a certain part of the company's staff is updated. The quality of work of specialists and the level of their productivity are in a very wide range. In such a dynamic state are abstracted from specific professionals and talk about the resource pool, which means a set of employees of all necessary specializations and skill levels required to perform all relevant and planned projects of the IT company.

The current employer in the IT field is aware of its dependence on professionals, it is ready to motivate and protect the team, and therefore takes into account material, social and career demands.

From a management point of view, before requiring professionalism and high performance from employees, it is necessary to first provide them with support and the opportunity to become better and more efficient. In this case, the company must take care of the development and training of employees to achieve high results [2]. The system of motivation and stimulation of personnel in the organization affects the labor, social and creative activity of each employee, the end result of the entire organization. With effective motivation, the organization can increase its economic potential, the attractiveness of the profession for employees, as well as improve the relationship between management and subordinates [3].

As for the very concept of "motivation", it does not have a clear definition. Well-known authors have devoted their scientific works to this problem. In the table. 1 presents some definitions of the concept of motivation proposed by Ukrainian scientists.

Table 1

Analysis of the definition of "motivation" in scientific works

№	Author (s), source	Definition
1	N.V. Ovsyuk [4]	It is the inner desires and goals of a person that motivate him to act in a certain direction to achieve the goal
2	H. Fedoryshyn, YU. Boyarchuk [3]	Is one of the leading functions of management, as the achievement of the main goal depends on the coherence of the people in the team
3	Economic encyclopedia	It is a person's motivation to work, which is the resultant system of internal motivating elements, such as needs, interests, values, on the one hand, and on the other - environmental factors that are reflected and fixed by human consciousness, that is, external stimuli that motivate activity
4	T.A. Zamfirova [5]	This is the function of management, which is to form incentives to work in employees (encourage them to work hard), as well as long-term action on the employee to change the given parameters of the structure of his values and interests, forming an appropriate motivational core and development on this basis labor potential
5	O.A. Sikun [6]	It is a kind of set of internal and external factors that push the employee to work effectively in order to achieve the goal of the enterprise.
6	N.P. Yurchuk, D.V. Zakharchuk [2]	This is an activity aimed at activating the people working in the organization to work more effectively. This definition shows the close relationship between managerial and individual psychological content of motivation.

Source: generalized by the author on the basis of the cited literature

Thus, based on the analysis of interpretations by domestic scientists of the concept of "motivation", we can say that on the one hand, motivation is a kind of system (creating a system of motivation of one or more employees), and on the other - as a process (long-term impact on employees to ensure changes according to certain parameters.

The most important subjects of the motivation system are managers of all levels of enterprise management, who encourage their subordinates to work effectively. At the same time, the leader as a subject of the motivation system can be its object for the head of the highest management level. The success of business entities is primarily influenced by its leaders, who have a creative mindset, the ability to take risks and influence employees [6].

Yurchuk N.P. and Zakharchuk D.V. [2] in their research offer a scheme of staff motivation process for a clearer understanding of the motivation process (Fig. 1).
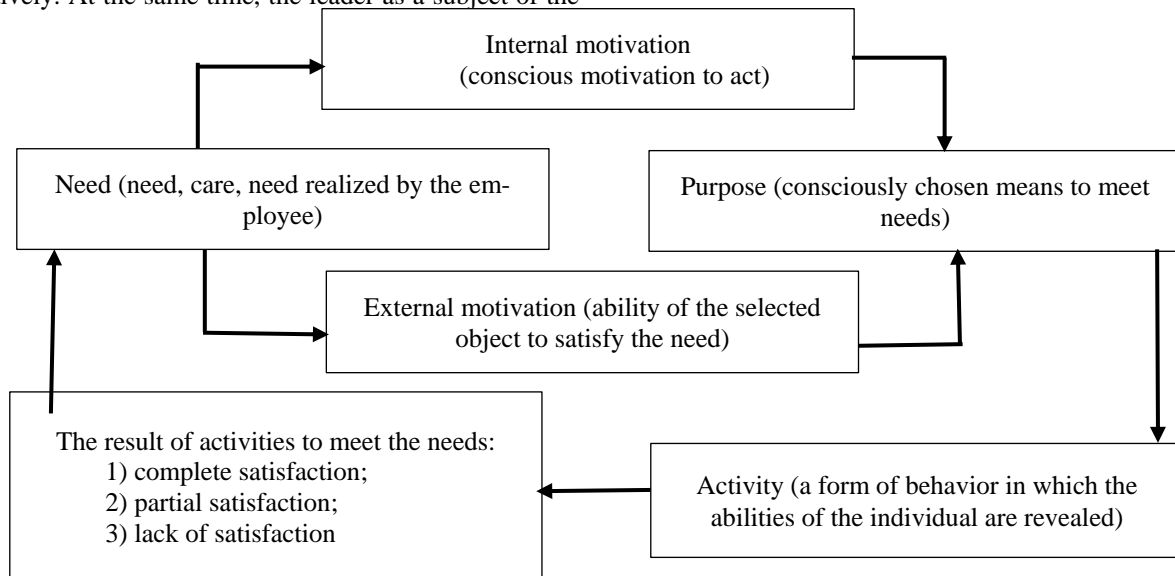
Fig. 1. The process of staff motivation

Source: [2, p. 66]

Today, scientific sources present a large number of theories and concepts of staff motivation A. Maslou, D. Makklellanda and F. Hertsberha, N. Khouva i V. Shtrausa. Their comparative analysis is carried out in table. 2.

Table 2

Comparative analysis of basic and modern theories of motivation

Criteria	A. Maslow's theory	D. McClelland's theory	F. Herzberg's theory	Generation theory (N. Howe, W. Strauss)
Component of theories	Needs are grouped, arranged hierarchically in the form of a pyramid.	Certain groups of needs have been identified. There is no hierarchy of needs.	Two groups of factors are identified, namely hygienic and motivational.	Employees are grouped, each group is offered its own incentives.
Scope	It is difficult to adapt in management practice.	Through the satisfaction and development of the needs of managers.	It has been used effectively in organizations, but there have been critical remarks about research methods.	It is used in modern enterprises.
Advantages	People's motivation is determined by a wide range of their needs, so employees should be monitored to identify them.	Needs groups are not mutually exclusive and are not hierarchical. Manifestations of the impact of these needs on human behavior depend on their interaction.	Managers must first pay attention to the factors that cause dissatisfaction, so you should strive for positive results.	Allows you to plan the company's staffing needs and forecast the involvement of specialists.
Disadvantages	Individual features and differences of people are not taken into account. It is not necessary to meet a person's higher level of needs according to the pyramid.	The mechanism for meeting the needs of the lower is not shown equal. Insufficiently taken into account the individual characteristics of each employee.	The same factor can be satisfying one person and dissatisfaction with another.	The conditionality of the proposed classification and the controversial distribution of incentives for the generation to all employees of a certain age group.

Source: [7]

According to these theories, the basis of human motivation among other needs is the balance between success and avoidance of failure. Therefore, the need to succeed, which is quite important in the motivation system, encourages the worker to perform better than the existing standards of performance (for example, time of development or the number of products or tasks).

The need to succeed presupposes the avoidance of possible failures, and their ratio, being complementary, indicates the strength of this need in the worker. In terms of the theory of motivation, quite often the first desire is referred to as the motive for success, and the second - the motive to avoid failure. After all, the predominance of the motive of success corresponds to a high level of need to succeed, and the predominance of the motive of avoidance - a low level [7].

Staff motivation is one of the functions of management, along with such as planning, organization, control, decision-making, so it requires certain gradual methods of its effective implementation. There are three types of motivation methods: organizational and administrative; social (intangible); economic (material).

There are three groups of methods of motivating employees:
1. Economic methods (direct; indirect).
2. Organizational and administrative methods.
3. Social methods.

Direct economic methods of employee motivation include:
− various forms and systems of remuneration;
− awards for rationalization;
− allowances for length of service, qualification;
− profit sharing, etc.

Indirect economic methods are:
− payment for tuition, transport and rent;
− preferential meals, pensions, health insurance;
− financing of vacations, sanatorium treatment;

− valuable gifts;
− economic support of personal interests (sports, hobbies, hobbies) and others.

Organizational and managerial methods of motivating employees include such methods as:
− flexible work schedules;
− programs to improve the quality of work;
− discipline support;
− labor protection;
− changes in the mode of operation;
− method of complicity in the affairs of the firm.

Social methods of motivating employees involve the implementation of important measures, namely:
− favorable and safe working conditions;
− high evaluation (announcement of gratitude, awarding of diplomas);
− opportunity for professional development;
− friendly atmosphere in the team;
− corporate culture;
− holding solemn meetings;
− participation in decision-making [8].

Methods of motivating employees in any field of activity are similar, but there are a number of factors that affect the degree of satisfaction of the needs of employees of a company depending on the degree of qualification, difficulty and harmfulness of work and so on. Due to the rapid development of the information society and the digitalization of the economy, it is important to consider the system of motivation of IT professionals.

According to a study by Ukrainian IT company N-iX, there are currently about 4,000 companies in the IT industry in Ukraine. The IT sector in our country is growing by about 26% every year. In 2019, the number of specialists amounted to 200,000, which means that next year their number may reach approximately 220,000 (Fig. 2) [9].
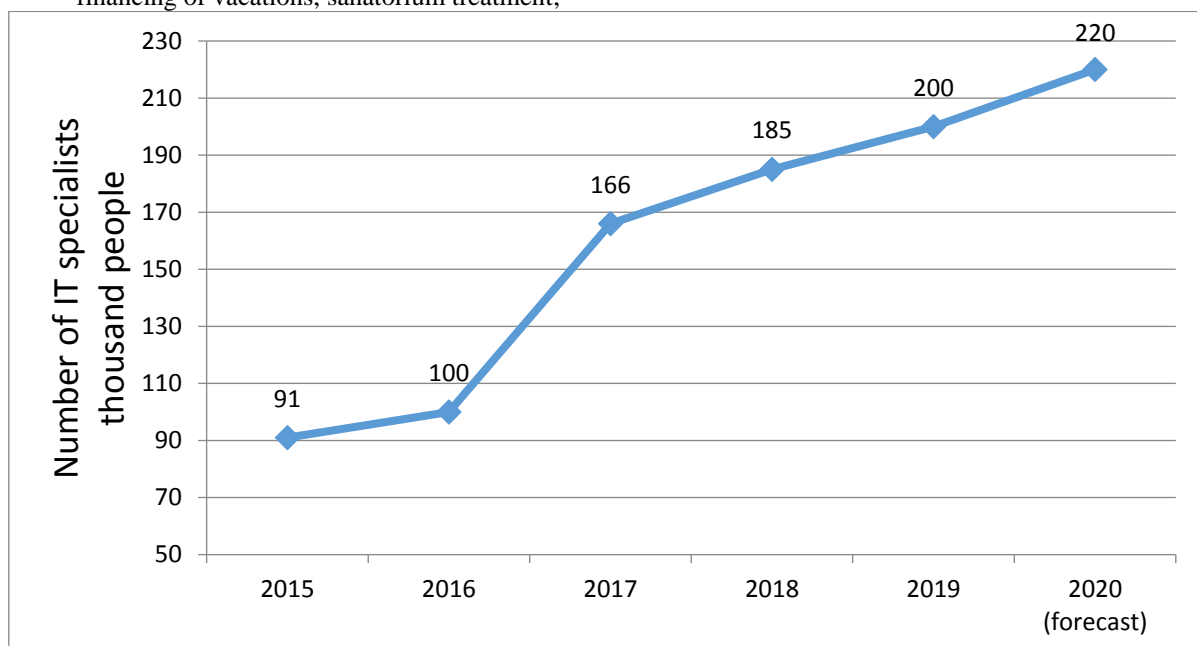

Fig. 2. Dynamics of change in the number of IT employees

Source: [3]

According to researchers, the structure of professional competencies of IT professionals should include more the ability to identify and formalize tasks that can be solved using information technology than the possession of specific technologies, although, of course, the latter is also necessary. This is due to the fact that the cycle of technology change is much shorter than the period of training a specialist in this field of knowledge. The optimal structure of professional competencies of a specialist in the field of IT includes:

1. Use of general and special software.

2. Conducting analytical activities in the field of application.

3. Execution of works on the decision of network and communication problems.

4. Application software development.

5. Technical support.

6. Ensuring IT security of information systems.

7. Organizational support of design and research work in the field of IT technologies.

With such features of this professional group, it is necessary to take into account some stages of development of the system of employee motivation and its elements from a practical point of view. Work on creating a system of motivation can be divided into four main stages.

1. Analysis of the existing system of internal relations of employees and their work motivation.

2. Development of general principles of employee motivation, payment system and incentives.

3. Coordination and discussion of the developed approaches and principles of systems of motivation and stimulation with all links of the management of the organization.

4. Design and implementation of staff incentives.

An important issue in determining an effective system of motivation of IT workers is the feeling of comfort in the workplace. Thus, the international personnel portal HeadHunter Ukraine together with DOPOMOGA IT & Telecom Resources conducted a survey on the databases of IT specialists is not a topic of motivation in work, but what factors ensure the comfortable work of IT specialists in the company. Factors that determine the comfort of working in the company [10]:

High wages - 50.58%.

Opportunity to study promising technologies, to grow promisingly - 67.77%.

Good team - 67.36%.

Interesting tasks - 63.22%.

Career opportunity - 59.05% /

Free schedule, independent projects - 45.04%.

Stability of work - 42.28%.

Technical equipment of the workplace - 38.02%.

Status and brand of the company - 16.94%.

Other - 1.24%.

The set of main motivators, in general, is quite standard - high salary, good team, opportunity for professional growth, interesting tasks. The status and brand of the company are the least important for the comfortable work of IT specialists.

A study by DOU [11] in 2020 found that most IT professionals are satisfied with their salary. 18% of respondents do not like the income level. The largest percentage of dissatisfied among SysAdmin, Support, Junior QA, Junior SE, Designer, Marketing. The most completely satisfied (over 40%) among System Architect, Team / Technical Lead, Senior SE.

Note that one of the lowest levels of salary dissatisfaction in Data Science. Many young people in this field, given the median age of 25 years. If we take the answers of only respondents under 25, the ratio of dissatisfied and satisfied remains unchanged. If you look at trends in vacancies, the proposals for beginners in Data Science is not so much. So, most likely, more or less experienced specialists enter this field, and the level of competition for vacancies is not very high. All this together keeps salaries at a satisfactory level for almost all participants in Data Scientist 15% of respondents experienced a reduction in salary due to quarantine. And for 8% reduction in income was more than 15%. The worst situation among system administrators: salary reduction of 30% of respondents, of whom 4.5% indicated that the salary is not paid at all until the end of quarantine. Also, a high percentage of non-payment by designers - 3.7%.

Interestingly, junior testers and developers felt the negative impact of quarantine in the least: their salaries were more actively increased than others and reduced less than others.

Most IT professionals have only one source of income - salary. Part-time jobs are most common in Designer, SysAdmin, Product Manager, Data Science, Marketing, DevOps and System Architect. Interestingly, the lowest percentage of professionals with additional sources of income is among the QA group.

In general, IT professionals have a stable financial position even in a coronary crisis: only 5% of respondents indicated that they spend more than they earn. Instead, almost 70% save. The worst financial situation among Support, Junior QA, SysAdmin, Designer, HR - they have a number of those who have a negative financial situation, more than 10%.

Almost a quarter of Senior PMs have two higher educations, and the largest number of PhDs among Data Scientists is 9.4%. There were no respondents with secondary education among Business Analyst, SysAdmin and Data Science. Instead, the largest number of specialists with secondary education (from 3 to 4%) among Support, DevOps, System Architect. 15% of respondents do not have time for professional development. Most of these specialists are among Senior QA - 20%. In general, most often IT specialists, both technical and non-technical, read specialized literature and attend trainings and courses [11].

It is necessary to motivate IT specialists, regardless of their function at the enterprise. First, the information technology market is developing quite actively even today, despite the economic crisis and significant staff reductions, as every company needs IT specialists. Secondly, the professional self-awareness of IT specialists has recently grown considerably - if earlier various actions aimed at increasing staff motivation were perceived by them without enthusiasm, modern IT specialists are interested in both tangible and intangible

motivation of their work and enough. well aware of their own importance to the enterprise.

So, let's consider the main motivating factors in terms of working with IT-staff, which highlights the HR specialist A. Butusevych:

1. Wages. It is considered that the simplest and most effective motivation for any work is a high salary. For IT professionals, the level of monthly financial compensation really plays an important role. Quite a lot of IT specialists who are going to change their current place of work and are actively looking for a new one, in interviews the reason for such a search is called a low (inappropriate to the market) salary level. IT specialists working in the field of software development and finance receive the most, and sales and production receive the least. Among the important factors influencing the level of salaries of IT workers are the availability of specific knowledge and skills, specialized training and various certificates.

Thus, we can conclude that the level of salary is very important for IT professionals, but to increase and maintain the level of motivation and, consequently, the efficiency of employees, it makes sense to introduce a bonus or bonus money [12].

2. Competent manager. Unlike many other categories of staff, for IT professionals, the professional qualities of a leader are of great importance. The general problem of employees of the IT industry in their isolation and inhumanity, and any company - is, above all, a cohesive team, the only mechanism. And the information technology department is a rather separate subdivision, it has its own rules, its own style of communication, pronounced specifics of interests, etc., and only a competent manager will be able to become an effective motivating factor for people.

The immediate supervisor, in addition to strong leadership potential, must have fundamental knowledge and experience in the field of information technology. If he shows incompetence in solving technical issues - his reputation can fall sharply in the eyes of IT professionals, which can negatively affect their motivation, and in the future will be reluctant to work under his leadership.

Also, the head of the IT department or group leader must be able to listen to their subordinates and give constructive feedback. In the work of an IT specialist, which by its nature is creative, new ideas and extraordinary visions of problem solving often arise. Such a spontaneous initiative must be properly supported, otherwise it may disappear along with the motivation of the employee. That is why it is so important for the head of the information technology department to find an opportunity to communicate with his subordinates, to be attentive to ideas and to support their initiative [12].

3. Social package. A popular supplement to the salary is the social package, which refers to the material motivation of work. Today, companies offer social packages, which may consist of components such as health insurance and accident insurance, mobile communications, lunches, fitness, business laptop, home Internet, tuition compensation, discounts on goods / services, producing / provides the company, etc. Also,

many companies offer to reimburse travel and food costs, calling it a compensation package. However, not all of these benefits are equally important for the IT professional.

Yes, many IT professionals are quite cool about health insurance and the opportunity to visit a fitness club / pool - they simply do not have enough time for illness and sports. Mobile compensation and discounts on goods and services within the company are more popular. Lunches delivered to the office are very important for this category of specialists (especially they will be appreciated by programmers who often face continuous operations, and leaving the office during lunch can greatly distract them from the task, which will negatively affect the project time).

Also quite important are such benefits as a business laptop and paid by the company home Internet. By adding such components to the social package, the company wins twice - first, it supports the motivation of the employee and his loyalty, and secondly, he will be able to remotely solve problems that arise at work at any time of day.

In addition, in recent years, IT professionals are more loyal to employers who fully or partially compensate for specialized IT training: obtaining professional certificates, training courses. The benefits of an enterprise that receives more professional employees are difficult to overestimate. Based on the above, we can conclude that the social package for the IT-specialist has its own distinctive features and should be developed as individually as possible [12].

4. Convenient office location. A fact that once again confirms that the market of experienced IT professionals is dominated not by employers but by employees: professionals are relaxed and can afford to choose a place of work closer to home. This trend is, of course, more relevant for large cities, where programmers do not want to spend a lot of time on the road, realizing that much of the problem can be solved remotely.

5. Work schedule. The popularity of the conventional work schedule "from 9:00 to 18:00" has been declining recently. Greater flexibility in the schedule will please IT professionals, and giving the opportunity to choose a work schedule will be an undeniable advantage when choosing a new job.

Most IT professionals are owls, so in the morning they are almost ineffective, because a lot of time is spent on "rocking", morning coffee, watching the news on the Internet. Of course, if we are talking about support professionals and system administrators, which may be needed at any moment from the start of the office, it is difficult to deviate from the standard work schedule. However, for IT professionals who work on a project basis, it is possible to develop such schedule options as work from 10:30 to 19:30, from 11:00 to 20:00 or even from 12:00 to 21:00 [12].

The ability to choose a work schedule is an important motivating factor for any IT specialist, provides comfort and promotes an individual approach to optimizing the performance of the employee.

6. Comfort at work. Often, IT professionals are immersed in their tasks with their heads, and it is easier

for them to work 14-20 hours continuously than to stretch the project for a few days. In this situation, it is important that the office has the opportunity to eat, pour tea or coffee, relax, so often IT companies organize lounges or just put sofas in offices, arrange showers, try to provide a comfortable indoor climate.

7. Creative methods. According to research, IT professionals increasingly prefer interesting projects, new technologies and enterprises with a transparent system of work organization. Despite the fact that standard methods of intangible motivation in the form of comfortable work areas and flexible schedules still remain popular among IT professionals, experts have recently noticed a trend towards creative methods of motivation in the field of IT.

Some companies use the points accumulation system as a social package. The essence is that the employee accumulates points for the period of work in the company, for participation in projects and other activities. Accumulated points can be spent at personal discretion. For example, order a chic work chair, an exciting trip or training program, that is, something that will inspire and give strength for further work.

Another example of a non-standard approach to motivation is the choice of equipment to work at your discretion. The new employee is offered a virtual amount, within which he chooses a personal computer, which he can then get into personal ownership [12].

It is worth noting that every year more and more staff seeks to find a job that will provide work-life balance - the opportunity to combine personal life with work. This is possible with the appropriate introduction of organizational and administrative methods of work motivation. They create the organizational structure of the enterprise, especially working conditions, and ensure the employee's interest in not losing his job [10].

To determine the characteristics of motivation of IT professionals should identify the distinctive features of work in the IT field. Particular attention should be paid to the advantages and disadvantages of working in the IT field, taking into account which will determine the most effective factors and methods of staff motivation.

The advantages of working in IT include:
- unlimited professional development of IT specialists;
- creative and diverse work;
- the ability to change activities without compromising career growth;
- possibility of remote work;
- high level of wages;
- worthy bonuses and bonuses;
- lack of oversaturation of the IT market with specialists;
- the possibility of a flexible work schedule;
- formed IT-community in different countries.

Among the disadvantages of working in the IT industry are:
- possible irregular working schedule;
- high level of stress;
- high level of fatigue due to constant work at the computer;

- high requirements for entering the IT field: professional skills and knowledge of English;
- complexity of training, high cost of IT-education and advanced training;
- high frequency of cases of professional burnout of IT specialists;
- staff turnover in the workplace [12].

Thus, the main negative and unmotivating factors of IT professionals are a high level of stress and fatigue, as well as a high probability of emotional burnout.

Today, Ukrainians can create, promote and sell IT products in global markets. They are interested not only in creating a product, but also in its active development. As a result, more and more Ukrainian developers want to be part of what they are working on. This is the beginning of the development of software development centers - R & D-offices. The R&D office is an offshore R&D center where the customer and the contractor are one company. In essence, the R&D office is a division of a large food IT company in a developing country. At the same time, it retains all the internal functions and policies of the company. The main advantage for developers is that they have access to the process of creating a product "from A to Z". The employee will know all about the process of marketing and selling an IT product in Western countries, and will be able to interact directly with C-level managers and climb the career ladder. In addition, employees of local development centers are often invited to the company's headquarters, where they learn from experience, corporate culture and attend trainings with their American or European colleagues.

R&D centers significantly affect the labor market in the country. Western IT corporations, which are opening their offices in Ukraine, are also building a complete infrastructure. Local resources need to be involved in providing R&D centers, and this is an additional economic benefit for all [14]. Experts from the IT Ukraine Association estimate that one employee in the IT industry creates 3-4 jobs in related industries. With the growth of the industry to 400 thousand professionals by 2024 will create about 2 million jobs in Ukraine [15].

One of the important elements of the personnel management system in enterprises is the HRM (Human Resource Management) system. HRM-system - an automated comprehensive personnel management system. HRM-systems include not only subsystems of automation of personnel accounting and calculation of payments to employees, but also HR-subsystem, which allows for recruitment, management of personnel talents and, performance management and staff training.

These systems are fully functional and provide automation of the main functions of personnel management, as well as effective management decisions, including [16]:
- accounting and work with a full range of information about employees of the organization, maintaining a file of staff;
- work with the organizational structure of any degree of complexity;
- maintaining a detailed staffing schedule;
- work with personnel documents (orders, reports,

employment records, sick leaves, certificates of employees, etc.);

- accounting and storage of any types of files for each employee (photos, scanned documents, etc.);

- planning and accounting of measures to assess the professional and personal characteristics of staff;

- planning and accounting for professional advancement of employees, drawing up career paths and career planning;

- planning and management of professional development, training and retraining programs;

- personnel reserve management, work with personnel reserve lists;

- planning and accounting of certifications;

- accounting for personnel costs in different analytical sections: training, motivation, etc.;

- monitoring of staffing needs;

- recruitment and selection of personnel: maintaining a database of candidates, selection of candidates for the position;

- formation of a system of material incentives for employees;

- planning and accounting of vacations, business trips;

- work with information on social security of employees;

- analysis of indicators for the staff of the organization;

- preparation of statistical reports for the management of the organization [16].

According to the international analytical agency Gartner, by 2025 [17] about 60% of medium and large companies in the world will invest in HCM-complexes, which include HRM-systems.

Ultimate Software, Workday, SAP and Oracle are named the leaders of the market of HCM-solutions for companies with a staff of 1,000 in the Gartner study in 2019. Gartner's magic quadrant also includes Ceridian, ADP (WorkforceNow), Talentsoft, Kronos, Comerstone OnDemand, ADP (Vantage HCM), Meta4, Infor, Ramco Systems.

Among the popular HRM-systems in Ukraine are: Hurma System, Zoho People, BambooHR, Workable. Modern HRM systems provide a transformation of interaction between employees within the company's workflows.

The problem of retaining qualified IT specialists remains relevant for employers. Nowadays, work on staff motivation has long ceased to be a simple tribute to fashion, and has become a necessary aspect of the efficiency and success of any company. First of all, it is customary to pay attention to the motivation of employees who bring the company direct income (sales managers, project managers), and managers.

A secondary priority for business support staff. This category is most often used by IT professionals. The exception is companies engaged in the creation and sale of IT goods and services, in which the work of IT professionals is the main source of income. Conceptual vision of problems and ways to solve them in practice becomes possible only with balanced management decisions [18].

It should be noted that often highly qualified IT professionals prefer to work in small businesses, citing more humane relationships in the team and a high level of freedom. And if you want, they can always forge, doing some specific project in another company. Today, there is still a shortage of top managers and middle managers in this field (ie specialists who combine technical and managerial skills).

But based on all the above, we conclude that it is not necessary to change any IT employees often, as it is extremely unprofitable for the company as a whole, because in addition to finding a new employee, additional costs are required for his specific training, given the specifics of the company and adaptation. IT companies need to create an environment that promotes the self-education of IT professionals and provides the opportunity to share knowledge and experience.

Conclusions. Thus, the economic and social essence of staff motivation is to meet the needs of staff, both tangible and intangible, which in turn contributes to achieving the goals of enterprise development, strengthening competitive positions in the market and making more profit. In the practice of personnel management of the enterprise should use methods of work motivation in accordance with its specifics and take into account: the industry in which the company develops, management, working conditions, number of workers, quality of their work, current performance, interpersonal relationships in the workplace and corporate culture that has formed at the enterprise.

Thus, when building a system of motivation of IT-specialists it is necessary to take into account their personal characteristics and professional competencies. The system of motivation of IT-specialists should include: taking into account the proposals of social packages for IT-personnel in the labor market, carrying out systematic evaluation, rewarding the results of evaluation and efficiency of tasks, encouraging initiative and reducing work costs, career assistance, maintaining a high level of creative potential, recognition of professional achievements, opportunities for self-education, reducing the risk of demotivation and emotional burnout. In the dynamic development of the IT industry, taking into account the personal qualities of specialists in this field when building a system of work motivation is the key to successful business.

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