V. M. ZAERNYUK, Yu. V. ZABAIKIN, E. V. KRASAVINA, M. F. KHARLAMOV

HUMAN CAPITAL AS A FACTOR OF ECONOMIC GROWTH OF ENTERPRISES OF MINERAL COMPLEX

Monograph

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The problem of formation and accumulation of human capital is due to the need to study human capital as the main factor in the formation and development of the economy of innovative type and is quite relevant at this stage of economic transformation. The monograph systematically and consistently discusses the basic theoretical approaches to the essence and economic content of human capital, improving the system of training, practical aspects of building a successful team in the enterprise. In the monograph, the authors, on the basis of retrospective analysis and assessment of the current state of human capital, justified the objective need to increase the cost of enterprises, including the state in science and education, health, social programs. The authors present a method of evaluating the effectiveness of investments in human capital, which can contribute to improving the efficiency of enterprises of the mineral complex.

The book will be of interest to researchers, teachers, graduate students, students involved in the study of human capital. It will also be useful for professionals working in the real sector of the economy.

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INTRODUCTION

Relevance of the study. In the transition to an innovative model of the country's economy, human capital is of particular importance.

The competitiveness of modern enterprises is largely determined by their ability to generate, implement and use the achievements of scientific and technological progress, to implement technological and managerial innovations, the source of which is embodied in the employees of the enterprise human capital. The formation and accumulation of human capital is due to investments, which include all types of costs in cash or other form. In this regard, the main problem faced by enterprises is to assess the effectiveness and feasibility of investments in human capital of employees. The relevance of the final qualifying work is the need to study human capital as the main factor in the formation and development of the economy of innovative type.

The degree of scientific development of the problem. The basic provisions of the theoretical and methodological nature of human capital were laid down in the works of scientists and economists W. petty, A. Smith, D. Ricardo, K. Marx, A. Marshall, W. Thompson. As an independent section of economic analysis, the concept of human capital is presented in the studies of T. Schultz, G. Becker, M. Grossman, S. Fisher, P. M. Nureyev, A. I. Dobrynin, S. A. Dyatlov. Evaluation methods of efficiency of investments in human capital are disclosed in the works of V. V. Lukashevich, J. Vitanza, E. Flamholtz, K. N. Chigareva, O. G. Vahanian, R. I. Kapelyushnikov, M. V. Semenova, V. Alaverdyan, G. N. Toughskins.

Theoretical and methodological approaches to the management of professional development, the formation of a management reserve, assessing the human capital model of managerial competencies presented in works of domestic and foreign scientists: M. Armstrong, and A. V. Antropova, T. Y. Bazarov, I., Brian, D. Golla, H. T. Graham, V. A. Dyatlov, A. P. Egorshina, B. L. Eremin, P. V. Zhuravlev, T. V. Zaytseva, A. J. Kibanov, M. V. Kolpakov, G. D. Cruden, A. Mumford, E. V. Maslova, W. R. Mondi, S. K. Mordovin, I. Nonaka, Arsinoi V. S., V. V. Travin, and S. V. Shekshnia, A. W. Sherman, etc.

However, despite the presence of a significant number of publications and research in the field of human capital, there is still no clear definition of the concept of human capital, little attention is paid to the methodological elaboration of issues related to the choice of the optimal way of innovation in the enterprise through investment in human capital.

The object of the study are investments in human capital.

The subject of the study is the mechanisms and ways to improve the efficiency of innovation in the enterprise through investment in human capital.

The purpose of this work is to develop ways to improve the efficiency of innovation in the enterprise by investing in human capital.

Based on this goal, the following tasks of the study are defined:

- to consider the main approaches to the concept of "human capital", to highlight its distinctive features and properties, to determine the structure;
- substantiate the role of human capital in the innovative development of the enterprise;
- to conduct a comparative analysis of Russian and foreign methods of assessing the effectiveness of investments in human capital, to identify their advantages and disadvantages;
- develop a methodology for assessing the effectiveness of investments in human capital and on its basis to assess the effectiveness of investments in human capital in a particular enterprise;
- identify the problems of accumulation of human capital in the enterprise and identify possible solutions.

Research methodology. The research is based on General scientific research methods (comparison, analysis and synthesis, expert evaluation, analogy, etc.).

The theoretical basis of the books was the scientific works of domestic and foreign scientists devoted to the issues of human capital.

The information and empirical base of the study is based on the use of manuals on the research topic, publications of periodicals, statistical services data, materials of rating agencies, accounting and management reporting of the enterprise.

The information base of the research consists of materials of publications in periodicals, legislative and regulatory acts of the Russian Federation, normative documents of ministries, statistical materials, manuals on the research topic, publications of periodicals, data of statistical services, materials of rating agencies, accounting and management reporting of the enterprise.

CHAPTER 1. THEORETICAL AND METHODOLOGICAL ASPECTS OF HUMAN CAPITAL

1.1. Essence and economic content of human capital

In modern conditions, the key factor in improving the competitiveness of enterprises is human capital. In this regard, there is a need to study this economic category.

The prerequisites for the development of the theory of human capital were laid in the scientific works of such economists as W. petty, A. Smith, D. Ricardo, K. Marx, A. Marshall, W. Thompson, which marked the beginning of scientific research of human capital [180].

However, as an independent section of economic analysis, the theory of human capital was formed at the turn of the 50-60-ies of the twentieth century thanks to the research of well-known American economists T. Schultz and G. Becker.

T. Schultz was the first to use the term "human capital", which meant a set of investments in human beings, increasing their ability to work. The scientist argued that improving the well-being of poor people depends not so much on the land and technical devices, but on the knowledge, skills and certain skills that make up human capital. T. Schultz said: "All human resources and abilities are innate or acquired. Each person is born with an individual complex of genes that determines his innate human potential. Acquired by a person during his life a valuable quality that can be enhanced by appropriate investments, the scientist called human capital" [181].

According to T. Schultz, the main result of investments in people was the accumulation of people's ability to work, their effective creative activity in society, in maintaining health. The researcher proved that human capital is able to possess the necessary characteristics and properties of productive nature, as it is able to accumulate and reproduce. According to T. Schultz, from the total product produced in society, the accumulation of human capital is not used 1/4 of its total value, as follows from the theories of reproduction of the XX century, and 3/4 [181.

Thus, T. Schultz made a significant contribution to the formation of the theory of human capital during the initial stage of its development. The scientist was one of the first to define human capital as the main productive factor of post-industrial and innovation-oriented economy. A follower of T. Schultz, G. Becker developed his idea by justifying the term efficiency of investment in human capital and formulated the economic approach of human behavior. In his book "Human capital", which became the basis for further research in this area, G. Becker defined human capital in the form of a set of innate ability, acquired skills, knowledge and motivation accumulated in a person, which are used by him in the production of goods and services and is a source of income for a person and society [170].

The scientist was one of the first to consider the concept of human capital at the micro level. As an investment in the human capital of employees, the author took into account mainly the costs associated with education and training. G. Becker calculated the economic efficiency of investments in education by comparing the benefits of education and costs. To calculate the additional income from higher education, the scientist deducted the lifetime earnings of persons with higher education from the lifetime incomes of persons with secondary General education. The costs of education included both the direct costs of education and the opportunity costs, or lost profits - the money lost by the person during the period of study. The return on investment in education was calculated as the ratio of income from education to the cost of obtaining it and averaged 12-14 % of annual profits, which exceeds the profitability of some firms [170].

In the framework of the theory of human capital G. Becker also investigated the structure of the distribution of personal income, the scientist analyzed their age dynamics and inequality in payment of male and female labor. With the help of a wide statistical material, the scientist proved to politicians and entrepreneurs the importance and role of education as a factor in the growth of income of both the employee and the employer, and the state as a whole. Therefore, investments in education began to be considered as promising investments that bring income in the future [170].

For his work in the field of human capital theory, T. Schultz and G. Becker were awarded Nobel prizes, indicating the outstanding contribution of scientists to economic theory and the increasing importance of human capital as a factor in the competitiveness of the enterprise.

A significant contribution to the development of the General theory of human capital was made by Nobel prize winner Simon Kuznets, who added the concept of GDP to economic theory and practice. As the primary factor of GDP growth, the scientist identified the level of accumulated national human capital. He argued about the existence of a threshold value of the accumulated national human capital, the achievement of which will ensure the transition to the next technological mode of the economy [182].

An important role in the study of human capital was played by the work of M. Blaug, E. Lazer, J. Kendrick, sh. Rosen, R. Solow, B. Chiswick, R. Layard and others [187].

Certain aspects of the theory of human capital, its structure, formation and development have been studied since the 1990s in the works of Russian scientists - S. A. Dyatlov, A. V. Koritsky, R. I. Kapelyushnikov, A. I. Dobrynin, M. M. Kritsky and others.

S. A. Dyatlov under the term "human capital" means the accumulation as a result of investment of a certain stock of health, knowledge, ability, skill and motivation of a person, which can be used in a particular sphere of social reproduction and contribute to the growth of his income, increase productivity, increase production efficiency [45].

The researcher koritsky A.V. was engaged in the development of the theoretical foundations of the concept of human capital, developed methods of its quantitative assessment, and evaluated the effectiveness of investment in education. The author argued that the most important investments in a person are the costs associated with education and training in the workplace, which increase the level of knowledge of employees and increase the amount of human capital of the enterprise. Along with this, important are the costs of health care and medical care, reducing both morbidity and mortality of employees of the enterprise, and the cost of labor migration, childbirth, which is the reproduction of human capital [82].

A. I. Dobrynin and R. I. Kapelyushnikov considered human capital as the embodiment of the stock of knowledge, ability, skills and motivation. At the same time, scientists argue that human capital, which is part of the total capital, is the accumulated investment in education, health, special training and migration of the labor force [44].

B. M. Genkin analyzes human capital from economic and sociological positions. According to the author, human capital is characterized by such qualities as natural abilities, health, education, professionalism, mobility, acting as sources of income of a person, his family and society [32].

The researcher Cretan M. M. characterized human capital as a General specific form of life, developed a methodology for assessing the size of individual human capital at all stages of its development, also proposed an original method of calculating the national human capital in value terms [79].

- V. Shchetinin draws attention to the ambiguity of interpretations of the concept of "human capital". In a narrow sense, one of the components of human capital is education, which serves as a source of future income. In a broad sense, the formation of human capital occurs through investment in education, health, migration [50].
- V. I. Romanchin and I. A. Nikitin define human capital in the form of a certain stock of knowledge, skills, abilities, motivation and health of people, formed as a result of investment and expediently used in the process of labor activity for the growth of income of a person, enterprise and the state. The authors also identify types of human capital, including health capital [136].
- G. I. Bondarenko was at the Foundation of the socio-cultural concept of human capital research, which allowed to justify the impact of social institutions on the reproduction of human capital, its formation, accumulation and rational use. The author argues that the accumulation of human capital is possible, as an individual can acquire certain skills, abilities and improve health. Investment in human capital leads to economic and social effects, but can be quite long-term, for example, investment in education capital takes an average of 12-20 years, and investments in health capital are made throughout the life of individuals. G. I. Bondarenko defined the features of modern social institutions in terms of reproduction, accumulation and preservation of human capital: the Institute of education participates in the formation of the intellectual component of human capital, the institution of the family performs the function of its reproduction and implementation, and the Institute of health is aimed at the formation of the physical properties of human capital. G. I. Bondarenko found that in modern conditions all social institutions perform their functions inefficiently, so it is necessary to develop programs and implement strategies for the formation of human capital, its preservation and optimal use [17].

Thus, the analysis of different approaches to the definition of human capital showed that the concept of human capital was formed gradually,

initially it included only investments in special higher education. Therefore, sometimes human capital in a narrow sense is called educational capital.

Subsequently, the concept of human capital expanded considerably, as investments in health, education, science, migration, culture and art were considered. For example, experts of the world Bank in assessing the human capital of different countries in the calculations included consumer spending: human costs for food and clothing, improving housing conditions, education, health, culture, as well as government spending for these purposes [9].

Thus, the study of the theory of human capital allowed the authors to formulate the following definition: human capital is a set of innate abilities and acquired skills of a person, his physical health and accumulated knowledge necessary to generate income for their owner.

It is necessary to distinguish the concept of human capital from the concept of human resources. The labour force is directly people with or without education, determining skilled and unskilled labour. Human capital is a broader concept and includes, in addition to human resources, accumulated investments in education, health, science, security and quality of life.

The analysis of the relevant literature showed that at present the theory of human capital is developed in detail, the main factors of its reproduction and development are determined. This leads to the conclusion that human capital is a complex socio-economic category and includes elements of various Sciences and disciplines: Economics, sociology, psychology, medicine and others.

In the future, it is necessary to consider the structure of human capital, to identify its distinctive features and properties, as well as to determine the sources of its formation and development.

1.2. The structure of human capital and its features

In the economic literature, many different approaches to the classification of human capital are given, which is explained by the complexity of this economic category.

Human capital can be classified according to the following features [21]:

- components or components of human capital;
- form of ownership;
- levels of the economy;
- the main areas of investment in human capital and their sources;
 - depending on the purpose of investment in human capital;
 - the economic effect of investing in human capital.

If we analyze the structure of human capital, it is represented by two main components: the capital of education and the capital of health.

The capital of education is formed during the period of training and consists of the necessary knowledge and skills acquired by a person, which are used by him for the production of goods and services and are sources of his income. Investment in education capital is necessary to transform the innate, natural qualities of a person into professional qualities that are in demand in the labour markets.

Health capital is an investment in a person, which is necessary to support and improve his health, as well as improve performance. Health is the most important element of human capital, since its level depends directly on how well and fully a person can carry out his / her activities and bring income to himself / herself and his / her family, employers and the state [175].

Health capital, being a special category of human capital, has the following distinctive qualities [175]:

- health, unlike education, cannot be fully restored or acquired in a short time. In addition, capital health instantly destroyed in connection with unforeseen incidents, for example, in connection with accidents or disasters.
- trait due to heredity or predisposition to a certain kind of disease, while the level of education is subject to a significant increase through the acquisition of new knowledge, developing skills and abilities.
- health is the capital of the individual, even in the absence of its realization, that is, employment.

It should be noted that until recently, the most actively conducted research and development related to the capital of education. Today,

however, more and more attention is being paid to health capital, which is an integral and basic part of human capital.

Some scientists, in addition to education and health capital, also include biological or natural capital, family capital and cultural capital in human capital.

The natural capital of a person implies biologically inherited abilities of an individual, which are transmitted to him at birth, which include mental and intellectual abilities of a person, as well as his health, obtained from parents.

Family capital includes education, motivation, spiritual values passed down from generation to generation.

The capital of culture has a close connection with the capital of the family and is determined by its culture, as well as the habitat and personal cultural preferences of the person [21].

Individual, corporate and national human capital are distinguished by forms of ownership.

The individual human capital represents the accumulated stock of knowledge, skills, professional qualification of the person allowing him to receive the additional income.

Corporate human capital (human capital of the enterprise) is expressed in the presence of highly qualified personnel, computer and information technologies, know-how, increasing the efficiency of the enterprise.

National human capital, or the capital of the country, includes labor resources, competitive production, innovative technologies that ensure the competitiveness of the country in the global market in the context of globalization [81].

The above types of human capital by form of ownership are shown in the figure 1.1.

The classification of human capital by levels of economy is represented by the following gradation [106]:

- micro level: individual human capital characteristics of individual human capital;
- meso-level: corporate human capital characteristics of the human capital of the enterprise;
- macro level: national human capital characterization of human capital at the country level.

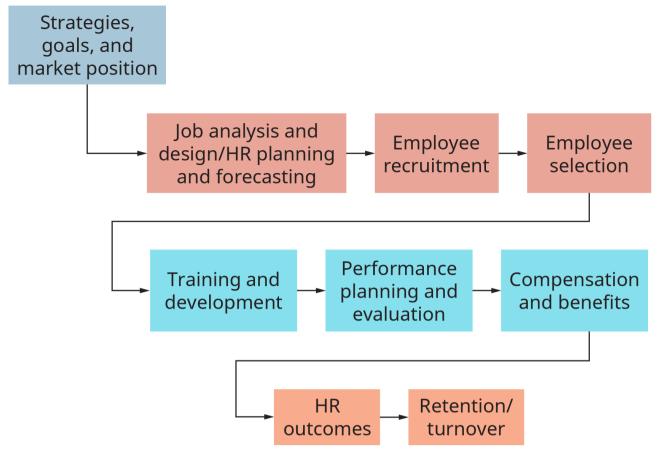


Fig. 1.1. Classification of human capital by form of ownership [81]

This classification is most often used in the analysis and evaluation of human capital. Each level is characterized by an appropriate set of indicators.

For an individual employee in the evaluation of human capital can be used as natural indicators (qualifications, work experience) and cost (personal expenses for education and profession, income growth as a result of refresher courses and retraining).

To assess the human capital in the enterprise as natural indicators, you can use the number of employees, their professional and qualification composition, product quality, the amount of time worked, and the cost of training and advanced training of employees, productivity of employees, profit growth of the enterprise as a result of retraining of personnel as a set of cost indicators.

At the macro level, the natural indicators are the number of employed and unemployed, the professional and qualification structure of the total labor force, the expected duration of the working period of life, and the cost - the loss of GDP from the non-participation of the unemployed in economic

activity, labor productivity, the volume and share of costs for education and health care in the Federal budget [36].

Investments or investments are necessary for the formation and accumulation of human capital. Depending on the direction of investment in human capital, the following types of expenses are allocated [178]:

- education costs: first of all, the costs of higher education,
 advanced training, retraining, on-the-job training;
- spending on preservation and maintenance of health: include the totality of expenditures that affect life expectancy, standard of health (cost of medical care, health insurance, disease prevention, improvement of living conditions);
- mobility costs associated with the migration of people in search of a better job.

The above costs can be presented at the macro, meso and micro levels, as shown in Fig. 1.2.

A tentative decision tree for human capital

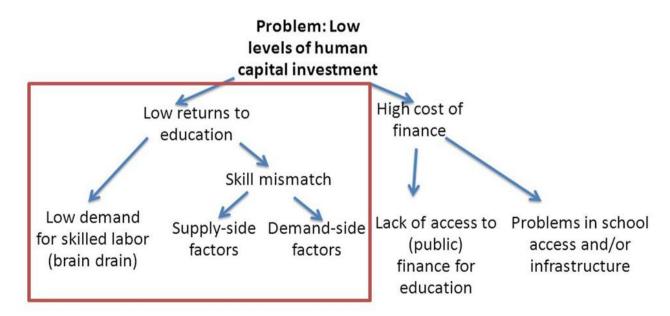


Fig. 1.2. Levels of investment in human capital and related costs [138]

Sources of investment in human capital are the following subjects of the economy [138]: public and private sector, family and individual. It should be noted that a significant share of responsibility for the formation and accumulation of human capital in the field of education and health lies with the state, which uses various methods of stimulation and enforcement measures aimed at the development and accumulation of human capital of the nation.

The above-mentioned subjects of investment in human capital and their functions are presented in Fig. 1.3.

Rates of return to human capital investment

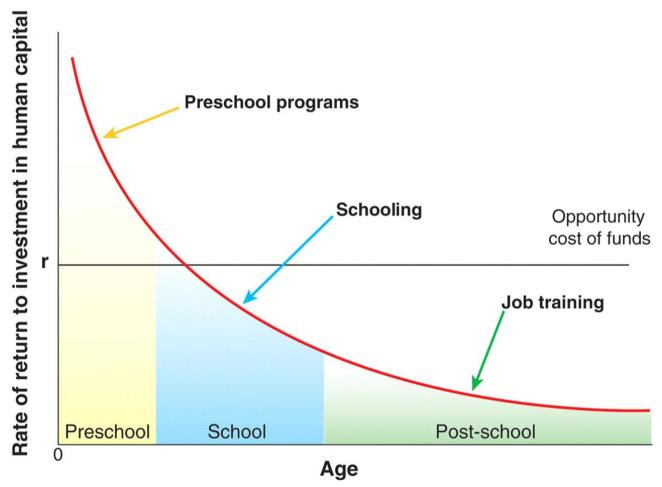


Fig. 1.3. Subjects of investment in human capital and their functions [138]

Subjects of the economy have different assessments of the economic effect of investing in human capital.

For an individual, the economic effect of investments in human capital will be an increase in the level of income, the acquisition of competitive advantages in the labor market.

The state seeks to achieve high rates of economic growth in the implementation of investment in human capital.

Enterprises see the effect of investing in human capital in increasing the productivity of workers, profit growth, increasing the level of competitiveness in the market [139].

In research practice distinguish between internal and external (external) effects of investing in human capital.

The internal effect of investment in human capital is obtained on the one hand directly by its owner - the individual, and on the other - the investor.

The external effect of investing in human resources goes to third parties, for example, investments in higher education of a student are carried out without direct financial participation of the University, but provide an inflow of funds to the latter [80].

There are also negative (destructive) and positive (creative) effects of investing in human capital.

The negative effect is understood as human capital, which does not give a positive return on investment in it at any level of the economy. People with such human capital include the unemployed, criminals and corrupt officials. In addition to the negative impact on society and the economy, additional funds are required for human reorientation.

The concept of "inefficient investment in human capital" is closely related to the concept of negative effect, which is determined by the investment in inefficient projects: for example, in the education of a person who is unable to learn, the purchase of substandard medicines, investment in low-efficiency R & d.

The positive effect of investing in human capital arises from the increasing return on investment. To people who possess positive human capital can be attributed to professionals in the business, talented people in various fields [20].

There are also consumer and investment effects of investing in human capital.

The consumer effect is associated with obtaining utility in the process of investment: for example, in the process of learning there is communication with peers, obtaining new knowledge, when doing sports, people get positive emotions from playing in a team, visiting art exhibitions, the individual gets aesthetic pleasure.

The investment effect is related to the benefits that a person, an enterprise and the public sector can get after the end of the investment

process: for example, obtaining a diploma is possible after graduation, improving health - after treatment [46].

Thus, we can distinguish the specific features of investment in human capital, which distinguish them from other types of investment:

- investments in human capital are long-term: the period of investment in education is about 15-20 years, and investments in health are made during the entire period of human life [48];
- the return on investment in human capital is directly determined by the life expectancy of the individual, in particular the length of the working period;
- human capital is accumulated for the whole period of life of the individual, but is subjected to a physical and moral wear and tear: aging of the human body, the obsolescence of knowledge and the reduction of the value received by the employee education.
- investments in human capital are the most profitable in comparison with investments in other forms of capital, as they allow to bring utility to each subject of the economy: they contribute to the growth of employees ' incomes, increase the level of competitiveness of the enterprise, increase the welfare of society.

As a result of the study of human capital, its structure, factors of formation, distinctive features and properties, it can be concluded that human capital is a complex economic category and requires careful study and analysis.

Currently, there are many approaches to the classification of human capital, which are poorly interconnected, which means that the process of research and analysis of human capital is much more complicated. Therefore, in the future it is necessary to develop a unified system of classification of human capital, which will avoid difficulties in its evaluation.

1.3. Evaluation of the connection of human capital with innovation in the development of the enterprise

To date, the innovative development of the enterprise is not provided by the previous experience in the field of human resource management, based on traditional methods. The accumulation of human capital is due to the continuous growth of knowledge, skills, production experience and qualifications of workers throughout their lives. A special role in this process is assigned to higher professional education, designed to form professional, special and innovative competencies of employees.

As mentioned above, the achievement of competitive advantage of the company is largely provided by knowledge and innovation, the source of which is embodied in its employees 'human capital. The optimal use of human capital in the enterprise involves two main areas [126]: improving the use of the working time Fund (increasing labor productivity) and reducing labor costs per unit of production.

Increase of labor productivity at the enterprise is impossible without investment in fixed capital and, especially, in human capital, as it is the level of the latter that determines the degree of success of innovation, as well as the efficiency of the use of fixed capital.

The main effect of investing in human capital is the highly productive work of each employee, which confirms the positive correlation between the level of human capital development and employee payment [174]. It can be concluded that the greater the amount of accumulated human capital, the higher the productivity and economic growth rates.

The impact of investment costs on the economic growth of the enterprise is shown in Fig. 1.4.

In developed countries, the analysis showed that the main condition for economic growth is the accumulation and preservation of human capital, as well as its further development and multiplication.

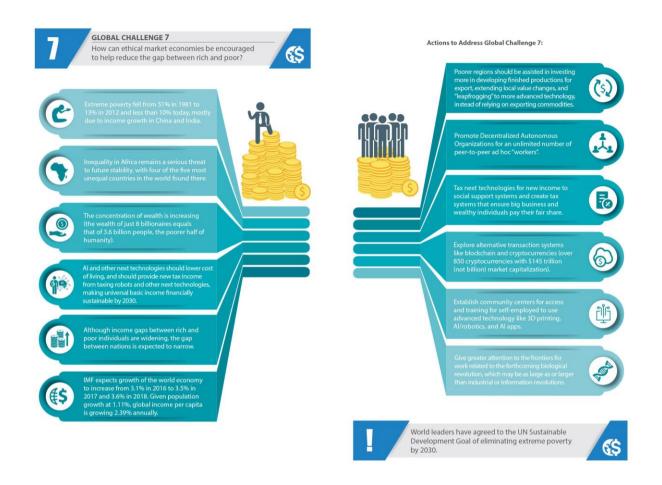
Experts of the world Bank, who surveyed 192 countries of the world, found that 16 % of economic growth in countries is due to investments in fixed (physical) capital, 20 % - allocated to natural capital, and 64 % is associated with the level of development and the quality of human capital [19].

In such countries as Germany, Switzerland and Japan, only 14% of the national wealth is formed at the expense of human capital, which is primarily due to the high risks associated with investing in human resources development for quite a long time [19].

In table. 1.1 data on the structure of state budget expenditures of some countries of the world are given.

According to table. 1.1 it can be noted that in developed countries most of the budget is spent on the maintenance and development of the main

components of human capital - social protection, health, education, housing and communal services.



Source: compiled by the authors [48]

Fig. 1.4. The impact of investment costs on the economic growth of the enterprise

For example, in Germany and France the share of funds for social protection of the population is almost half of the state budget - 43.3 % and 43.1 %, respectively, and in Canada, the Netherlands and the UK about 20 % of the state budget is spent on health care.

In Russia, on the contrary, budget allocations for the development of human capital are small, as the majority of monetary resources are directed to the maintenance of the state apparatus and the defense complex.

Analysis of the data table. 1.1 it can be concluded that the allocation of state budget funds by developed countries is aimed at investing human resources rather than fixed capital.

Table 1.1. The structure of state budget expenditures by functional type, in %[137]

	Year	Public administration bodies	Defence, public order, security	Economic services	Environmental protection	Utilities sector	Health	Recreation, culture, re- Ligia	Ed	Social protection
Russia	2016	37,8	12,0	8,4	0,2	2,3	3,4	1,1	2,2	32,7
Austria	2016	12,9	3,9	1,2	0,8	0,7	15,8	2,4	9,8	42,8
Belarus	2016	8,5	7,5	12,5	0,2	6,1	12,2	3,1	13,6	36,4
Germany	2016	13,4	5,9	7,1	1,4	0,9	16,3	2,3	9,6	43,2
Latvia	2015	13,9	8,2	11,5	1,9	2,6	10,3	4,4	16,3	31,0
Lithuania	2015	12,4	8,4	10,4	1,5	0,9	16,5	2,7	15,5	31,8
Netherlands	2016	9,9	7,0	9,0	3,1	0,7	17,7	3,1	12,2	37,3
Poland	2015	11,8	9,1	11,1	1,5	1,7	11,2	2,7	12,8	38,3
Britain	2015	10,6	9,6	7,1	1,8	1,1	17,8	1,5	12,0	38,4
Ukraine	2016	13,9	13,6	6,3	0,6	1,8	7,9	1,8	13,4	40,6
France	2015	11,0	5,9	10,0	1,8	1,9	14,3	2,3	9,6	43,1
Finland	2015	14,9	4,5	8,3	0,4	0,7	12,6	2,6	11,0	44,9
Kazakhstan	2016	15,3	10,9	13,5	0,2	5,4	11,0	3,5	17,7	22,5
China	2015	8,6	8,6	27,7	2,3	8,2	8,9	1,5	12,3	22,0
USA	2016	14,2	13,9	8,8	•••	1,3	24,4	0,7	16,1	20,6

The result is a high level of economic development and quality of life. In this regard, it is particularly interesting to study the impact of the main factors of human capital on the economic growth of the country. To this end, a correlation and regression analysis of the dependence of economic growth on some components of the knowledge economy based on statistics.

Economic development of the country is usually measured on the basis of GDP per capita in a comparable form of the study period. Independent variables that directly affect the dynamics of GDP, selected indicators that reflect the amount of investment in fixed capital, tax arrears and fees to the budget of Russia, the size of the state budget expenditures on health and education, the number of employed people with higher education, the indicator of morbidity for major diseases.

The corresponding multiple regression equation is represented by the formula:

$$Y = \beta_0 + \beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5 + \beta_6, \tag{1}$$

where Y - GDP per capita, RUB/person.;

 β_0 - estimation of the I-th factor;

 X_1 - investments in fixed capital, mln rub.;

X₂ - debt on taxes and fees to the budget of the Russian Federation, billion rubles.;

X₃ - Federal budget expenditures on health care, billion rubles.;

X₄ - Federal budget expenditures on education, billion rubles.;

 X_5 - number of employed population with higher education, thousand people.;

 X_6 - population morbidity by main diseases, thousand.

Thus, the task is to find the dependence of GDP per capita on different types of resources on the basis of statistics (Rosstat) for 2011-2017 in the Russian Federation. The comparability of the sample data is ensured by the transition from nominal to real indicators, taking into account inflation in each period. Calculations are implemented on the basis of Excel.

The least squares method (OLS) was used to construct the multiple regression equation. The regression equation presented by the formula is obtained based on the results of OLS evaluation:

$$Y = -71263,6 + 0,02X_1 + 61,43X_2 - 47,87X_3 - 273,8X_4 + 8,1X_5 + 0,89X_6$$
 (2)

The reliability of the regression coefficients was carried out using student's t-test, and the model as a whole using Fisher's F-test. The resulting model was significant only for two coefficients with such explanatory factors as investment in fixed capital and tax payments to the state budget of the Russian Federation. But in General, the model is adequate in relation to the sample data, because $F_{\text{nab.}} = 40,39 \; F_{\text{Crete}} = 3,22$.

The obtained model confirms the significance of all coefficients for explanatory variables. The greatest impact on the productive feature - GDP per capita – had the Federal budget spending on education and the number of employed people with higher education.

The regression model as a whole is significant ($F_{\text{nab.}} = 40,39 > F_{\text{Crete}} = 3,22$; p-value = 3,62*10-8 < 0,05). Coefficient of determination R2 he showed that the change in the growth rate of GDP per capita by 94 % is caused by the influence of investments in fixed capital, state budget expenditures in education, as well as the number of employed people with higher education.

As a result of the regression analysis, it is proved that the increase in the number of employed people with higher education and the growth of investment in fixed assets have a positive impact on the level of economic development of the country. The growth of Federal budget spending on education does not have a significant impact on economic growth.

Domestic researchers have long noted the crisis situation with human capital in Russia. Thus, according to S. A. Kurgan, among the most notable manifestations of the crisis are the following [83]:

- devaluation of human capital in the economically active population, the emergence of intellectual unemployment;
- reduction of income of persons with higher education, forcing them to change their profession and find additional income;
- "brain drain" (migration of scientific personnel from Russia abroad);
- shortage of teaching staff capable of training qualified personnel;
- growth of social and psychological tension in society due to the crisis in the economy.

Taking into account the above-mentioned problems typical for modern Russia, it can be concluded that for the success of an innovative breakthrough in our country it is necessary to simultaneously address three key tasks: innovative development, technological modernization of industry and human capital development. However, at the moment, the investment policy of the Russian Federation is focused on the short-term effect: it does not take into account the loss of both fixed capital and human capital, the loss of which can lead to the collapse of high-tech industries, the restoration of which is extremely problematic even with a significant state budget.

In General, the selected indicators allowed to analyze the efficiency of investments in human capital and show the dependence of economic growth on the quality of such investments.

According to the results of the analysis, the tools by which education has an impact on economic growth and productivity are identified:

- the work of each person due to education becomes more productive, increases the ability of a person to perform both standard tasks and functions, and new, non-standard;
- a person grows the ability to establish contacts in society and the ability to adapt to the surrounding conditions and structure, which

makes an educated person more flexible and able to make the right decision in time:

- in a society with the growth of education of the population decreases the level of innovation resistance, which contributes to the rapid and easy implementation of innovations;
- education itself (and, above all, higher education) contributes to
 the development of new technologies, innovations and innovations;
- education creates "human capital", which is one of the factors of modern production.

Taking into account the above, we conclude that at the moment the competitive advantage of the economy and the possibility of its modernization is largely determined by the accumulated human capital.

In Russia, human capital as a factor of innovative development should be given more attention to achieve high rates of economic growth comparable to developed countries.

CHAPTER 2. THE ANALYSIS OF EXISTING METHODS OF EVALUATION OF INVESTMENT IN HUMAN CAPITAL

2.1. Modern methods of estimation of investments in human capital at the industrial enterprise

Currently, human capital is not reflected in the balance sheet of the company, only intellectual capital in the form of intangible assets is taken into account. As a result, the real market value of the enterprise is distorted and there is a need to assess the value of human capital and the funds invested in it. To do this, different methods are used, similar to the methods of assessing real investment.

The economic literature provides a considerable number of approaches and methods for assessing investments in human capital. The variety of approaches to the measurement of human capital has led to the following gradation of assessment levels [106]:

- micro-level: the characteristics of human capital at the level of the individual and the company;
- meso-level: assessment of human capital of large organizations and regions;
- macro level: characterization of total human capital in the national economy;
- mega-level: assessment of human capital on a global, global scale.

Each level of assessment is characterized by an appropriate set of indicators.

In this study, the most practical interest are the methods of evaluation at the micro level, that is, the evaluation of the effectiveness of investment in human capital of an enterprise or organization. Consider the most common of them.

Expert method of quality assessment. This method evaluates the qualitative characteristics of specific employees, as well as the labor staff of the enterprise as a whole. Qualitative characteristics of the employee are presented by such indicators as the level of education, work experience, qualification category, ability to creative, non-standard thinking. The evaluation procedure consists of three stages [183]:

- the definition of key indicators that establish the contribution of employees to the human capital of the enterprise, it should take into account the belonging of employees to different types of personnel (production or service) and management levels;
- establishment of significance coefficients (weight fractions) for each indicator;
 - development of a score scale for each indicator.

Then the results are analyzed and the average score for each employee is set. The obtained values are compared with the reference values, which were obtained empirically: the summation of points for all quality indicators.

The expert method has the following disadvantages: the subjectivity of the estimates and their low reliability, the complexity of the evaluation procedure and processing of the data. The first shortcoming is difficult to overcome, as it is necessary to develop a single scale of assessments for heterogeneous indicators. The second drawback - the difficulty of collecting data for analysis and processing - can be overcome if the company has implemented a system of KPI (key Performance Indicators) - a system of Key performance Indicators that set performance indicators of staff. This system is widespread abroad and is becoming more and more popular in Russia [176].

The method of valuation of human capital on the basis of cost determination it is one of the most common methods in practice. It is carried out in two ways: direct and indirect.

The indirect method involves comparing the market value of the enterprise with the cost of its replacement. D. Tobin, Nobel prize winner in Economics, proposed the coefficient q, calculated as the ratio of the market value of the object of evaluation to the cost of its replacement. The replacement cost includes the cost of creating the enterprise. If q < 1, and the cost of the object of evaluation is lower than the cost of its replacement, then this object should not invest due to low human resources. If q > 1, the estimated object has a high level of human capital and is attractive for investment.

On the basis of the direct method, the total costs necessary for the formation of human capital in the enterprise are determined: the costs of paying employees, improving working conditions and life protection, the costs of training and improving the skills of employees, improving workers

by providing permits to sanatorium institutions [177].

The nominal (potential) annual value of human capital in the enterprise is determined by the formula (3) [73]:

$$K_n = \frac{CH_n \times (F_0 + F_m + Z_d + Z_0)}{CH_f},$$
(3)

where K_n – the cost of human capital of the enterprise, rub.;

 CH_n - normative number of personnel, people.;

 F_0 – planned or actual annual payroll of all industrial and production personnel of the enterprise, rub.;

 F_m – planned or actual annual Fund of material encouragement of employees of the enterprise, rub.;

 Z_d – annual expenses for payment and encouragement of labor of employees of the enterprise from additional sources of financing (not from funds F_0 and F_m), for example, from the income received for performance of unscheduled orders or non-core works, rub.;

 Z_0 – annual costs of training, professional development of employees of the enterprise, rub.;

 CH_f – the actual average annual number of personnel of the enterprise, people.

The advantage of using this method is the simplicity of calculation, the disadvantage is the incomplete accounting of the real cost of human capital of the enterprise. Also, a significant drawback of this method is that it does not take into account the effectiveness of the cost of the formation and development of human capital: for example, two people, using one type of training and carrying out the same costs, can get completely different results.

Method for determining initial and recovery costs of staff it is based on the model of Eric Flamholz [179], developed in the early 60s. This method takes into account the costs of the company, not related to the maintenance of personnel, and with its acquisition and replacement. Initial costs are the costs of hiring staff and the costs of their initial training, recovery costs are direct costs in the form of payments to employees upon dismissal and indirect costs associated with a decrease in employee productivity before dismissal. A significant disadvantage of this method is the difficulty of calculating indirect recovery costs.

Method of finding the individual cost of the employee [152]. This method is developed by scientists from the University of Michigan and

uses the concept of conditional and realizable value. The individual value of an employee is determined based on the likelihood that the employee will remain in the organization for a certain period of time. The expected realizable value is represented by two elements: the expected notional value and the probability of the employee continuing to work in this organization.

The expected realizable value is determined by the formula (4):

$$PC = UC \times P_0 \tag{4}$$

where PC – expected realizable value, rub.;

UC – the expected conditional value, rub.;

 P_{o} – the probability that an employee will remain in the organization for some period of time.

The probability of the employee leaving the organization (turnover rate) is determined by the formula (5):

$$P_{T} = 1 - P_{O} \tag{5}$$

where P_T – probability of employee leaving the organization.

The opportunity cost of flow is calculated by the formula (6):

$$AIT = UC - PC = PCxP_{T}$$
 (6)

where AIT – the opportunity cost of turnover, rub.

To measure the individual conditional and realizable values of the employee in cash, a probabilistic model was developed, the algorithm of which consists of the following actions [152]:

- establishment of sequence of stages (positions) of career growth of the employee;
- assessment of the cost of each stage of career development for the company, or finding the position value of the employee;
- forecast of the expected period of work of the employee in this organization;
- predicting the expected career path of the employee before dismissal, taking into account the probability of the employee's occupation of each position in the future;
- discounting the expected future income to determine the present realizable value of the employee.

The advantage of this method is that it uses a probabilistic component that takes into account the possibility of dismissal of an employee from the organization. As a result, this method can be used when selecting one of several candidates for the position: the advantage should be given to the person with the highest realizable value.

The disadvantage of this method is that it allows you to approximately, rather than accurately predict the individual cost of the employee, as the probability of leaving the organization depends on many different factors, most of which are almost impossible to measure. For example, how can you calculate the probability of a conflict between an employee and a Manager? In addition, for various reasons, the employee may be for a long time at a low stage of the career ladder and if he has high ambitions can resign from the organization and try to realize themselves in another enterprise.

Based on this method, we can conclude that not always the employee with high potential is the most valuable for the enterprise.

Method of estimation of competitive cost of human capital it involves the assessment of costs and potential damage to the company, with the possible dismissal of the employee [141]:

- personnel costs of a leading competitor in the industry (including production capacity);
- the amount of bonuses to the employee who can provide a competing company for his transition to them, obtained by expert;
- costs of the enterprise find an employee that can replace the resigned employee;
- economic damage caused to the company during the period of search for a new employee, a decrease in the volume of production of goods or services, the cost of training a new employee, a possible deterioration in the quality of products when taking a new employee;
- predicting the loss of unique innovative products, skills and potential that will be transferred to the competing enterprise together with the employee;
- expected losses of a part of the market, growth of sales of the competitor and strengthening of its influence in the market.

This method is more applicable to the assessment of the human capital of the "white collar" as the most qualified employees of the enterprise, as currently there is a trend of transition of highly qualified personnel from Russian companies to foreign due to higher wages. The advantage of this method is that it provides a more effective assessment of the cost of human capital of employees, the disadvantage is the use of

expert method in the evaluation, which can contribute to the production of subjective data.

Cost method, developed by K. N. Chigoryaev [163], based on the valuation of human capital in three main groups of costs: the wage Fund, the cost of health capital and the cost of intellectual capital. The cost of intellectual capital can be attributed to the cost of training and advanced training of employees, research and development. The cost of health capital is represented by investments in employees to maintain their health and improve their performance, for example, the organization of preventive examinations, health care, health insurance.

The advantage of this method is the relative simplicity of calculations when using it. However, as it is known, the need for health services increases with the deterioration of human health, therefore, there is no direct link between the volume of investment in health and health capital.

The method of estimation of human capital based on goodwill of an employee was developed by V. Alaverdyan got its development and research, N. Toughskins [152].

The estimated cost of the employee is determined by the formula (7):

$$S = Z_n \times G_{chk} \tag{7}$$

where S – estimated cost of the employee, rub.;

 Z_p – estimated or paid employee salary, rub.;

 G_{chk} – goodwill (employee human capital ratio) .

G. N. Tuguskina [46] defines the value of the employee's human capital as the product of his salary and goodwill, taking into account the investments made in his human capital during the period of work in the organization.

The cost of human capital of the employee is determined by the formula (8):

$$S = Z_p \times G_{chk} + I \times t \tag{8}$$

where S – cost of human capital of the employee, rub.;

I – investments in human capital of the employee, rub.;

t – period of work in the organization, years.

Goodwill of an employee is calculated according to the formulas:

$$G_{chk} = I_{pr} + I_{st} + K_{pp}$$

$$(9),$$

$$I_{pr}$$
=Profit/full-time employee (10),

$$I_{st} = Staff costs / full-time employee$$
 (11),

$$K_{pp} = O_{br} x (1 + C/4 + B/18)$$
 (12),

where I_{pr} - profit index;

 I_{st} - human capital cost index;

 K_{pp} - the coefficient of professional prospects, takes into account the level of education of the employee, his experience and age;

 $O_{\rm br}$ – education level assessment equal to 0.15 for employees with incomplete secondary education; 0.6 for employees with secondary education; 0.75 for employees with secondary technical and incomplete higher education; 1.00 for employees with higher education working in the specialty;

C – work experience of the employee in the specialty (in accordance with the recommendation of the research Institute of labor is divided into 4, as it was found that the length of service is 4 times less impact on productivity than the level of education);

B- the age of the employee (according to the recommendation of the research Institute of labor is divided by 18, with the upper limit of the age for men is 60 years, for women - 55 years).

The advantage of this method is taking into account when assessing the human capital of the employee of the enterprise level of his education, work experience and age, but does not take into account the physical and mental health of the employee, which can significantly affect his work experience.

Method of capitalization of future income is the most common method in which the value of human capital is determined based on the economic effect of its use, that is, the total income received.

The basis of this method is the statement about "preference of goods in time" [184]: for a person the value of a certain amount of money or a set of goods in the present time is higher than in the future. In other words, the measurement of the value of human capital is the determination of the present, reduced to the current time value of the future income stream.

Each person can be seen as a combination of a unit of labor and the amount of human capital embodied in it. Human capital generates income, which is defined as the discounted wages earned by an employee during his or her working capacity. Employee income from the use of their human capital is calculated as a weighted average of annual earnings expected during the working period, and is a permanent or permanent income.

The total value of human capital is determined by the formula (13) [43]:

$$\frac{W_1}{(1+r)} + \frac{W_1}{(1+r)^2} + \dots + \frac{W_1}{(1+r)^n} \tag{13}$$

where W_i – expected annual earnings of the employee from the use of human capital, RUB.;

n - life expectancy, years;

 Γ – interest rate, interest.

Thus, the main idea of human capital assessment by the method of income flow measurement is reduced to the discounted value of all human earnings during his life.

This method is quite effective when it is necessary to assess the human capital of one person or the effectiveness of investments in it. However, there may be difficulties in assessing the human capital of large groups of people, and is acceptable in this case will be to use the approach based on the construction of a special indicator of human capital, for example, the human development index (HDI).

Among the practical methods of assessing the effectiveness of investments in human capital at the enterprise, the method proposed by the British pharmaceutical Corporation "upjon" is interesting [125].

Under this method, investments in human capital are understood as direct costs (wages, bonuses, benefits, insurance premiums, training and advanced training of employees) and indirect costs (costs of hiring staff, staff turnover, rental of office space and equipment of workplaces).

Data on direct costs of the enterprise can be taken from its financial statements and various payment documents. To account for indirect costs, the average total direct and indirect cost ratios for different categories of staff are determined. For example, for the functional specialists of the Corporation "upjon" on average one dollar of direct costs accounts for \$ 1.37 indirect costs [125].

The total investment in an employee who is in a particular position in the organization is determined by the formula (14):

$$CHKR=PS-SUZ+SPZ+CHZ+a4xSI$$
 (14)

where CHKR – the cost of human capital of an individual employee of the organization;

PS – the initial cost of the employee's human capital;

SUZ – the cost of outdated knowledge of the employee is determined by the formula A1 x PS;

SPZ - the cost of acquired knowledge, skills and abilities of the employee is determined by the formula $A2 \times PS$;

CHZ – the cost of implicit knowledge and abilities of the employee is determined by the formula A3 * PS;

SI - cost of investment in this employee;

a1, a2, a3 и a4 – the weight factors determined in an expert way.

In particular, investments in the senior designer of the Corporation "upjon" for five years of work in this position at a salary of 3 thousand dollars. amounted to 294 thousand dollars. and in order to get them paid off and brought a profit above the Bank interest, you need to present value in the amount of 348 thousand. [125].

Of course, the above methods are not a complete list of all existing methods for assessing the effectiveness of investment in human capital at the micro level, but it can be understood that today there is no holistic method of determining the value of human capital in the enterprise. The analysis of the main methods of human capital assessment showed that all the considered approaches have shortcomings. Also, the difficulty of determining the value of human capital and the effectiveness of investments in it is largely due to the lack of statistical data necessary for the analysis.

Thus, it can be concluded that none of the considered methods of assessing investments in human capital is universal, which is explained by the complexity of human capital as an economic category. The most appropriate method depends on the conditions of the enterprise, its industry. In the future, it is necessary to develop a comprehensive methodology for assessing human capital, including both cost and natural indicators, due to the financial results of the use of human capital and its intangible, intangible nature.

2.2. SWOT-analysis of investment in human capital of an individual and an enterprise

The formation and accumulation of human capital is due to investments, which include all types of costs in cash or other form. Before investing in human capital, it is necessary to assess the expected economic efficiency of this type of investment for both the individual and the enterprise. To do this, the various methods discussed in the previous paragraph are used. However, it is necessary to highlight such a method of

determining the effectiveness of investment in human capital as SWOT analysis.

SWOT analysis is a method of strategic planning, which is used to assess the factors and phenomena affecting the enterprise. All factors are divided into four categories: strengths (strengths), weaknesses (weaknesses), opportunities (opportunities) and threats (threats). This method includes the definition of the goal and the identification of internal and external factors that contribute to its achievement or complicate it [107].

We will conduct a SWOT analysis of investment in human capital for an individual and an enterprise.

In modern conditions, the main characteristic of the economic development of society is the direct dependence on the emergence of new knowledge, which is the source of innovation. The processes of the emergence of new knowledge and the transfer of existing knowledge are closely linked to the development of education, and therefore to the accumulation of human capital. This allows us to consider it as the main factor in the economic development of society in the period of formation of the knowledge economy. Therefore, an individual for a highly paid position in the company, it is necessary to have a high level of accumulated knowledge and skills that increase its level of competitiveness in front of other candidates.

Table 2.1 presents the socio-economic aspects of investing in human capital for the individual.

Investments in human capital give its owner, as a rule, a higher income in the future. For society, these investments provide long-term economic and social effects.

It should be noted that investments in human capital represent a good expendable: the average period of investment in education is about 12-20 years, and in capital health, the person makes investment in a lifetime. In addition, human capital is inseparable from the individual and differs from physical capital in terms of liquidity. Also according to E. B. Romanova depends on the decisions of the individual functioning of human capital and the degree of its impact, which is determined by the interests of man, his enterprise and preferences, material and moral interest, the General level of education and culture [135].

Table 2.1. SWOT- analysis of investment in human capital for an individual

Strength	Weakness
1. Accumulated and developed human	1. Significant expenditure on education
capital is a fundamental factor of	during the period of study and on
success in employment;	improving health throughout the life of
2. Return on investment - high return in	the individual;
the future;	2. Lack of funds for people from low-
3. Implementation in various fields;	income families;
4. Good health contributes to longer life	3. 3. The effect of investing in human
expectancy.	capital stretched over time;
	4. Imperfection of existing institutions
	of society.
Scope	Threats
1. Wide access to interesting and	1. Human capital is subject to physical
promising work;	and moral deterioration over time;
2. High prestige of the profession,	2. Increased costs of opportunistic
increased pleasure from the activities;	behaviour.
3. Continuing education as a	
permanent investment in human capital	
development.	

In carrying out activities, the employee has the opportunity to continuously improve their educational level, studying at work and in educational institutions. At the same time, it will develop its human capital, investing in it and waiting for the future return on investment. The expected return on investment in human capital includes a higher level of income, satisfaction from the chosen profession, improvement of working conditions and more.

The weaknesses of the process of investing in human capital can be attributed to the significant costs of the individual to receive education, improve their skills, maintain health. A possible solution is to provide a system of long-term loans, develop new ways of financing educational institutions, participate in state programs of higher education for students from low-income families.

One of the main threats to investing in human capital is the cost of opportunistic behaviour in education and health facilities. Form costs - a moral hazard arising from the conclusion of a contract where the individual relies on the good faith of the other party, and obtaining reliable information is costly or virtually impossible.

Also to the threats of investment for the individual is that his human capital is subject to physical and moral deterioration over time. Physical

wear is associated with aging of the human body. Investments help to reduce the depreciation of human capital, as well as increase the period of working age of the individual. Moral depreciation of human capital is associated with the fact that in the process of an individual's life his knowledge, skills and abilities become obsolete. It is empirically proved that in modern society the term of renewal of knowledge is not more than 5 years, and not only the stock of knowledge, but also experience is depreciated [7].

Consider the process of investing in human capital on the part of the enterprise and identify the strengths and weaknesses of this process, as well as opportunities and threats.

Table 2.2. SWOT- analysis of investment in human capital for the enterprise

Strength	Weakness				
1. The high share of human capital in	1. High costs of training, professional				
the assets of the enterprise is a	development and retraining of employees;				
fundamental factor of its economic	2. Continuity of investment in the human				
growth;	capital of employees, as their knowledge,				
2. Competitive advantage in the form	skills and abilities become obsolete over				
of highly qualified employees;	time;				
3. Return on investment - high profit	3. Freedom of movement of labour				
of the company in the future;	reduces the willingness of employers to				
4. Long-term economic and social	invest in its development;				
impact.	4. Long-term expectation of the effect of				
	investing in human capital of employees.				
Scope	Threats				
1. Access to new markets;	1. Dismissal and departure to another				
2. Possibility of production of high	organization of a highly qualified				
quality products, competitive in the	employee in whom significant funds were				
market;	invested;				
3. Production of innovative products.	2. Wear and tear of human capital over				
	time.				

Table 2.2 presents a SWOT analysis of investment in human capital for an enterprise.

At present, the competitiveness of enterprises is largely determined by their ability to produce and produce innovative products, which is impossible without a high level of accumulated human capital. Therefore, it is important for the company to invest in the human capital of its employees in order to obtain high profits in the future. The presence of highly qualified personnel gives the company the opportunity to produce high quality products, competitive in comparison with analogues, as well as contributes to the development of innovative products. Therefore, there is a possibility of output of an enterprise into new markets, providing it with additional income and increase profit.

However, the process of investing in the human capital of the company's employees also has weaknesses, expressed in the high costs of training, advanced training and retraining of employees, which not every enterprise can afford.

An important negative side of the process of investing in human resources is its continuity, as the knowledge, skills and abilities of employees over time become obsolete and require updating.

It should be noted that the effect of investing in human capital can be obtained not at the moment, but in the foreseeable future, while investments must be made in the present time. Freedom of movement of labour also reduces the willingness of employers to invest in its development.

At the same time, when investing in human capital, the employer may be afraid of dismissal and departure to another organization of a highly qualified employee, in which significant funds have been invested, which will certainly have a negative impact on the activities of the enterprise as a whole. The negative feature of human capital is its moral and physical wear and tear over time, which is expressed in the additional costs of the enterprise to improve the health of employees, retraining and improving their skills.

Thus, we have considered the process of investing in human capital both from the position of an individual and from the side of the enterprise and identified the strengths and weaknesses of this process in both cases. Despite the existence of negative aspects of investment, human capital is the main factor in improving the competitiveness of the enterprise and brings a high return on investment in the future. The shortcomings of this process should be mitigated by the improvement of the institutional environment, as well as the implementation of Priority programs of the government of the Russian Federation.

2.3. Dynamics of investment in human capital in the Russian Federation

In the transition to an innovative model of economic development of Russia, special importance is given to human capital, defined as a set of innate abilities, skills, physical health and accumulated knowledge necessary to generate income for their owner.

The value of human capital as an efficient and difficult renewable resource is recognized not only at the enterprise level but also in the national economy. In this regard, the formation and accumulation of human capital through investments, which include all types of costs in monetary or other forms, is of particular relevance.

Depending on the direction of investment in human capital allocate spending on education, preservation and maintenance of health, improvement of living conditions, cultural level, social protection of the population.

The subjects of investment in human capital are the public and private sectors of the economy. It should be noted that a significant share of responsibility for the formation and accumulation of human capital in the field of education and health lies with the state.

Let us analyze the amount of public investment in human capital, using the data on the Federal budget of the Russian Federation, presented in table 2.3.

According to table 2.3, there is a gradual reduction in the Federal budget spending on human capital, which indicates the passivity of the state in the formation and accumulation of the latter.

The share of expenditures on health care, education, social security, housing and communal services is steadily declining, despite the "Concept of long-term socio-economic development of the Russian Federation until 2020 "adopted by the Government, in which improving the quality of life of the population is one of the main goals. At the same time, there is a fear that in the future the dynamics of reducing human capital spending will continue, which will negatively affect the country's economy in the long term.

After analyzing the data in table 2.3, it can be noted that the expenditures of the Federal budget of the Russian Federation during the analyzed period have the greatest weight of budgetary allocations for the

fulfillment of expenditure obligations in the areas of ensuring the defense capability of the national economy and social policy. This situation has developed due to the priority of financing of defense enterprises in order to increase military capacity. According to table 2.3 there is a positive trend in the increase in spending on national defense and social policy.

Minor changes took place in the structure of expenditures on the national economy - decreased by 0.9% in 2018 compared to 2012.

The budget expenditures have the lowest weight in education costs – 4.7 % in 2012 and 4.3% in 2018.d, as well as expenditures on health care and culture, the share of which decreased, respectively, from 4.8 % in 2012 and 3.2% in 2018 and 1.7 % in 2012 and 1.0% in 2018 (table. 2.3).

It is known that the formation of human capital is impossible without its owner, that is, an individual or a household. The household spends at the micro level necessary for the initial formation, maintenance and development of human capital. Consumer spending on education, health and cultural services is a direct investment in human capital. In the framework of this study, the analysis of the structure of consumer spending is of particular interest.

The structure of personal consumption largely reflects the level and nature of economic development, as it is comprehensively determined by the structure of production and foreign trade of the country on the supply side and the amount of income of the population and the level of social inequality on the demand side.

The aggregated data show that in 2000-2017 the consumption structure in the context of key groups of goods and services showed a noticeable volatility, but after 2005 it stabilized relatively. In particular, the share of non-durable goods declined from 59.3% in 2000 to 49.2% in 2017, the Share of services experienced fluctuations from 20.7% in 2000 to 31.7% in 2017 (Table 2.4). In General, by 2017, in comparison with 2005, the share of short-term goods in the structure of personal consumption increased by 2.2 p. p. relative to the level of 2008 to 6.2 p. p., and services — increased by 0.5 p. p. to 31.7%.

Table 2.3. Structure of Federal budget expenditures of the Russian Federation, 2012-2018

Type of	201	.2	201	3	201	4	201	5	201	.6	201	7	201	.8
expenditure	in	in %												
	billion	to												
	rubles	total	rubles.	total	rubles.	total	rubles.	total	rubles	total	rubles	total	rubles	total
Costs - total	12895	100	13343	100	14831,6	100	15620,3	100	16416		16420	100	16713	100
among them:														
national	1968,5	15,3	1849,3	13,9	3062,9	20,7	2324,2	14,9	2302,1	14	2460,1	15	2402,1	14,4
economy														
national defence	1812,4	14,1	2103,6	15,8	2479,1	16,7	3181,4	20,4	3775,3	23	2852,3	17,4	2827	16,9
national issues	1129,9	8,8	1211	9,1	1351,3	9,1	1117,6	7,2	1095,6	6,7	1162,5	7,1	1257	7,5
national security	1843	14,3	2061,6	15,5	2086,2	14,1	1965,5	12,6	1898,7	11,6	1918	11,7	1971,6	11,8
and law														
enforcement														
housing and	228,8	1,8	177,5	1,3	119,6	0,8	90,0	0,6	77,2	0,5	119,5	0,7	148,8	0,9
communal														
services														
education	603,8	4,7	672,3	5	638,3	4,3	610,8	3,9	597,8	3,6	615	3,7	722,6	4,3
culture and sport	213,1	1,7	240,1	1,8	315,6	2,1	163,0	1,0	147,5	0,9	185,8	1,1	158,9	1
health	613,8	4,8	502	3,8	463,7	3,1	516,0	3,3	506,3	3,1	439,8	2,7	537,3	3,2
social policy	3859,7	29,9	3833,1	28,7	3452,4	23,3	4265,3	27,3	4588,5	28	4992	30,4	4581,8	27,4
other expenses	622	4,8	692,4	5,2	862,5	5,8	1386,5	8,9	1427,4	8,7	1675,3	10,2	2105,8	12,6

Source: compiled by the authors [61, 62, 63]

Table 2.4. The structure of personal consumption of Russia, 2000-2017 years

	2000	2005	2008	2010	2014	2017
GDP, trillion rubles.	7,3	21,6	41,3	46,3	79,2	92,0
Remuneration of employees, %	36,5	38,1	43,1	38,9	40,4	40,6
Consumption, trln RUB-, including:	3,2	10,4	19,7	23,1	40,6	45,9
Durable goods (durable), %	9,5	13,8	16,7	13,7	14,9	12,0
Medium-term use goods (semi-durable), %	10,5	8,4	7,9	7,7	7,1	7,0
Short-term use goods (non-durable), %	59,3	46,6	43,0	46,9	46,5	49,2
including food and drinks	41,2	29,1	25,6	27,5	26,9	30,1
including alcohol and tobacco	11,0	7,4	6,3	6,7	7,3	7,5
including payment for services of the	1,0	1,1	1,1	1,1	1,1	1,1
education system						
including expenses for trips to health	1,2	1,3	1,3	1,3	1,5	1,7
resorts and recreation, tourism and						
medical services						
Including expenses for movies, theatres	0,3	0,5	0,4	0,3	0,4	0,4
and other shows						
Amenities, %	20,7	31,2	32,4	31,7	31,6	31,7

Personal consumption in Russia has been growing especially intensively for ten years, which corresponds to the period of high oil prices (2005-2014). The share of durable goods purchases peaked in 2008 (16.7%) and decreased to 12.0% by 2017 the share of non-durable goods and services have reached its maximum and minimum, respectively 2000

The structure of personal consumption in Russia is characterized by a low share of services — below the indicators of not only developed countries, but also the level of BRICS PARTNERS. Typically, these indicators reflect four factors:

- underdeveloped supply and high cost of services (aimed at the wealthy);
- limited demand due to attempts to save on services for purchases of goods;
 - a high proportion of the state (shareware) services;
- high share of the shadow sector in services (transport, education, health) not accounted for by statistics.
- Investment in human capital by households is very small. The share of expenditure on education and health in total expenditure in 2017 is only 1.1 % and 1.7 %, respectively.

The reduction of household expenditures on the purchase of durable goods (by 2.7 p. p.) and medium-term use (by 0.9 p. p.) from the level of 2008

indicates a decrease in household income and a reduction in secondary spending during the crisis.

The greatest weight in the structure of the population's expenses are the costs of buying food and paying for transport services, less significant are the costs of buying clothes and shoes, as well as payment for housing and communal services.

Thus, we have considered the main directions of investment in human capital at various levels of the economy and determined that in modern conditions human capital is a valuable resource for both the individual and the state as a whole. The subjects of the economy from investing in human capital receive an economic effect, which is manifested for the household in increasing the level of income for the state - in the growth of GDP, improving the competitiveness of the national economy.

In Russia, there is currently a reduction in spending on health care, education, housing and communal services, which negatively affects the formation and development of human capital, and, consequently, the level of innovation activity. The structure of the Federal budget expenditures of the Russian Federation is still dominated by the costs of the defense complex and national security of the country, which contribute little to the development and achievement of high rates of economic growth.

It is obvious that in our country at present there is a problem of low accumulation of human capital. One of the possible solutions to this problem is the introduction of humanitarian expertise, when all government decisions are tested to determine the impact on the human capital of the country. Thus, the immediate and long-term consequences of the adopted laws and reforms in terms of their impact on the state of human capital should be predicted.

CHAPTER 3. ECONOMIC ASSESSMENT OF EFFICIENCY OF INVESTMENT IN HUMAN CAPITAL

3.1. Analysis of investment in human capital of PJSC "POLYUS»

PJSC Polyus is the largest gold producer in Russia and one of the 10 leading global gold mining companies, the cost of production at the enterprises of which is one of the lowest in the world.

Polyus has the second largest gold reserves in the world (proven and probable reserves according to the international classification are 68 million ounces) — the Foundation of sustainable production growth.

PJSC "Polyus" was formed by reorganization in the form of allocation of gold mining assets of OJSC "MMC Norilsk Nickel (CJSC Polyus and its subsidiaries) into an independent public company in accordance with the decision of the General meeting of shareholders of OJSC "MMC "Norilsk Nickel" of September 30, 2005.

The official date of establishment of Polyus Gold is March 17, 2006 - the date of state registration of the Company. OJSC "Polyus Gold" was registered in Krasnoyarsk region.

PJSC "Polyus" is a 100% owner and the controlling owner of its subsidiaries, including OJSC "Lenzoloto" LLC "Lenskaya Zolotorudnaya company", OAO "Rudnik imeni Matrosova", JSC "Aldanzoloto" GRK", OJSC "South-Verkhoyansk Mining Company", OJSC "Yakut mining company".

The main enterprises of the company are located in the Krasnoyarsk region, Irkutsk and Magadan regions, as well as in the Republic of Sakha (Yakutia) and include 5 operating mines, gold deposits and a number of projects under construction and development.

PJSC Polyus being the leader of the Russian gold mining industry is one of the ten leading global gold mining companies with one of the lowest production costs. The group's proven and probable reserves (P&P) are 64 million ounces — the third largest in the world.

Strategic priorities are:

1) Maintenance and expansion of an extensive mineral resource base;

- 2) Implementation of effective from the point of view of capital investment growth opportunities;
 - 3) Maintaining a leading position in the cost of production;
- 4) Ensuring shareholder returns while maintaining an optimal capital structure;
- 5) Maintaining high standards of corporate governance and disclosure;
- 6) Maintaining high standards in the field of occupational health and safety.

Competitive advantages of the Company:

- 1. PJSC Polyus is the largest gold mining company in Russia in terms of production volumes and gold reserves.
- 2. The company has a large financial and production potential, allowing to acquire gold assets of a significant scale at various stages of development, as well as to carry out geological exploration, evaluation and commissioning of large deposits.
- 3. Check the Russian, and the Russian capital, the Company guarantees free access to participate in auctions for the right of exploration and exploitation of strategic deposits, classified by the state in the category of a strategic.
- 4. Constructive interaction with regional and tax authorities, high level of social security of the Company's employees.
- 5. Modern technologies of gold extraction from ore, including unique technology of sulfide ore processing using bio-oxidation in Northern conditions.
- 6. Own research and experimental-industrial base and highly qualified personnel for creation and introduction of new technologies of enrichment and geological exploration of gold deposits.
- 7. Unified information environment and wide exchange of knowledge and experience between the company's divisions.
- 8. Highly professional geological survey and unique knowledge base on the main gold-bearing regions of Russia and the CIS.

Negative factors in the company's activities:

1. Severe climatic conditions in the area of location of all assets of the Company, leading to additional costs in production, seasonal performance of some functions (deliveries).

- 2. Increase in production costs, including due to depletion of easily enriched ore reserves and reduction of gold content in the fields owned by the Company.
- 3. Underdeveloped road transport infrastructure and lack of electricity in most regions of the Company's presence.

All deposits, which is working PJSC "Polyus", are in Russia. The company conducts geological exploration, prepares for industrial development of deposits and extracts gold on ore and alluvial deposits in Krasnoyarsk Krai, Irkutsk, Magadan, Amur regions, the Republic of Sakha (Yakutia).



Fig. 3.1. The regions of presence of JSC "Polyus»

The largest mines of PJSC "Polyus" is the mine Olimpiada, Krasnoyarsk Krai, Eastern Siberia, Russia. Type of development - open pit. Located in one of the richest gold mining regions of Russia, Olympiada mine is the largest enterprise of Polyus. Ore production at the field began in 1996, and now it accounts for more than half of the total gold production of the Company.



Fig. 3.2. Open pit mine Olympiada PJSC Polyus»

The ore produced at the field is processed at three factories, the total capacity of which is 13 million tons of ore per year. For the processing of sulfide ores of the Olympic games "pole" utilizes the technology of oxidation BIONORD, which are proprietary to the Company.

The development of the company's economic policy in the field of sustainable development involves the analysis of the following main directions of costs:

- expansion of production, environmental protection, occupational health and safety;
 - social programs for employees and their families;
 - socio-economic development of the territories of presence.

According to the strategic development Plan of PJSC Polyus for 2016-2021, the Company plans to conduct large-scale geological exploration, expand production at existing enterprises and begin industrial development of several new fields. This activity will increase the reserves and annual production of gold, as well as become a source of financing for the further development of the company's business and related sustainable development programs.

The implementation of these plans will entail an increase in the number of employees of the Company and, accordingly, an increase in the costs of personnel training, safety training, medical care, prevention and prevention of industrial injuries.

The growth of gold production, in turn, increases the scale of the company's impact on the environment. This will require costs for the modernization of existing and construction of new tailing dumps, construction of treatment facilities, environmental monitoring, reclamation of disturbed lands.

An important component of the company's environmental programs will be reducing the harmful impact of production on the environment through the development and implementation of new technologies. Company-sponsored research covers such areas as non-cyanide leaching; neutralization and warehousing tsiansoderzhaschih STO-cov; the treatment and reuse of wastewater.

Responsible approach to the organization and financing of activities will be one of the indicators of the company's responsibility for personnel and the environment.

Human capital is one of the key factors of the company's competitiveness and creation of opportunities for growth of its value. Therefore, PJSC Polyus pays great attention to the formation of a competitive level of compensation for personnel and the creation of the best conditions for the disclosure of labor and creative potential of employees.

As a fast-growing company, PJSC Polyus needs qualified personnel and provides all interested employees with opportunities to improve their professional level. The current practice of recruitment and training of personnel includes cooperation with professional and higher specialized educational institutions, training of employees at their own training and course plants, referral to training courses, assistance in obtaining higher education. As a result of the training, various types of employee incentives are practiced. In addition to wages, workers receive social benefits, which is of particular importance in the remote Northern regions. This includes free accommodation and meals in shift camps, payment of the cost of travel on vacation and travel to the place of work, sanatorium and resort services.

Socio-economic development of the territories of presence.

In many regions of its presence, PJSC Polyus is a company that contributes to the development and maintenance of infrastructure, one of the largest taxpayers and benefactors.

PJSC "Polyus" today, with almost 20 thousand employees. The company has an able-bodied team with the necessary professional

knowledge, skills for training young personnel, familiarizing them with the best achievements and transfer them the accumulated experience [33].

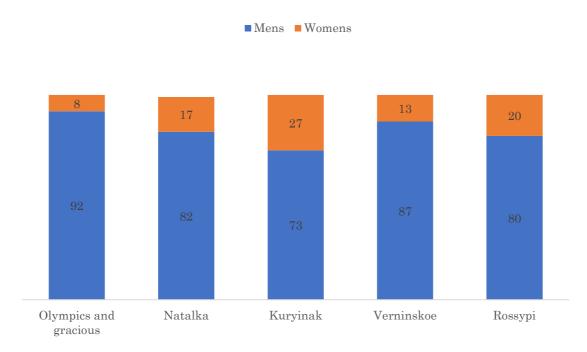


Fig. 3.3. Distribution of employees by sex in 2018 g.

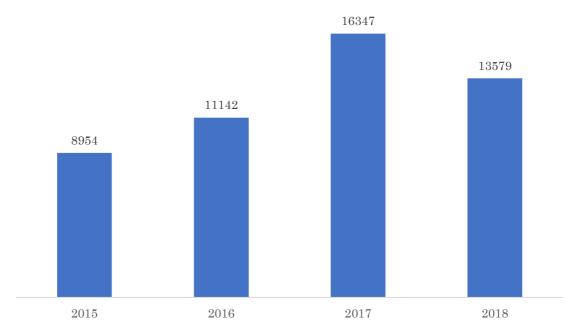


Fig. 3.4. Number of employees trained in 2018 g.

Employees are the main asset of Polyus, and the Company is aware of its responsibility for ensuring safe and comfortable working conditions. We are constantly working to improve the living and working conditions of our staff, develop a system of remuneration and create opportunities for professional development and career growth.

These activities are governed by human rights and human Rights Policies developed in accordance with the UN Guiding principles on business and human rights and the ICMM principles, which are also included in the Polyus Code of corporate conduct».

For PJSC "Polyus" high professionalism and effective work of each employee are the guarantee of success and achievement of goals.

Consider the main indicators of production and economic activity of PJSC Polyus (table. 3.1 and 3.2).

Table 3.1. Consolidated results of operations

	2018	2017	ISM. for a
			year, %
Olympiad	1065.4	1007,3	6
Fertile	415,8	456,7	-9
Bernina	223,3	205,7	9
Placers	147,7	145,7	1
Kuranakh	198,9	171,5	16
Natalka.	132,7	3,3	н.д.
The volume of refined gold, Koz	2 183,8	1990,2	10
The production of concentrate, t	116	84 962	37
	466		
Antimony in the flotation concentrate, t	23 602	-	Н.Д.
Gold in flotation concentrate, thousand	256,3	170,0	51
ounces			
Commodity gold in concentrate sold, Koz	189,7	119,0	59
Total production gold, Koz	2 440,1	2 160,2	13
Volume of rock mass, thousand tons	300648	224	34
		423	
Stripping ratio, t/t	6,0	4,9	22
The amount of ore mined, kt	42 841	37 810	13
The volume of ore processed, kt	38025	28 663	33
Recovery factor, %	80,8%	83,4%	-2,6 п. п.
Total production of gold doré and gold in	2 450,0	2 161,9	13
concentrate, Koz			

Note: compiled by the authors

Total gold production for 2018 amounted to 2 440 thousand Troy ounces (including 256 thousand ounces of gold in concentrate from the Olympics) vs 2 160 Koz in 2017, a Growth driven by increased production of the gold at the Olympics, the output of Natalka design capacity and high results of the work on the Bernina and Kuranaga. The annual output of Dore gold increased by 13% to 2,450 thousand ounces.

The volume of processing increased to 38 025 thousand tons compared to 28 663 thousand tons in 2017, which is due to the launch of the Natalka ZIF, the implementation of projects to expand production and commissioning of heap leaching facilities at Kuranakh.

The extraction coefficient compared to the same period in 2017 decreased by 2.6 PP and amounted to 80.8% against the background of the output to the design capacity of the Natalka ZIF and the reduction of extraction coefficients at the Olympics and Blagodatnoye. The recovery rate at the Group level, adjusted for operations at the Natalka field, was 82.3%.

Table 3.2. Consolidated financial result

	2018	2017	ISM. for a
	2010	2017	year, %
Revenue	2	2	7
	915	721	
Operating profit	1524	1455	5
Operating profit margin (%)	52	53	(1) п. п.
(Loss)/profit for the period	474	1241	(62)
Basic (loss) / earnings per share, \$	3,45	9,64	(64)
Diluted (loss) / earnings per share, \$	3,30	9,61	(66)
Adjusted net profit3	1326	1015	31
Adjusted net profit margin (%)	45	37	8 п. п.
Adjusted ebitda4	1865	1702	10
Adjusted margin. EBITDA (%)	64	63	1 п. п.
Net operating cash flow	1464	1292	13
Capital expenditure 5	736	804	(8)
Cash costs			
Total cash cost (TSS) per ounce sold, \$/ounce	348	364	(4)
Total cash cost of production and maintenance	605	614	(1)
(AISC) per ounce sold, \$/ounce			
Financial condition			
Cash and cash equivalents	896	1204	(26)
Net debt	3	3	0
	086	077	

Note: compiled by the authors

Key financial performance the key operating results of OJSC Polyus for 2018 is presented in Fig. 3.5 and 3.6:

In 2018, the company's results exceeded the target level: the total gold production rose to 2.44 million ounces, which is 13% higher than the corresponding figure in 2017.

At the same time, due to the high quality of assets, as well as the scale of mining and processing, Polyus retains the status of a world gold producer with a record low cost.

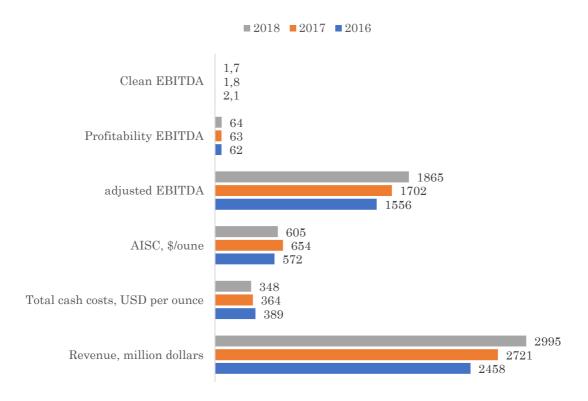


Fig. 3.5. Key financial indicators of PJSC "Polyus" for 2018.

Despite the unstable situation in the market and difficult geopolitical situation, we managed to solve the tasks, showing ourselves as an effective and responsible company working for the benefit of all stakeholders.

The growth of the company is possible only together with the growth of employees, so PJSC Polyus has created all conditions for professional development.

Consider the issues of personnel management and social responsibility of employees of PJSC Polyus».

personnel Structure.

As of January 1, 2019, the list number of employees of PJSC Polyus amounted to 14,223 people, which is 180 people (-1.2%) less compared to January 1, 2018 (table. 3.3).

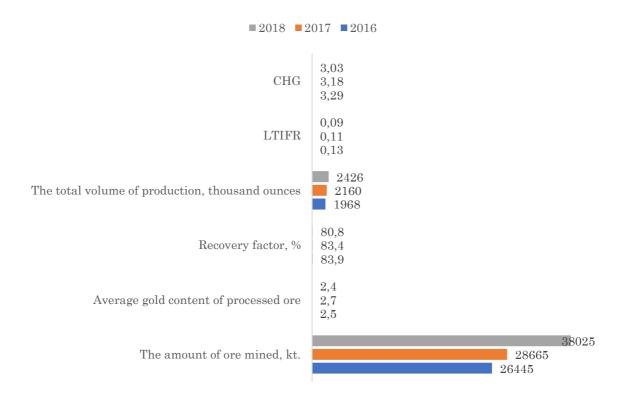


Fig. 3.6. Key operating results of OJSC Polyus for 2018.

Table 3.3. Structure of the personnel of PJSC POLYUS by categories of employees [33, 34]

category of workers	as of January 1 2018		as of Janua	Off.	
	чел	%	чел	%	%
working total,	18943	100	19942	100	+5,3%
among them:					
senior officials	2255	11,91	3020	15,14	+33,9%
specialists	3881	20,49	5813	29,15	+49,8%
people	75	0,40	50	0,25	-43,5%
working	8383	44,25	11059	55,46	+31,9%

Note: compiled by the authors

In the structure of personnel of PJSC "Polyus" the highest specific weight falls on the category of the workers (55.7 per cent) that is associated with the specific activities of the society. This figure decreased by 2.7% compared to 2017 (table. 3.4).

The educational level of employees of PJSC Polyus increased compared to 2017: 42.2% of the company's employees have higher professional education (in 2017, this figure was 40.7%).

PJSC "Polyus" has a productive team, possessing the necessary professional knowledge and skills for the training of young cadres,

familiarize them with advanced achievements and the transfer of experience.

Table 3.4. Structure of the personnel of PJSC POLYUS by categories and level of education of employees [33, 34]

category of	secondar	ry and basic	seco	ondary	hiş	ghest	de	egree
workers	Genera	l education	voc	vocational				
			education					
	pax	share	pax	share	pax	share	pax	share
working	8057	40,40%	3430	17,20%	8425	42,20%	30	0,20%
total,								
among								
them:								
senior	299	9,90%	510	16,90%	2195	72,60%	16	0,70%
officials								
specialists	355	6,10%	663	11,40%	4782	82,20%	14	0,30%
people	4	7,00%	6	11,80%	40	81,20%	-	•
working	7365	66,60%	2245	20,30%	1449	13,00%	-	-

Note: compiled by the authors.

Motivation and social programs.

PJSC "Polyus" operates a time-based bonus system of remuneration of labor, applies a system of surcharges and allowances in accordance with the current labor legislation and local regulations. The bonus system depends on the quality and timing of the planned work. Additional social guarantees and benefits are provided in the Collective agreement of PJSC Polyus»

As part of the social policy, PJSC Polyus was implemented in 2018: voluntary health insurance for employees accident insurance

reimbursement of travel expenses for children of employees sporting activity

organization of work with veterans and home front workers, etc. employee incentives.

Voluntary health insurance for employees. Employees of PJSC Polyus have the opportunity to receive qualified medical assistance provided within the framework of voluntary medical insurance programs in medical institutions of the territories of their presence. In 2018, 194 296 thousand rubles were spent on voluntary medical insurance.

Accident insurance. Employees of PJSC Polyus are insured against accidents during the performance of official duties. Payments under the accident insurance contract are aimed at support and adaptation of employees after the insured event. In 2018, 4196 thousand rubles were spent on accident insurance.

Reimbursement of travel expenses for children of employees. In 2018, employees of PJSC Polyus were compensated for expenses (5,656 thousand rubles) for the purchase of 200 vouchers for children's recreation.

Organization of work with veterans of the great Patriotic war and home front workers. As part of the implementation of the social policy, PJSC Polyus annually provides financial assistance to veterans of the great Patriotic war and participants of the labor front during the war: in 2018, 118 people were assisted in the amount of 590 thousand rubles, and measures were taken to celebrate the victory Day (1,506 thousand rubles).

Employee incentives. For outstanding achievements and results in work, performance of particularly important tasks in key areas of activity, professional skills, employees of PJSC Polyus can be presented to the promotion of departmental, industry, government and corporate awards. In 2018, 390 employees of PJSC Polyus were awarded.

professional Development of employees

With the aim of improving the quality of staff in 2018 was developed and approved three-year program of leadership development "the Challenge of growth: from the head to the leader with a" 100% coverage from the master to the Director, the target audience is 2500 leaders. On a regular basis, the participants of the project "Personnel planning" are trained.

In order to form a knowledge management system, the project "Internal trainers" is implemented, in which key experts of the Company conduct thematic trainings adapted to the internal standards of the Company. In 2018, more than 120 training sessions on 29 topics were held, 1626 man-programs were implemented.

For the development and maintenance of workers of working professions skills of safe behavior on the production of a project "Corporate safety school." In 2018, the project trained 107 people, as well as 76 newly hired employees helped to adapt to the production of mentors.

Actively working with young people and specialized Universities:

- for the period 2016-2018, 470 employees took part in the Competition of young specialists and innovators, presenting 407 innovation projects;
- 60 employees were trained in the program of advanced training and retraining courses "Industrial heat power engineering" at the Moscow energy Institute;
- in order to promote the heat and power industry among young people together with the participants of the project of the Department of education of Moscow "Professional training" for 235 pupils and students held 13 career guidance tours.

The main achievements in the direction of development of young professionals in 2018:

- employees of the Company took two of the six prizes and one place in the additional nomination "For an integrated approach to the reliability of heat supply" at the Competition of young professionals Gazprom energoholding;
- the team of young specialists took the 2nd place in the social direction in the Interactive session on the development of the technological forecast of the fuel and energy complex development and the 3rd place in the intellectual game "Battle of minds" on the Youth day of the Russian energy week;
- for the first time in honor of the day of energy held game BOOMS (Struggle of minds of young professionals) among 13 teams of young professionals branches;
- in 2018, members of the Council of young professionals took part in the Olympics.

labor Protection

PJSC Polyus carries out active work in the field of labor protection, prevention of industrial injuries and occupational diseases, within which the following activities are carried out:

- carrying out a special assessment of working conditions,
 bringing jobs in accordance with the rules and regulations;
- conducting preliminary (on admission to work) and periodic medical examinations of employees engaged in work with harmful working conditions, as well as mandatory psychiatric examinations;

- informing employees about working conditions at their workplaces, levels of occupational risks, as well as guarantees provided to them, which are subject to compensation;
 - provision of optimal regimes of work and rest;
 - the Day of labor protection;
- providing employees with personal and collective protection,
 flushing and decontamination means;
 - ensuring safe execution of contract works;
- implementation of the safety Culture project in all structural units of PJSC Polyus».

One of the main problems in PJSC Polyus, to which special attention is paid, today remains industrial injuries.

The main causes of accidents in 2018 were:

- personal negligence of the worker 4 cases (fall on a smooth surface);
 - illegal actions of third parties 2 cases (traffic accident);
- violations in the production of works 5 cases (contact with hot parts of the equipment, including exposure to steam and hot water, violations in the performance of works.

We will analyze the amount of investment in human capital of employees of PJSC Polyus during 2012-2018, using the data of the company's reports on sustainable development presented in the table. 3.5.

According to table. 3.5 PJSC Polyus has seen a positive trend in the increase in the costs of labor protection and industrial safety, voluntary medical insurance of employees and the organization of work with veterans and home front workers, which indicates the activity of the enterprise in investing in the human capital of its employees.

At the same time, the cost of training and advanced training of employees in the period consistently decreased. Their share in 2016 was 12.3%, in 2017-6.6%, and in 2018-6.2% (table. 3.5).

The greatest weight in the investment of the company in the human capital of their employees is the costs of development of production and social sphere, which includes the cost for construction of new and improvement of existing support bases and other facilities of social purpose and their content. These costs in 2018 are 60.4 % of the total costs, which is explained by the importance of ensuring comfortable working conditions and accommodation of employees at production facilities.

Table 3.5. Investment in human capital of workers of PJSC "POLYUS", 2016-2018. [10, 11]

Type of expenditure	20	16	201	7	201	2018	
	in	in %	in	in %	in	in %	
	million	to	million	to	million	to	
	rubles	total	rubles	total	rubles	total	
Costs – total	500	100	578	100	616	100	
among them:	061		680		864		
labor protection and industrial	280	56,1	352150	60,9	372	60,4	
safety expenses, thousand rubles	442				620		
voluntary health insurance for	147	29,4	183949	31,8	194	31,5	
employees	159				296		
accident insurance	4 056	0,8	4507	0,8	4 196	0,7	
reimbursement of travel	5 752	1,2	5373	0,9	5656	0,9	
expenses for children of							
employees							
organization of work with	935	0,2	1991	0,3	2096	0,3	
veterans and home front							
workers							
costs of training and	61	12,3	38074	6,6	38	6,2	
professional development of	717				000		
employees							

The second item in terms of costs are the costs of labor protection and industrial safety - 32.2 % in 2018, which is due to the presence of hazardous types of production in the activities of the enterprise and the need to minimize accidents and accidents at work.

Less significant costs of the enterprise as noted above are the costs of training and advanced training of employees, as well as compensation for the cost of vouchers for children of employees - their share in 2018 is $6.2\,\%$ and $0.9\,\%$ respectively.

Thus, having analyzed the investments of PJSC Polyus in the human capital of its employees, it can be concluded that this company cares about its employees and seeks to increase their productivity and satisfaction with working conditions in various ways. The company is aware of and recognizes its social, environmental and economic responsibility, which arises as a result of the implementation of its production activities.

However, any enterprise needs to assess the effectiveness of investments in human capital to ensure their profitability for further investment.

The method of assessing the effectiveness of investments in human capital on the example of PJSC Polyus is presented in the following paragraph.

3.2. Evaluation of efficiency of investments in human capital on the example of PJSC POLYUS»

The methods of estimation of efficiency of investments in human capital considered in item 2.1 have the shortcomings caused by complexity of the made calculations, specific components of model, and also lack of statistical data necessary for the analysis.

In this regard, it is necessary to develop a comprehensive methodology for assessing the effectiveness of investment in human capital, based on effective and qualitative indicators.

The first step in developing the methodology is to select and validate the indicators to be included in the model. As effective indicators of efficiency of investments in human capital it is offered to use such indicators as the total volume of the made goods, the performed works and the rendered services, net profit of the enterprise, average number of personnel. Quality indicators are indicators of staff profitability, staff turnover, average annual output of one employee of the enterprise, profit from sales, performance of work per employee. The choice of these indicators for the analysis of the efficiency of investment in human resources is explained by the simplicity of their use and the availability of the necessary data in the annual reports of enterprises.

The next step in the implementation of the methodology is the calculation of the previously selected indicators. Performance indicators are contained in the financial statements of the organization, with regard to quality indicators – they need to be calculated.

To calculate the coefficient of profitability of personnel, the necessary data are the average number of employees of the enterprise and net profit, information about which is contained in the report on financial results (form N_{Ω} 2).

The coefficient of profitability of personnel is determined by the formula (15):

$$Crp = Pch/Xhssc,$$
 (15)

where Crp – the profitability ratio of staff;

Pch – net profit of the company, thousand rubles.;

Xhss – average number of employees, thousand people.

Calculate the coefficient of profitability of personnel of PJSC "Polyus" is contained in the table. 3.6.

Table 3.6. The coefficient of profitability of personnel of PJSC "POLYUS", 2014-2018.

Indicator	2014	2015	2016	2017	2018
Net profit, \$ million	752	898	929	$1\ 015$	1 326
Average headcount, pers.	18 050	18 121	18 144	18 943	19 942
The profitability ratio of	4,17	4,96	5,12	5,36	6,66
staff,%					

Note: compiled by the authors

According to the table 3.6 rate of return for the staff of OJSC Polyus increased, which may indicate the increasing effectiveness of employees 'work in creating the profit of the Company.

To calculate the employee turnover ratio, the necessary data are the average number of employees of the enterprise and the number of employees dismissed on their own and for disciplinary violations.

The turnover ratio is calculated by the formula (16):

$$Ktk = Chu/Chss (16)$$

where Ktk – staff turnover rate, percent;

Chu – number of dismissed employees, thousand people.;

Chss – average number of employees, thousand people.

The calculation of the turnover ratio of PJSC Polyus is presented in table. 3.7.

Table 3.7. The turnover rate of PJSC "POLYUS", 2014-2018.

Indicator	2014	2015	2016	2017	2018
Number of dismissed employees, in	506	462	429	469	491
thousand people.					
The number of employees, in thousand	415	390	391	412	396
people.					
The average number, in thousands of	18	18	18	18	19
people.	050	121	144	943	942
Staff turnover rate,%	5,10	4,70	4,52	4,65	4,45

Note: compiled by the authors

After analyzing the data table. 3.7 it can be noted that the turnover rate of PJSC Polyus decreased during the analyzed period, which had a positive impact on the company's activities.

Production is the most common and universal indicator of productivity of employees. To calculate the average annual output of one employee of the enterprise, the necessary data are the average number of employees of the enterprise and the total volume of goods produced and work performed, information about which is contained in the report on financial results (form $N_{\odot} 2$).

The average annual output of one employee is determined by the formula (17):

$$Vcp = Q/Chss,$$
 (17)

where Vcp – average annual output of one employee, thousand rubles.;

Q – the volume of goods produced, works performed, billion rubles.; Chss – average number of employees, thousand people.

The calculation of the average annual output of one employee of PJSC Polyus is contained in the table. 3.8.

Table 3.8. The average annual output per employee of PJSC "POLYUS", 2014-2018.

Indicator	2014	2015	2016	2017	2018
Revenue, \$ mln	1850	1930	2040	2271	2195
Average headcount, pers.	18 050	18 121	18 144	18 943	$19\ 942$
Average annual output of one	102,5	106,5	112,4	119,9	110,1
employee, \$ thousand					
Average salary per employee, \$	1 234	1 332	1 456	1 604	1 681

Note: compiled by the authors

According to table. 3.8 there is a gradual increase in the average annual output of each employee of PJSC Polyus, which indicates the high efficiency of production activities of employees of the enterprise during the analyzed period. At the same time, the average monthly salary grew, reaching 67.2 thousand rubles in 2018.

To calculate the profit from the sale of products, performance of work per employee, the necessary data are the average number of employees of the enterprise and profit from the sale of products, performance of work, information about which is contained in the report on financial results (form N_{Ω} 2).

Profit from the sale of products, performance of work per employee is calculated by the formula (18):

$$Pwork = Pr/Chss$$
 (18)

where Pwork – profit from sales per employee, thousand rubles;

Pr – profit from the sale of products, works, billion rubles.;

Chss – average number of employees, thousand people.

Calculation of profit from the sale of products, performance of work per employee of PJSC Polyus is presented in table. 3.9.

Table 3.9. Profit from sales of products, performance of work per employee of PJSC POLYUS, 2014-2018

Indicator	2014	2015	2016	2017	2018
Profit before tax, \$ million	865	1 033	1 068	$1\ 255$	$1\ 524$
Average headcount, pers.	18 050	18 121	18 144	18 943	19 942
Profit from the sale of	47,92	57,01	58,86	66,25	76,42
products, performance of					
work per employee, \$					
thousand					

Note: compiled by the authors

After analyzing the data table. 3.9, it can be noted that the profit from the sale of products, performance of work per employee of PJSC Polyus increases during 2014-2018.

The third stage of assessing the effectiveness of investments in human capital is the consolidation of previously calculated indicators into a single system and the calculation of growth rates, which is presented in the tables 3.10, 3.11.

Table 3.10. Indexes of efficiency of work of personnel of PJSC "POLYUS" to a base year

Indicator	2015	2016	2017	2018
The profitability ratio of staff	1,19	1,23	1,29	1,60
Staff turnover rate	0,92	0,89	0,91	0,87
Average annual output per employee	1,04	1,10	1,17	1,07
Profit from the sale of products,	1,19	1,23	1,38	1,59
performance of work per employee				

Note: compiled by the authors

According to table 3.10, during 2015-2018, PJSC Polyus observed positive dynamics of increase in such indicators as the average annual

output of one employee, which indicates the efficiency of the staff, and, consequently, the appropriateness of investments in it by the enterprise.

Among the negative aspects, it should be noted the decrease in the profitability ratio of personnel to the previous year during the analyzed period – decreased from 154, 7% in 2015 to 138.0% in 2018. However, it is necessary to take into account the scope of the company's activities.

In PJSC Polyus, there is an annual negative increase in the profitability ratio of personnel, which may indicate a decrease in the efficiency of employees in creating profits of the enterprise.

Thus, the calculation of the proposed performance indicators of the personnel of PJSC Polyus revealed the ambiguity of its assessment, therefore, it is necessary to determine the integral indicator of the efficiency of personnel and investments in it.

Calculation of the integral indicator of efficiency of work of the personnel and investments in it is offered to make on the following algorithm:

1) calculate the private indicators, multiplying the deviations of the corresponding indicators from the previous year and weight coefficients;

calculate the integral indicator of the efficiency of personnel and investment in it by the formula of a simple average:

interpret the final value of the integral indicator on the evaluation scale proposed by the author.

To determine the weight coefficients, it is proposed to use a uniform method of distribution of weights, since each of the indicators calculated in tables 3.6 - 3.9 to a certain extent characterizes the efficiency of the personnel of the enterprise as a whole.

Calculation of private indicators of efficiency of the personnel of the enterprise taking into account weight coefficients and an integral indicator is presented in the table 3.12.

The dynamics of the obtained total values of the integrated performance indicators of the personnel of PJSC Polyus for 2015-2018 is presented in Fig.. 3.1.

Table 3.12. The specific indicators and integral indicator of efficiency of work of personnel of PJSC "POLYUS", in percent

Indicator	2015	2016	2017	2018
The profitability ratio of staff	1,19	1,23	1,29	1,60
(Крп)				
Staff turnover rate (Ктк)	0,92	0,89	0,91	0,87
Average annual output per	1,04	1,10	1,17	1,07
employee				
Profit before tax per employee	1,19	1,23	1,38	1,59
Integral indicator (Ки)	1,124	1,169	1,229	1,331

Note: compiled by the author

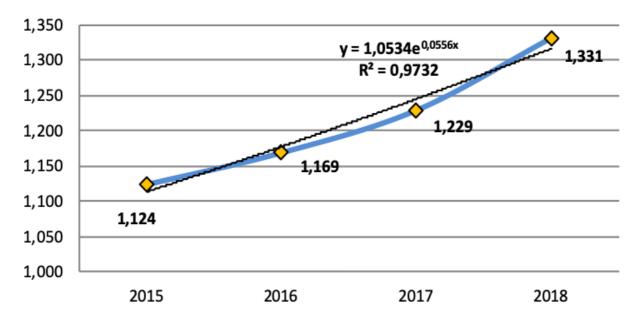


Fig. 3.1. The dynamics of integrated indicators of efficiency of investments in the employees of PJSC "Polyus».

According to table. 3.12 and Fig. 3.1 there is a steady increase in the integral indicator of the efficiency of the personnel of PJSC Polyus during the analyzed period (from 2016 to 2018), which indicates the feasibility of investing in its employees from the enterprise. If in 2016 the efficiency of investment in human capital was only 0.7, in 2018 the value of this indicator became equal to 3.46, which indicates a positive return on investment in personnel.

According to the evaluation scale presented in table. 3.11, staff performance in 2015 and 2017 is good, and the efficiency of investing in human capital - had an average efficiency, but in 2016 the overall

assessment of staff performance can be called satisfactory, and investments in it have low efficiency.

Thus, the proposed method of assessing the effectiveness of investments in human capital on the basis of qualitative and effective indicators allowed to analyze whether there is an effect of investments in human capital of employees.

3.3. Strategy in the field of human resources management in PJSC Polyus»

Employees are the main resource of Polyus. The company strives to be an attractive employer, constantly developing the system of material and non-material motivation, improving working conditions, providing opportunities for professional development and career growth.

Strategy of human resources management is governed by the "Personnel policy" and "policies for the protection of human rights", which developed with the Guiding principles on business and approved by the Council on human rights of the UN and principles of the ICMM . These documents were also taken into account when updating the "Code of ethics of the Pole".

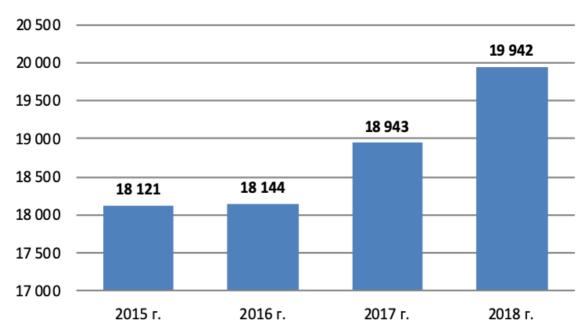
The company is constantly improving the personnel management system and introducing the best international practices in this area. At the moment, Polyus is engaged in the reorganization of the business process management system.

Polyus is interested in attracting highly motivated employees and is constantly improving the recruitment process.

The company respects all candidates and does not discriminate on the basis of age, sex or other grounds when hiring. Polyus evaluates candidates based on their professional training, industry experience, personal qualities and motivation.

The company recognizes and protects the right of employees to safe working conditions, freedom from discrimination and freedom of Association.

Polyus respects the culture and customs of local communities in the regions of its presence and operates in accordance with their interests.



Rice. 3.2. Dynamics of average number of employees of PJSC "Polyus"

All employees of the company are obliged to be guided in their work by the principles set out in the "human rights Policy".

Polyus actively cooperates with specialized Universities. The company implements the program "Find out the price of gold!", within the framework of which students can undergo practical training at the enterprises of "Polyus" with the opportunity to stay on a permanent job.

Social policy.

Due to the nature of their activities, gold mining companies in one way or another have an impact on the regions of their presence. Polyus makes significant efforts to ensure that the company's work contributes to the growth of the quality of life of people and the development of local communities.

Expenditure on social projects in 2018 amounted to 33.6 million rubles (Fig. 3.3).

The reward system operating in Polyus Is tied to the grading system. In addition to the basic part, the remuneration also provides for a bonus component, the amount of which is determined by the results of work on the basis of key performance indicators linked to the achievement of strategic goals at the functional and operational levels.

Polyus strives to provide its employees with an attractive social package. In addition to the basic salary and bonuses, the company offers a number of additional guarantees — compensation for the cost of food and

travel to work, life insurance, health programs and financial assistance. Employees of all business units are provided with voluntary health insurance.

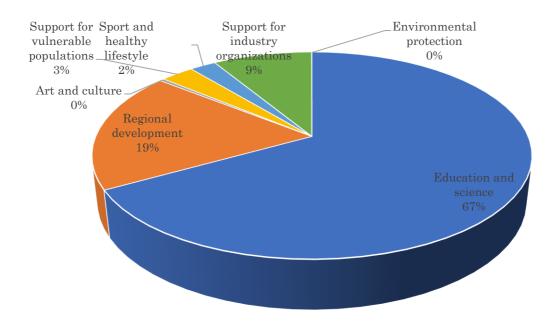


Fig. 3.3. Expenditure on social projects by category, %

"Polyus" shift camps are equipped with modern comfortable dormitories, canteens and sports facilities.

The company is also actively developing a number of platforms for informal communication of employees — corporate volunteering programs, professional skills Championships and corporate Spartakiads.

Staff training and development.

Polyus actively invests in the training of employees and improving their professional and leadership competencies.

The training system created in the company takes into account both the interests of a particular employee and the current and future needs of the business. Its key element:

Corporate University "Polyusa", offering a range of options for professional and career development, including opportunities for distance learning.

Corporate program "knowledge pole", the main task of which is to ensure the development of management and business skills. At the same time, this program contributes to the formation of horizontal relationships between employees of different divisions of the company.

Training programmes in occupational health and safety.

Safe working conditions for all employees is one of the key elements of Polyus' strategy in the field of sustainable development. The company is continually improving its approaches to management of labor protection and industrial safety (hereinafter — safety).

Polyus has adopted a "Policy in the field of occupational health, industrial safety and environmental protection", compliance with the requirements of which is mandatory not only for employees of the company, but also for employees of contractors.

When selecting contractors, occupational health, safety and environmental issues (HSE and e) are also taken into account as one of the main criteria (see the Standard "Interaction with contractors in the field of occupational health, industrial safety and environmental protection"). Polyus encourages contractors to implement preventive measures to prevent violations of safety rules.

As the first Russian company to join the International Council on mining and metals (ICMM), Polyus committed itself to the fifth principle of ICMM — "to Strive for continuous improvement of health and safety".

"Polyus" continuously increases the level of security on its assets. The approach of the company involves the control of the main risk factors: the impact of equipment/mechanisms and hand tools; fall from a height; electric shock; traffic accidents.

Safety culture

The company assumes that no economic, technical or other considerations can be taken into account if they contradict the safety requirements. This idea of "pole" tends to convey to each employee.

Since 2012, a large-scale program to improve the safety culture has been successfully implemented at all production assets of the company. Its main task is to make each employee aware of the responsibility for their own safety and the safety of their colleagues. As part of this work, "Golden safety rules "were developed — simple, clear and at the same time highly effective rules of conduct aimed at reducing occupational injuries.

Polyus believes that it is important to encourage the personal contribution of each employee to improve safety culture and to acquire knowledge and skills in the field of HSE. To achieve this goal, the company uses both tangible and intangible tools of motivation.

Since the attitude of managers to these issues plays an important role in the formation of corporate safety culture, Polyus launched the program "Leadership in the field of HSE", developed the Standard "Leadership in the field of labor protection, industrial safety and environmental protection". Within the framework of this work, the company implements a number of programs in the following areas:

- Training of top management, senior and middle managers, as well as line management;
- Development and monitoring of performance targets for managers;
- Inclusion in the KPI system of assessment of the implementation of personal commitments of leaders.

Safety culture management requires the implementation of a unified monitoring and evaluation system. To do this, the "Pole" is used globally recognized Bradley scale ¹¹

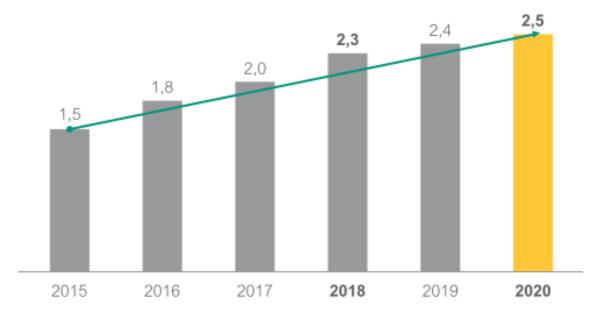


Fig. 3.4. The average level of safety culture on the Bradley scale for 2014-2017 and the target level of 2020

¹ Bradley scale — an indicator of the evolution of the level of safety culture and the effectiveness of the system in the field of OT and PB. The scale assesses the transition from external supervision to a conscious attitude of each employee to occupational safety. Bradley's safety culture is measured by several indicators — management commitment, procedures and standards, line Manager responsibility, motivation and engagement, training, audits, investigations, etc.

The corporate model of occupational health and safety management is aimed at complete elimination of recurrence of pre-accident, emergency and other dangerous situations. To do this, the company carefully analyzes all emergency situations related to the work of equipment or actions of employees. As part of this work, the causes of incidents are identified and measures are developed to prevent them in the future.

The company is progressively implementing an automated data and process management system in the field of labor protection, industrial safety and ecology. Monitoring and regular analysis of the information received support the effective functioning of the OT, BOP and e management system.

The company has developed and successfully implemented an "Integrated management system for occupational health, safety, environment and sustainable development».

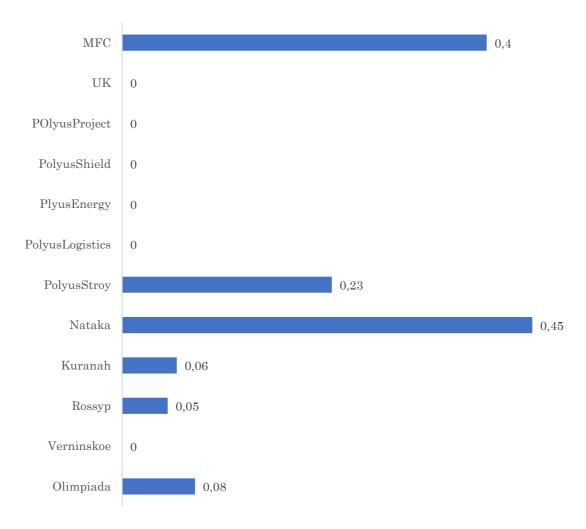


Fig. 3.5. Frequency rate of injuries with disability (LTIFR) for the business units in 2018

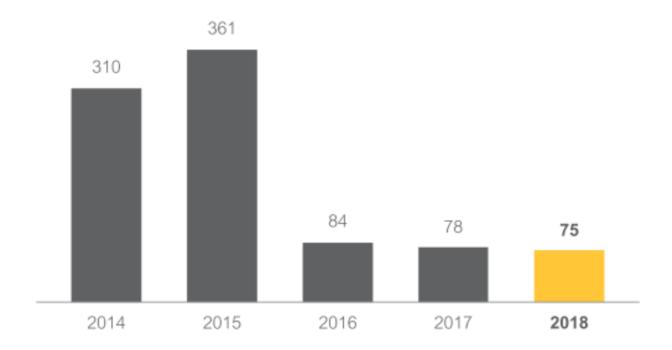


Fig. 3.6. Total number of reported injuries (TRI)

Polyus Enterprises are certified for compliance with the requirements of OHSAS 18001 standard and regularly undergo Supervisory audits, confirming their certification. At the end of 2018, the company plans to conduct an audit for compliance with the new ISO 45001 "health and safety management Systems".

A summary statement of the results of the SOUT in the structural unit of PJSC Polyus, see **Annex**.

One of the main components of the personnel management system at PJSC Polyus is the development of the personnel reserve. As part of this work, the company identifies and trains prospective employees in an effort to ensure managerial continuity. At the same time, participation in personnel reserve programs allows employees of Polyus to effectively plan their careers. Clear career prospects make the work in the company more attractive for highly qualified specialists.

PJSC "Polyus" are two programs of personnel reserve:

- "Gold Reserve" a program to identify and unlock the potential of the most promising employees;
- "Gold Standard" succession program to prepare for the positions of line managers.

Health and safety

Industrial safety is an integral part of comfortable working conditions. The main goal of PJSC Polyus in this area is the complete elimination of injuries. To this end, PJSC Polyus has developed and implemented a comprehensive injury prevention Program based on key risks specific to the gold mining industry.

One of the elements of the Program is to conduct regular behavioral audits aimed at identifying potentially dangerous forms of behavior, and the formation of a positive model of performance of professional duties on the basis of the data obtained.

Monitoring also identifies key risk factors in the workplace. The company takes preventive measures, lectures and trainings. First of all, the relevant campaigns are implemented in pilot business units, where the largest number of potentially dangerous situations have been identified, and then replicated to other assets.

PJSC Polyus also pays considerable attention to the health of its employees. The company has developed the concept of health protection, consisting of three main elements:

- 1. Industrial hygiene and sanitation assessment and management of work environment risks;
 - 2. Industrial medicine control of employees ' health
 - 3. Health culture formation of healthy lifestyle of employees

Employees of the company's enterprises undergo daily pre-shift and pre-trip medical examinations with the help of special automated modules that allow for a few minutes to determine and evaluate about a dozen different indicators that affect the health and performance of employees.

A number of events are held on the assets of PJSC Polyus on a regular basis:

- information campaigns for the prevention of strokes and heart attacks,
- training in the basics of first aid and cardiopulmonary resuscitation,
 - vaccination against influenza and tick-borne encephalitis,
- measures to prevent occupational diseases, including the provision of Spa treatment in the leading medical institutions.

Profile training on safe production

Training is an important aspect of the formation and improvement of a culture of safe production. Therefore ,Polyus pays great attention to specialized educational initiatives, seeking to build the most effective system of training and training of employees in the field of labor protection, industrial safety and ecology.

The educational process includes two main areas — training in accordance with the requirements of the legislation and corporate training.

Participation in the relevant programs is mandatory for both employees of Polyus and employees of contractors.

Corporate training includes several programs:

- 1. Minimum occupational health and safety unit.
- 2. Safety culture and injury prevention.
- 3. Leadership, risk assessment and incident investigation for line managers and professionals.
 - 4. Defensive driving.
- 5. First responders. Strokes and heart attacks. Cardio-pulmonary resuscitation.
- 6. Environmental protection for managers, engineers and workers (from Q4 2018).

Training is conducted on the basis of training and course plants of PJSC Polyus both by internal trainers and invited specialists. For individual programs is also used by the teaching-Supervisory platform "OLYMPICS". During the training, employees not only study the theoretical material, but also work out their knowledge in practice.

Corporate culture

PJSC Polyus strives to develop the corporate culture of the company, involving the active participation of each employee in the work for the overall result.

The company conducted a large-scale internal research, which helped to formulate the values shared by all employees of Polyus»:

- Efficiency
- Cooperation
- Stability
- Security

These values are reflected in the "Code of ethics" — the main document on corporate culture.

Here are excerpts from this document.

"The mission of the enterprise can be described as: "pole" — the standard of gold mining. By mining gold, we ensure the wealth and

technological progress of our country. We aim to do this as efficiently and economically as possible, for the benefit of shareholders, with care for safety and environmental protection. The result of our work is a universal measure of value, proven for thousands of years.

- 1. "Gold standard" means that we strive to create a company that is best engaged in its business M.
- 2. Our goal is to extract gold in the most efficient way, using the best management, technological, resource-saving solutions and ensuring safe working conditions».

Gold is called eternal metal, a universal measure of value. And the Company also strives to be a benchmark of stability, security, efficiency and profitability.

Local community

Gold mining companies have an impact on the development of the territories of presence. Being one of the largest taxpayers and employers in the regions of its work, Polyus strives to contribute to improving the quality of life of people and the development of local communities. The company makes an additional contribution through the implementation of its own infrastructure projects, as well as a number of social and charitable programs. The policy of charitable and sponsorship adopted by PJSC Polyus provides a unified approach to these issues in all regions of presence.

By joining the International mining and metals Council (ICMM), the company committed to comply with the ICCM principles, including:

- Principle 3. Protect fundamental human rights and respect the culture, customs and values of all persons affected by the company. To implement this principle in the "Pole" adopted "Policy for the protection of human rights».
- Principle 9. To contribute to the social, economic and institutional development of communities in the territory of presence.

 $Dialogue\ with\ stakeholders$

Polyus strives to maintain an open dialogue with all interested parties in order to take into account their rights and interests in its activities.

This work involves establishing interaction with people living in the regions where the company operates. The company uses a number of mechanisms, including:

• Public hearings, public consultations and meetings

- Sending information letters
- Receiving feedback through the hotline, boxes for confidential applications to the business units and e-mail

Following the best world practices

PJSC Polyus in its work not only fulfills all the requirements of the Russian legislation, but also undertakes additional obligations, including within the framework of membership in ICMM. The company has introduced additional standards in the field of interaction with local communities:

- The "standard for resettlement activities" ensures the interests of local communities and minimizes the impact of changes of residence and/or economic activity. Now the company does not conduct resettlement projects, but potentially such a situation may arise in the framework of research and development of new fields.
- The "standard for interaction with indigenous minorities" is designed to address potential situations in which the company's activities in remote regions may affect indigenous minorities and their territory of residence.

Five main directions of charity and sponsorship activities of the Pole:

- · Education and science
- · Culture and art
- Ecology and environmental protection

Education and science

PJSC "Polyus" has been active in supporting a number of educational and scientific projects. Cooperating with schools, vocational schools and Universities, the company implements both General education initiatives and specialized programs.

In schools PJSC "Polyus" including supporting geological profile classes, students in-depth study of disciplines related to mineral extraction, and visited the company's assets. Such projects increase interest in the mining industry and in the future help to successfully pass the final exams and enter the specialized faculties of higher educational institutions.

Sport and healthy lifestyle

PJSC Polyus regularly holds sports events for its employees, their families and residents of the territories of its presence. At the same time, the company is developing the infrastructure for sports, building new and reconstructing existing sports facilities.

Polyus also promotes a healthy lifestyle and supports local sports clubs and teams, helping them to participate in major tournaments and competitions.

Another important area of social investment of the company is the development of infrastructure for children's recreation, repair and modernization of children's camps in the regions of presence.

Also, PJSC Polyus regularly allocates funds for the reconstruction and repair of medical institutions of local importance.

Art and culture

One of the key areas of work of Polyus in the framework of the development of the territories of its presence is the support of various cultural initiatives aimed at improving the quality of life.

In the regions of work since 2016, the company holds a competition of theater groups "Polyus. Golden season". The winners receive grants to participate in one of the theater festivals. Part of the funds can be used for necessary repairs in theaters, modernization of their technical equipment or production of new performances.

Also in 2018, PJSC Polyus together with the international festival-school of contemporary art Territoria and the Moscow Museum of modern art (MMOMA) for the second time held the regional festival of modern art "Territory". In 2018, the event was hosted by Krasnoyarsk.

As part of the theatrical component of this project, residents of one of the regions of presence can see the best performances of the leading Moscow and regional theaters. The parallel educational program includes master classes for actors, Directors and producers of regional theaters. Another part of the festival is an exhibition of contemporary art, organized by MMOMA.

In support of the distinctive culture of the indigenous minorities living in the regions where the company operates, Polyus finances folk festivals and a number of other cultural events.

The company also regularly provides sponsorship to children's creative teams, helping to participate in the largest Russian and international competitions and festivals.

At the same time, PJSC Polyus pays great attention to the creation and restoration of green areas and other programs for the development of the urban environment in a number of regions of its presence, which also contributes to the environmental situation and the overall quality of life.

Support for socially vulnerable groups

Within the framework of cooperation with local communities, Polyus pays special attention to support of socially vulnerable groups of the population — first of all, representatives of the older generation, children from low-income and disadvantaged families, orphans and children with disabilities.

PJSC Polyus regularly sponsors the purchase of school and sports uniforms, office supplies and necessary literature for children from low-income families. During the holidays, the company participates in the organization of trips to boarding houses and health camps.

Human rights

PJSC "Polyus" recognizes the need to respect human rights. In its activities, the company adheres to the "Guiding principles of business activity in the aspect of human rights", approved by the UN Council in 2011, as well as the requirements contained in the following documents:

- Universal Declaration of human rights;
- International Covenant on civil and political rights;
- International Covenant on economic, social and cultural rights;
- International labour organization Declaration on fundamental principles and rights at work;
 - Voluntary principles of security and human rights.

The company officially recognizes the rights of its employees to safe working conditions, freedom from discrimination and freedom of Association, takes into account the culture and customs of local communities in the regions of its presence.

All employees, managers and executives of the company in their activities must be guided by the principles set forth in the relevant Policy.

Corporate policy in the field of human rights

In its activities, the company undertakes to comply with the legislation of the Russian Federation, as well as internationally recognized human rights. In particular, the company undertakes to adhere to the following principles:

- 1. fair treatment of all personnel and suppliers of goods, works and services, based on respect for their dignity without any discrimination;
- 2. observance of the right of workers to freedom of Assembly and Association, freedom of opinion and expression;
 - 3. prohibition of forced and child labour;

- 4. ensuring decent working conditions and adequate compensation to meet the basic needs of workers;
- 5. ensuring a safe and healthy workplace environment for all its employees;
- 6. compliance with the current legislation in the field of environmental protection, labor and industrial safety;
- 7. respect for the rights, cultures and customs of local communities in the regions where the company operates, including indigenous minorities;
- 8. open dialogue with stakeholders, which is seen as a key element of corporate policy;
 - 9. zero tolerance for corruption;
- 10. compliance by employees of the company's security service with all requirements of the applicable legislation, in particular, regarding the principles of the use of force.

Implementation

The company guarantees that all its corporate policies and procedures comply with the principles of this Policy.

All employees of PJSC Polyus, including newly hired employees, receive introductory training on human rights Policy.

The company undertakes to comply with the requirements of the Policy in the process of interaction with stakeholders, including government agencies.

The company operates a mechanism for the filing and processing of complaints and appeals, including cases of human rights violations, in compliance with the principles of confidentiality.

In case of detection of human rights violations ,Polyus undertakes to take measures to eliminate and prevent such violations.

Monitoring and reporting

The company regularly (at least once a year) assesses its compliance with the principles of Corporate policy in the field of human rights. In case of discrepancies, the Company has the right to apply corrective measures.

Monitoring compliance with the Policy will be implemented by including in the framework of assessing the achievement of targets in sustainable development. Information on the implementation of this Policy is included in the annual report of the company.

3.4. Approaches to the creation of a favorable ecological situation in regions of presence of JSC "Polyus"

Minimizing the harmful impact and maintaining a favorable environmental situation in the regions of presence is one of the priorities of PJSC Polyus. The company is aware of its responsibility for the environment and understands the need for rational use of natural resources and ensuring safe conditions for employees and people living in the territories of PJSC Polyus.

The average term of development of the Company's fields is about 30 years, which implies a long-term approach to the management of environmental aspects of activity.

At all stages of the production cycle, PJSC Polyus strives to consistently minimize its impact on the environment, constantly working to improve environmental performance.

Starting from the design stage, we assess all possible environmental risks and plan our activities in such a way as to avoid or minimize them. The company has an officially approved Standard for environmental and social impact assessment, which clearly regulates our activities at this stage. Materials of environmental impact assessment are published in the public domain with the provision of contact information for the implementation of "feedback". For example, the materials of the last major project implemented by PJSC Polyus — the construction of a mining and processing enterprise on the basis of the Natalka Deposit are available on the website of the administration of the tenka city district.

The Company pays considerable attention to the main environmental aspects of its work both at the construction stage and during the field operation:

- prevention of air and water pollution
- restoration of disturbed lands

To manage these aspects, the company has developed and implemented a "Standard for the rational use of natural resources, prevention of environmental pollution and accounting and reporting on environmental indicators", the requirements of which apply to all stages of the life cycle.

The company extends its environmental requirements to its contractors and suppliers. For this purpose, the "Standard of interaction

with contractors in the field of labor protection, industrial safety and environmental protection"was introduced. The company has also implemented the "standard for the treatment of cyanides", in order to meet the requirements of the International cyanide Management Code (International Cyanide Management Code). This corporate standard, for example, requires, among other things, cyanide suppliers to comply with the requirements of the International cyanide code — purchases are made only from certified suppliers.

Atmospheric air protection

Air quality is a critical factor for the health of our employees, residents of the areas of presence and the environment. Realizing this, "pole" builds its activities in such a way as to minimize emissions of pollutants into the atmosphere.

First of all, the company seeks to reduce the volume of fuel consumption from non-renewable energy sources and maximize the use of low-carbon and renewable sources. This approach allows to reduce emissions of greenhouse gases and other pollutants.

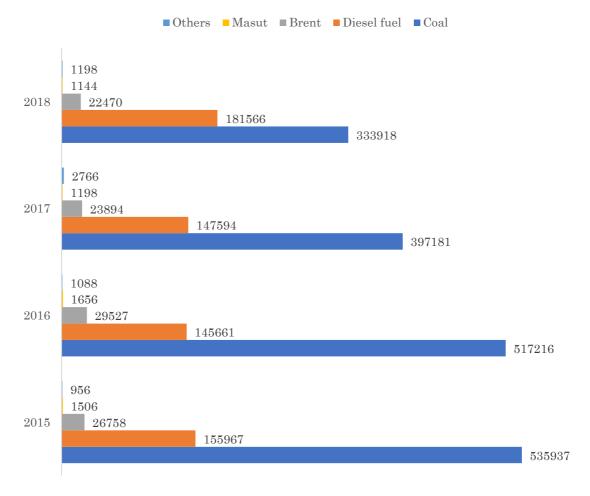


Fig. 3.7. The consumption of energy sources. MT in 2015-2018.

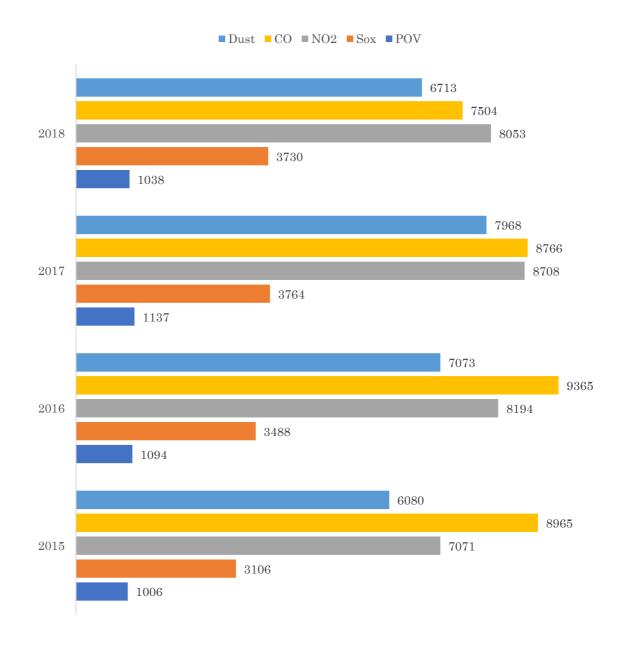


Fig. 3.8. Dynamics of significant air emissions in 2015-2018.

In order to reduce emissions into the atmosphere, the company ensures that the equipment used at the industrial sites meets international quality standards, as well as optimizes the routes of vehicles.

At the same time "Polyus" pays special attention to prevention of dusting of adjacent territories and on a regular basis conducts works on dust suppression.

Water management

Polyus pays great attention to the issues of rational water use. By entering ICMM, the company has committed itself to a responsible approach to water resources, formulated within the framework of the ICMM Policy statement on water resources protection.

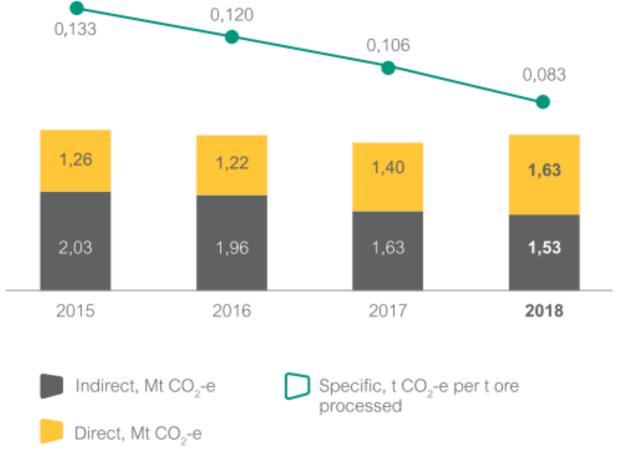


Fig. 3.9. Greenhouse gas emissions in absolute and specific terms in 2015-2018.

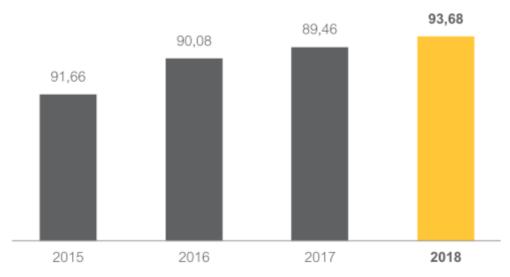
The priority goal of Polyus in the field of water use is to reduce the volume of water intake from natural sources per unit of output. To achieve this, the company:

- monitors water consumption
- introduces water-saving technologies in its enterprises
- seeks to increase the share of water reuse

Today about 90% in technological cycles of the enterprises of the company are subject to repeated use.

The main part of the new water is taken from the drainage systems of quarries, to a much lesser extent water intake is carried out from underground sources and surface watercourses.

Particular attention is paid to the treatment of water before discharge into surface water bodies: all enterprises, if necessary, carried out the construction of new and modernization of existing treatment facilities.



Rice. 3.10 Volume of recycled and reused water, %

In addition, the industrial sites "pole" is a continuous monitoring of the quality of ground and surface waters with the involvement of accredited in accordance with the regulatory requirements of laboratories, including mobile. This ensures that the impact does not exceed the established standards, and at the same time identify potential problems at the stage of occurrence and promptly take corrective actions.

Waste management

Waste generation is an integral part of production. For mining companies, waste is primarily a "tail": a mixture of rock and water particles formed during ore processing. The goal of Polyus is to minimize the possible impact of waste on the environment.

The company ensures full compliance of its facilities with the Russian legislation in the field of safe operation of tailing dumps. As a member of ICMM, Polyus also fulfils its obligations under the ICMM Policy statement for the prevention of catastrophic destruction of tailing dumps and implements measures for a comprehensive assessment of the risks associated with their operation. At the same time, special attention is paid to the management of the water balance of tailing dumps, the condition of dams and other protective structures, as well as related engineering networks and communications.

To minimize the amount of waste generated, the company is constantly looking for opportunities for recycling and reuse. If this is not possible, Polyus ensures the disposal and disposal of waste in an environmentally friendly manner or transfers it to specialized organizations.

Thus, in 2016, a quarter of all waste (1-4 classes) in the Polyus group was disposed of and disposed of, and in 2017 — already a third of waste (1-4 classes).

In 2018, the pole successfully carried out the campaign of "Divide and discard", which was commissioned installations for the thermal treatment of waste (like fast and the FURIOUS and 50), the analysis of accumulation and the possibilities of recycling of waste tyres. Also, containers for separate waste accumulation were purchased and installed and new contracts were signed with contractors for the disposal of waste prohibited for disposal from January 1, 2019 (tires, plastic, paper).

Restoration of disturbed lands

Polyus seeks to reduce the land allotment area and limit land clearing through the use of special technologies and mining practices.

Restoration of disturbed lands is also an integral part of the economic activity of Polyus. To manage this aspect, the company has developed a Standard for the liquidation and reclamation of deposits. Remediation activities are planned in the early stages of each project.

The company aims to reclaim individual sites as soon as their use is no longer necessary in the production process.

Biodiversity conservation

Polyus plans and implements measures to preserve biological diversity, preventing the destruction of habitats of plants and animals. When an impact is unavoidable, the company seeks to mitigate it and also implements compensatory measures.

The approach of "Pole" to the management of biodiversity is enshrined in the Standard for the conservation of biological diversity. At the early stages of project implementation, the company assesses the biodiversity of the surrounding areas and on the basis of these data develops plans for its conservation. In the framework of the monitoring and assessment of biodiversity in Bodaibo area the company cooperates with the Vitimskiy nature reserve.

The main implemented a "Pole" actions for preservation of biodiversity are:

- cooperation on these issues with regional public and state organizations
- · compensation in kind for damage to aquatic biological

resources, planting of trees

The company takes into account the results of the impact assessment on the environment with the aim of supporting the key areas of biodiversity conservation (ways of migration of animals and birds, nursery grounds, spawning, wintering, etc.).

The company pays compensation in kind for damage to water biological resources, planting of fossil trees in the locations of world heritage sites and in specially protected natural areas of Federal or regional importance. In addition, Polyus counteracts poaching among its employees and the personnel of contractors, as well as, where possible, in the areas adjacent to the company's points of presence.

The company does not develop mineral deposits in the locations of world heritage sites and in specially protected natural areas of Federal or regional significance. In addition, Polyus counteracts poaching among its employees and personnel of contractors, as well as, where possible, in the areas adjacent to the points of presence of the company.

3.5. The study and monitoring of biodiversity at the enterprises of PJSC "Polyus" in 2017

In 2017, all mining assets "Poles" were taken for the study and monitoring of biodiversity. In 2017, the company invested 7.5 million rubles in the study and conservation of biodiversity. In 2018, more than 3, 5 million rubles will be allocated for these purposes.

Magadan region

Polyus Magadan JSC (Natalka GOK), in cooperation with regional research institutes, conducted hydrobiological monitoring of macrozoobenthos of the Intrigan and Omchak rivers, fishery monitoring of aquatic bioresources of the Intrigan, Khinike-Kulu and Omchak rivers, winter route records of hunting and fishing animal species in the basins of these rivers, as well as Zoological monitoring of background, rare and protected animal species and geobotanical monitoring of background vegetation species.

The work was carried out in accordance with the plan of implementation of the corporate standard on biodiversityPolyus Magadan JSC (Natalka GOK), in cooperation with regional research institutes,

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The work was carried out in accordance with the plan of implementation of the corporate standard on biodiversity.

Krasnoyarsk region

The forest Institute of the Siberian branch of the RAS in the area of olympiadinsky GOK carried out work on the study of biodiversity, as a result of which a verified list of local plant species was prepared.

Republic of Sakha

По заказу «Полюса» Институт прикладной экологии Севера провёл исследование современного состояния гидробиоценоза реки Большой Куранах.

Иркутская область

At the end of 2017, Polyus together with fgbi "State nature reserve "Vitim" developed a biodiversity monitoring program for JSC "Polyus Verninskoye".

In 2018, a study of the population and species level of biodiversity of flora and fauna in the area of the enterprise was conducted. After processing and analysis of the collected materials, biodiversity-specific lists of animals and plants will be compiled. On the basis of these data, a plan of measures for the conservation of rare species will be developed in 2019.

Climate change

The company is aware that climate change can potentially adversely affect the stability of the infrastructure, reduce the effectiveness of measures to ensure environmental safety and availability of water and energy resources. Given the importance of these aspects, the reduction of greenhouse gas emissions is one of the important tasks of sustainable development of the company.

In 2015, PJSC Polyus, together with other ICMM members, supported the statement on climate change issued on the eve of the Paris conference (COP21). In its activities in this area, the company also seeks to adhere to the principles established by the UN sustainable development Goals: 12 "Ensuring the transition to sustainable consumption and

production models" and 13 "Taking urgent measures to combat climate change and its consequences."

The company carries out large-scale work on the development of a system of greenhouse gas emissions management, developed a Standard with internal requirements in the field of greenhouse gas emissions control. Polyus is considering options to reduce greenhouse gas emissions at all stages of the life cycle of its assets. The company's strategic objective in this area is to reduce greenhouse gas emissions by 15% by 2020 (compared to 2015).

In addition to measures for the rational use of resources and energy efficiency, PJSC Polyus also analyzes alternative opportunities to reduce greenhouse gas emissions into the atmosphere, including the use of renewable or low-carbon energy sources.

3.6. Recommendations for the accumulation of human capital in the enterprise

The main objective of the company is to make a profit and its long-term growth in dynamics. To increase profits, the company can develop in two directions: to improve the consumer properties of the goods through the use of expensive materials and modern technologies in the production process, which will undoubtedly lead to an increase in the cost of the product and an increase in the price of it, another option is to gradually reduce the cost of goods at the expense of resources and capabilities of the enterprise, leaving the price of the product at the same level. For the consumer, the second option is the most profitable, since for the same price he acquires a high quality product, without overpaying. The enterprise cost reduction may be achieved by improving workers 'skills, increase productivity, reduce scrap in production, the changes applied to the production of goods technology. Therefore, the company needs to contribute to the accumulation and development of human capital of its employees by investing in it.

The analysis of investments in human capital of employees of PJSC "Polyus" showed that this company actively invests in its employees and seeks to increase their satisfaction with working conditions in various ways. The company operates a system of internal corporate training, there

are various social programs (housing and pension programs), as well as social benefits for employees (vouchers to health resorts, financial assistance to the employee in a difficult life situation).

The above allows us to conclude that for PJSC "Polyus" the main asset is highly qualified personnel, so the company takes care of its employees and seeks to improve their productivity in various ways. the Analysis of the efficiency of investments in human capital, conducted in paragraph 3.2, showed that investments in employees of PJSC "Polyus" had a positive efficiency. The integral efficiency coefficient has been consistently increased from 1.124 in 2016 to 1.331 in 2018. This is due to the positive dynamics of increasing productivity, staff profitability and reduced staff turnover.

In General, during the analyzed period, there is a steady increase in the integral indicator of the efficiency of investment in human resources, which indicates a positive return on staff and the feasibility of investing in employees from the enterprise.

To accumulate human capital and improve the efficiency of investments in it, PJSC Polyus can give the following recommendations:

- increase the profitability ratio of staff;
- increase the cost of training and advanced training of employees, as this type of cost is more positive impact on the innovative activity of the enterprise.

The quality of measures aimed at increase of profitability of the personnel can suggest the following:

- maintenance of General statistics on layoffs;
- improving the methods of adaptation of new employees with the use of a mentoring system, holding events for team building (corporate events, fairs, sports events), which will allow them to quickly get used to the work, join the team and reduce the likelihood of their departure to another organization;
- material incentives: bonuses on the results of work, before the holidays, remuneration for the implementation of the production plan, additional payments to employees of hard work in the regions of the enterprise with severe climatic conditions;
- non-financial incentives: posting photos of the best employees of the month on the honor Board, honoring, presentation of certificates and letters of thanks;

- career prospects: the possibility of promotion of employees who perform their duties qualitatively, and not from among those close to the authorities;
- improvement of working conditions: application of modern equipment and technologies, availability of modern infrastructure (canteen, medical office), provision of necessary overalls and special footwear, delivery by official transport;
- organization of convenient work schedule with lunch break and technical breaks during the day for workers engaged in production.

The proposed measures will ensure the long-term increase in the efficiency of investment in human capital of employees, and, consequently, will lead to an increase in the efficiency of innovation in the enterprise.

CHAPTER 4. THE IMPROVEMENT OF THE MANAGEMENT SYSTEM STAFF TRAINING

4.1. The essence and purpose of staff training

The main factor that determines the economic condition of the enterprise is its ability to adapt to the changing conditions of the internal and external environment. This encourages managers of Russian companies to pay attention to the training of employees, sometimes despite the difficult financial situation. To date, in the process of personnel management, the selection of suitable personnel who will work for the benefit of the organization is only the beginning. For the success of the common cause, the management needs to take care of increasing the personal and labor potential of the personnel, since its development leads to an increase in labor productivity and profitability of the enterprise. Staff development and training is beneficial for both the organization and the employee. For the company – it is an opportunity to improve the quality of work, and for employees – the growth of quality of life, as well as the opportunity to demonstrate their abilities. The staff becomes competitive in the market.

Human resources management is a process of planning, selection, training, evaluation and continuous training of employees aimed at their rational use, increasing production efficiency and as a result of improving living standards [51, p. 267].

Training (including professional) is the process of obtaining the required knowledge, skills and abilities that an individual needs in the course of his professional trajectory. [51, p. 268]

Currently, the requirements of the external environment are such that the learning process should be carried out continuously. At the global level, this is due, inter alia, to the rapid development of science and technology. At the local level — a variety of changes in the company that require the employee's current knowledge, skills and abilities.

Continuous training is a system that is aimed at improving the professional Outlook of employees. Thus, vocational training implies the formation and development of the individual within the organizational environment.

In other words, training of the company's personnel is a process of development of professional skills, knowledge and abilities of employees, which should correspond to the main goals and development strategy of the organization. [51, p. 267]

In modern companies, professional training includes several stages, namely:

- Determining training needs;
- Training budgeting;
- Identify learning goals;
- Determining the content of training programs;
- The choice of teaching methods;
- Drafting of evaluation criteria of the staff in the learning process;
- Formation of professional skills and knowledge in the learning process;
 - Evaluating the effectiveness of training;
- Obtaining the final result in the form of the required knowledge, skills. [188, c.133]

Management of vocational training begins with the definition of needs, then the training budget is formed and on the basis of the information received, the training objectives are determined with the content of programs, methods and the definition of criteria for assessing the effectiveness of training.

The main purpose of any training, including professional training of employees, is to obtain relevant knowledge.

The objectives of vocational training must meet the following requirements. They should be:

- specific and specific (in a specific professional environment);
- aimed at the formation of the required competencies;
- measurable.

Training objectives can vary significantly depending on such variables as the needs of the organization, demographic or qualification characteristics of the staff, the financial situation of the enterprise, etc.

Organizing the learning process, it is necessary to take into account the following basic principles:

- interest of the employee in the results;
- combination of theoretical training with practical classes;

- meaningful learning;
- combination of traditional and modern teaching methods;
- monitoring of knowledge and correction of training;
- approximate theoretical information to real life work situation.

There are the following goals of personnel training, which are determined by the company's strategy and Express the organization's need for training.

Learning objective:

- professional development knowledge will help the employee to bring new ideas into the work process, which will allow him to easily cope with many tasks;
- motivation having received additional knowledge at the expense of the company, the employee feels the care of the management about his person. Realizing that he invested money, he begins to strive for maximum performance in their activities.
- lack of specialists insufficient number of necessary specialists in the labor market, which pushes the organization to self-training of its employees, etc.

Currently, there are several different approaches to the training of personnel in the enterprise:

Problem-situation - if an employee of the organization has low qualifications associated with high customer requirements or lack of skills to work with new equipment. A clear advantage of this approach is that it can identify obvious gaps in staff knowledge.[185, p. 7]

The tactical approach assumes that the companies are engaged in retraining of the employees in connection with significant external changes in business. In addition to the fact that employees receive specific new knowledge, they also acquire the necessary skills that will be useful in the future. In General, this approach is typical for companies that work for the future. [185, p. 8]

Companies that do not just adapt to the realities of the market, but create it themselves. This is training for the future, the need for which will appear after some time. Such organizations create their future based on the planned strategy of their development. This allows you to meet all the changes in the market fully armed.[185, p. 9]

The peculiarity of the strategic approach is that here great importance is paid to the personal growth of the staff, its creativity,

intellectual abilities. Such campaigns actively introduce and develop internal corporate culture.

Practice shows that realizing further prospects, people with great pleasure learn new skills and knowledge, achieve great success, become professionals in their field. The success of the company is determined by the quality of management decisions, consistency of all parts of the organizational structure. So, for large companies tend to create their own departments of training and development, the formation of the necessary programs for the overall development of the organization. Such organizations become market pioneers, set the tone and achieve huge competitive advantages.

It is no secret that for successful functioning in the market, the organization must be interested in the development of its staff, as the success of the company depends on the efficiency of its employees.

Well-organized process of professional training of personnel allows not only to change the level of knowledge of employees, but also to use the information obtained during the training for the benefit of the organization. After all, highly professional employees are able to make innovative, creative ideas, which, of course, directly affects the efficiency of the body itself.

4.2. Methods and types of personnel training

To date, most of the heads of organizations consider the success of its activities in direct dependence on the professional training of its employees. The emergence of new technologies and the introduction of scientific and technological progress in production requires the staff of the necessary knowledge and skills in the implementation of work duties. Therefore, the timely acquisition of knowledge by the employee and the rapid acquisition of the necessary skills will ensure the effective development and maintenance of the competitiveness of the organization.

Training of personnel is beneficial to both the employer and the employee. As a result, the employer will receive qualified personnel for effective performance of work, and the employee will improve his skills, which can lead to an increase in his salary, promotion and other positive factors.

In order for the company's employees to be well trained, it is necessary to look for a separate way to the needs of employees. Undoubtedly, there are different methods of training, and each of them has its pros and cons. Techniques that are used in one method may not be effective for all categories of employees. Therefore, managers need to be more careful in choosing the method of training their subordinates, otherwise the company will waste its financial resources, which will adversely affect the functioning of the organization as a whole. The most important criterion for personnel training is the effectiveness of employee training. And for high-quality training of employees need to choose the appropriate types and methods of training.

There are three main types of personnel training:

- 1. Training of personnel obtaining by employees of special knowledge, abilities and skills which are necessary for performance of a specific type of work.
- 2. Retraining of personnel obtaining new knowledge and skills for personnel due to a change of profession or changing the requirements for the profession.
- 3. Professional development obtaining additional knowledge and skills by employees in connection with the increase or growth of requirements for the profession.

Speaking about the methods of personnel training, it is important to note that this is nothing but the ways in which the required knowledge, skills and abilities of students are acquired. [74, p. 352]

Today, modern companies use various methods in the organization of the system of professional training of personnel. All these methods can be divided into two groups:

- education without isolation from production (in the workplace);
- training with job (outside the workplace).

For some organizations, on-the-job training is the primary form of training for new employees. In the process of training, the employee not only acquires new knowledge and skills, but also he formed an idea of the content of their duties. Not only employees of this company are engaged in training of employees, the organization can also involve external teachers for achievement of concrete results in the course of training of the personnel.

The methods of training in the workplace include:

- copy the organization attaches the employee to a competent specialist, and the employee learns by copying his actions;
- rotation transfer of an employee to another position, division for qualification improvement and experience development.
- mentoring an experienced employee solves a certain range of tasks aimed at training the "beginner", without being released from their main duties;
- delegation transfer of a specific type of tasks to the employee,
 where he can independently make a decision on this issue, but at the same
 time the Manager controls the process of work performance;
- under the training outside the workplace, you can understand all kinds of learning that take place outside of the enterprise.

These include the following methods:

- lectures the process of presentation of the necessary material
 by the lecturer for a certain period of time;
- business games the process of joint training of personnel, where the participants of the game are assigned certain roles in the game, and then the results of this game are considered
 - seminars staff training through discussion of the material.
- cases the process of applying real or fictional situations for training.

The most modern methods of personnel training include:

- modular training;
- distance learning;
- learning by doing;
- trained in Shadowing;
- trained in Secondment

For a quality training program, you can use a modular approach. The module specifies learning objectives, objectives and levels of learning. The training course, in particular, includes about three modules. In this case, a separate module can be a theoretical part, and practical work, and final projects. There can be any number of thematic modules. It all depends on how much time is needed for the development of skills and knowledge of the proposed material.

The advantages of this method include: flexibility, selectivity, as well as the ability to change the order of modules depending on the request of listeners.

Distance learning involves the possibility of training personnel through the use of telecommunications technologies to train employees at a distance. This method will allow employees of the organization to individually take classes at a suitable time for him.

The scheme of this training includes several stages: the student chooses the topic of interest to him and passes the initial testing. Further, according to the results of the passed test, the level of knowledge of the employee is established. Then a trial lesson is sent to be completed. After passing the required number of lessons on one subject, the student writes a test. And, based on the results, sends the job to repeat or exercise from a new topic. For this form of training requires good technical equipment and well-designed material. I would like to draw attention to the fact that due to distance learning is almost impossible to form the behavioral skills of the employee. Moreover, for the effective assimilation of knowledge, the employee must have a sufficiently high motivation.

Advantages of distance learning: the training process involves a large number of employees; training takes place in the workplace, allowing employees to less break away from their duties; the ability to choose a convenient time for training; acquired knowledge can be immediately applied in practice.

Disadvantages of distance learning: the lack of live contact with the teacher training; the complexity of the process of motivation of staff; the need for a number of individual psychological conditions; lack of practical training.

Currently, the direction of formation of "self-learning organizations" has become popular in the field of management. At the same time, the technology of learning - "action learning" - "action learning"came with him. The method of action training contributes to a more effective solution of organizational problems, develops the structure and dynamics of organizational changes.

The duration of one cycle of this technology is from 3 to 12 months, and the number of participants in one group, as a rule, does not exceed six people. The number of meetings can vary from three times a week for two hours, to two-day seminars on weekends.

The basis of the method of "action training" is a group of managers, the main employees of the company, where each of the employees solves the task assigned to him. Participants are given the opportunity to work on real-world tasks rather than on artificial tasks or situations.

The method of Shadowing is actively used in the West, namely in the UK (today 73% of English companies use this method). Literally this term is translated as "being a shadow".

The work plan is quite simple. For example, to promote a young employee, the company gives him some time to be the "shadow" of the current head. In the role of "shadow" employee captures moments throughout the training. Consequently, the employee receives the necessary skills and knowledge that will help him in the performance of his duties. [74, p. 357]

The advantages of this method: cost-effective and rapid adaptation to a new type of activity of the staff; the company improves its image by demonstrating its policy on personnel development; for the employee there is an opportunity to Express themselves in real conditions.

Training through Secondment (literally this term can be translated as secondment) is most often considered a kind of rotation of personnel, in which an employee from one Department is temporarily transferred to another and works there for a while, and then he returns to his former duties.

The advantages of this method: the development of personal qualities of the employee; strengthening team work; improving communication skills.

Disadvantages of this method: the presence of certain costs; the risk of conflicts; the risk of information leakage; fear of losing an employee.

It is important to note that each method of training has its advantages and disadvantages. Each of the above options can be successfully applied in a modern organization. The main thing here is to understand what results the company expects from the training of personnel, what specific goals it will help to achieve and how to effectively assess the results of the training process.

Further in the framework of this scientific work we will try to detail the types, forms and methods of training, which we have already mentioned in this section.

4.3. The specificity of the training and development of staff in the organization

Managers of modern companies in a dynamic development, pay close attention to the professional growth and competitiveness of staff. It has long been known that it is the staff that acts as the basic resource of the organization. Often, one of the main barriers to achieving high results of the company is the insufficient level of professionalism of the staff and improperly organized process of training and professional development of employees. In the information society, managers, professionals and ordinary workers need to regularly develop professional knowledge and skills. [54, p. 11]

At the present stage, staff training performs many important functions, the most important of which are: the adaptation of employees to the changing information space within the professional environment, increasing the motivation of staff, increasing the competitiveness of human resources in the enterprise and, as a result, the successful development of the company as a whole.

Today there is a huge variety of forms and methods of training, modern and innovative, as well as already proven over a long time.

The main (most common) types of personnel training at present include personnel training, advanced training and retraining. See Fig. 4.1. [74, p. 356]

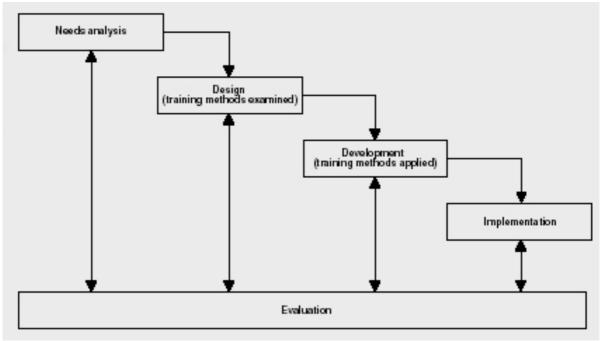


Fig. 4.1. Main types of training in the organization

A number of Russian universities are engaged in direct training of personnel for companies, while professional retraining and advanced training are the prerogative of the organization itself in the person of its management and personnel development departments.

As practice shows, in a number of Russian organizations, professional retraining is carried out in several ways, namely, on-the-job in the process of performing their official duties (internal) and on-the-job specialized courses (external). See Fig. 4.2. [74, p. 357]

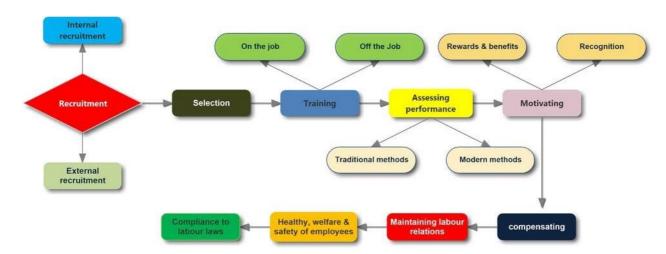


Fig 4.2. Basic forms of personnel training in the organization

Basically, the algorithm of personnel training consists of the following sequential set of actions: personnel evaluation, development and implementation of training programs, professional training (including new employees) of personnel, training of workers in second professions, corporate training, professional retraining of personnel, retraining of managers, specialists, workers, advanced training of all categories of employees. See Fig. 4.3. [74, p. 352]

It is important to note that the cost of on-the-job training is quite high, so many organizations use this form to train and improve the skills of leading specialists, senior and middle managers.

While internal training is carried out at the expense of the personnel reserve of the companies themselves and is implemented through mentoring, various trainings, adaptation measures for new employees, work with young professionals and their introduction into office.

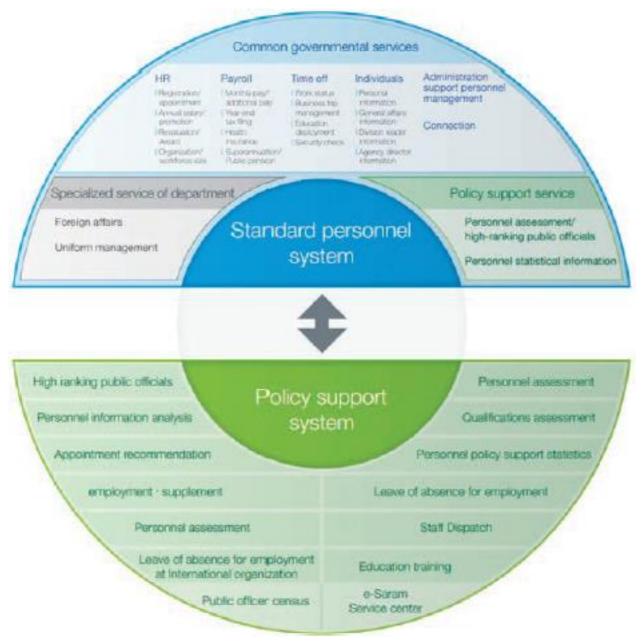


Fig. 4.3. System of personnel training in the organization

To initiate learning outside of the plan and the employee, send to the development office staff a memo with a clear justification of the need for its training.

In a number of organizations to make a final positive decision on the issue of training of employees, the following conditions must be met: the availability of funds in the budget of the organization, which may be allocated for the training of employees, the appropriateness of training of a particular employee or group (Department), the level and quality of the training program. See Fig. 4. [74, p. 355]

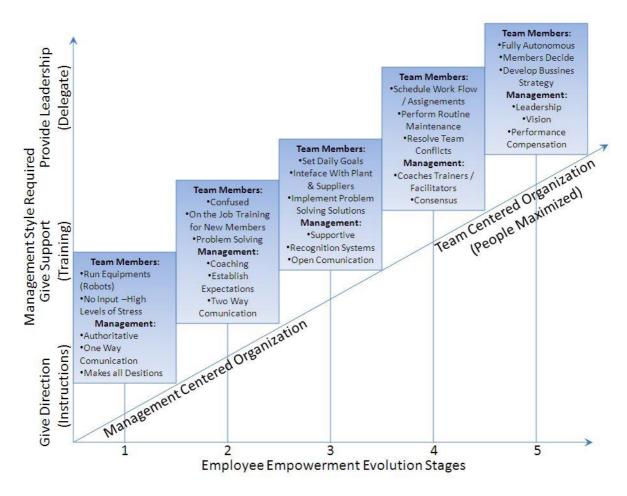


Fig. 4.4. Main directions of work in the organization of personnel training in the organization

In General, in modern organizations, training and development of personnel should be aimed at improving the level of knowledge, skills, motivational attitudes of employees in the framework of achieving strategic goals and meeting personal needs, which ultimately is the basis for the effective functioning of economic structures and improving overall competitiveness.

CHAPTER 5. MANAGEMENT AND PERSONNEL EVALUATION AT THE ENTERPRISE

5.1. Concept, main approaches and characteristics of human capital of the organization

The basis of the concept of personnel management of the organization is currently an increasing role of the employee's personality, knowledge of his motivational attitudes, the ability to form and direct them in accordance with the tasks facing the organization. In this context, the human capital of each employee, its formation and development become one of the key factors for the successful functioning of the business.

For the first time the phrase "human capital" in the economic theory of labor was used by Theodore Schultz, implying a set of investments in a person that increase his ability to work (education and professional skills). In the future, the idea of human capital was complemented and developed by G. Becker, G. Gardner, R. Nelson, E. Phelps, S. Bowles, G. Gintis, M. Spence, and many others.

G. Becker described the concept of human capital through the production process, arguing that all the accumulated skills and knowledge of a person directly affect its productivity and therefore are part of the production function.

Theorists of human capital – T. Schultz, G. Becker and other modern scientists - defined it as a set of knowledge, skills, professional skills that are formed by a person for subsequent implementation in production or consumer purposes. This set of qualities is manifested in a person and without him, as a carrier, does not exist (hence the definition – "human"). The opportunity to receive income on the basis of acquired knowledge in the workplace and to increase it, allows us to consider the knowledge accumulated in the University as capital, to assess its capacity. For this purpose, while studying at the University, the student determines for himself not a normalized working day, goes to material deprivation (because refuses unskilled, but well-paid work), hoping in the future, in employment in the specialty to get a greater return than the resources spent by them during the years of training. Moreover, for the successful use of human capital, a student must not only graduate from University, but also spend a number of years on the development of practical skills in their

chosen profession. Only in this case the knowledge gained in the University will acquire the form of human capital.

In human capital there are two components: universal and specific. The universal component is the knowledge and skills necessary for any complex intellectual profession – the ability to work with documents, to argue their own position, to own personal computer programs, foreign language, to own communication technologies, etc. the Specific component of human capital has a much narrower professional purpose, which can be used in specialized fields of activity. For example, the professional skills of a cardiac surgeon can hardly be used in the activities of the system administrator.

G. Gardner, in turn, expressed doubt about the ability to Express the ability of a person with the help of any General indicator, as there are too large differences in human abilities and they are not universal in themselves. His approach emphasized the existence of fundamental differences between mental and physical abilities. His point of view was based on many years of work in the field of human knowledge, where in his book "the Structure of the mind" (1983), he noted the existence of many outstanding people who in certain areas had mediocre abilities.

R. Nelson and E. Phelps described human capital more as the ability to adapt to external circumstances. In their opinion, this human capital should be particularly useful in a situation of imbalance, when it is necessary to adjust to the new working environment, new activities, etc.

The importance of public institutions in the formation of human capital was noted by E. Phelps and S. Bowles, who attached special importance to the school as a consciousness-forming mechanism by which people are instilled with the "right" ideology and generally accepted rules of behavior. According to their point of view, human capital is the ability to work in organizations, obey orders, and adapt to hierarchy and capitalist order.

All of the above views note the impact of accumulated human capital on the performance of work duties. In this regard, the management of human capital is a priority of any organization to obtain the desired results from the work of its employees.

Human capital management, as a rule, is based on the concept of management – theoretical and methodological basis, as well as a system of

practical approaches to the formation of personnel management mechanisms in the existing conditions.

However, in the following sections (Chapter 5) and the following (Chapter 6) of this scientific work we will stick to the term "staff" to determine such organizational processes as: human resources assessment, motivation of human resources, methods of human resources management, etc.

5.2. Features of team work management in organizations

The management process of any enterprise involves teamwork, which should be harmonious interaction of two or more individuals. Such joint work can be called in different ways (team, collective or group), but the fundamental essence of such interaction is based on identical principles. However, many experts in the field of human resources management still believe that each of the above concepts is somewhat different.[77, p. 103]

For example, the team assumes that the people included in it, must necessarily be combined with each other in any common professional matter (work). In turn, the group is individuals who do not necessarily interact with each other, guided solely by common professional interests. In order to belong to the same group, its members need to have, in principle, common views (and they can be far enough from professional). Thus, the team – a broader concept, which includes, in turn, the concept of group. Because a team can be a group, but not every group can and should be a team. [77, p. 104]

In modern scientific literature (both domestic and foreign) in the last few years, its authors have resorted to a different term describing the joint nature of professional activity of people. This term is "team". In this concept there are many derivatives of his phrases, namely: the management team, teamwork, team building, etc.

In order to understand in more detail the meaning of the term "team", you need to refer to its etymology. The concept of "team" emerged as a specific management term that reflects the main features of the interaction of a small number of individuals, each of which is endowed with complementary skills. In addition, these professionals are assembled into a team with a specific purpose, implying the solution of a number of tasks.

For example, increase of productivity, efficiency of labor activity, personal development, etc. [76, p. 104]

The scientific literature on management uses the following definition of "team". A team is a small number of individuals (usually no more than ten) who share common views on how to achieve professional goals and solve professional problems. At the same time, as it was mentioned earlier, members of the same team have complementary skills, share common work values, bear common responsibility for the decisions taken in the course of joint activities. [76, p. 106]

Each member of the team has different functional and role responsibilities, but in the course of joint activities they can be adjusted and modified in order to achieve results. In addition, in the principles of the functioning of the command community, HR specialists highlight such an important element as the mission. Regardless of the nature of professional activity in different team communities, the mission can coincide in the desire to constantly move forward, achieve the championship.

The team has a number of common and specific features. The common feature of the team can be attributed to its quantitative composition (two or more individuals). It unites it with such professional communities as collective and(or) group. Along with this, a common feature of the team is the desire of its members to achieve a common (declared) goal within their competence, as well as the presence of an internal structure with its complementary elements. The specific features of the team scientists include: the uniqueness of its composition, which will allow it to have "its own face»; the individuality of the qualities of each of its members, which extends to the distribution of intra-team powers; along with this, each individual who is a member of the team must and is responsible for the delegated professional functions specifically to him.[54, p. 12]

Without exception, all members of the same team have their own status and role set within the professional community. Personal abilities of a single "team player" play an important role and have a direct impact on the course of team interaction, which, in fact, determines the "strength" of the team. The team is strong in the case when each of its members in their position is better than all the others.

Western researchers in the field of personnel management (as opposed to domestic) have accumulated quite a long experience in the study of team professional interaction of individuals. They concluded that each

team (permanent or temporary) goes through four main stages in its formation.[77, p. 105] Namely:

- 1. Formation and the start of joint professional activities.
- 2. The decision of conflict situations and the General opposition of team members to each other.
 - 3. Normalization of interpersonal relations.
 - 4. Stable work to achieve effective results. [76, p. 113]

The first stage involves the distribution of roles between the participants, specification and negotiation of the full (final) team composition. It is at the first stage that team members are faced with the most complex internal contradictions: the rejection of individual work in favor of collective, the desire to defend their own positions and the boundaries of "personal space". In view of this, there may be minor contradictions or even conflicts, the cause of which is the desire of individuals to assert themselves. Very often it is during the second stage of komandoobrazovanie some of the team members realize that their actual functions differed substantially from the previously submitted. For example, they may seem more complex or, on the contrary, insignificant, not giving the opportunity to move forward, to build and increase professional potential. In the process of resolving conflict situations, team members may lose their initially positive attitude, lose faith in the feasibility of the team project. The second stage of team building, according to the researchers, is one of the most difficult. It is during his team often break up.

In order to avoid a negative result, it is necessary to follow the list of recommendations, namely:

- each team member must clearly understand (be instructed)
 their functions within the team;
- the roles of participants can and should be reallocated periodically;
- the rules of team interaction should be clear and understandable to each of its participants.

Along with this, all members of the team should be acquainted with the main stages of its formation, to convince that the problems are temporary and can be successfully overcome.

The third stage is marked by the fact that each individual accepts (externally and internally) the concept of team interaction, clearly aware of

and assessing the personal contribution to the team business. Team members can clearly see that their joint work gives positive results. At the third stage, the General rules of behavior of the team community members have already been finalized, which are beginning to become sustainable. Communication (both interpersonal and professional) stabilizes, and joint work begins to bring visible positive results.

Teams that reach the fourth stage (without breaking up on the way to it), stabilize the overall process of their movement and development. Their representatives already have positive experience in solving problems and identifying their causes. As shown by practical studies aimed at studying the process of team building, at the fourth stage, most of the members of the command structure change their organizational behavior in a positive way, the intermediate results of their joint activities become more tangible (because of the fact that the team is working together). in most cases, achieved before the estimated time), and employees already understand how to support and what to teach each other.

In addition to the main stages of team building, it is important not to forget about the overall goal of teamwork. For example, in the framework of organizational activities, the overall goal can be formulated as – optimization of the process of practical implementation of business strategy through the rational use of individual abilities and professional resources of individuals. [74, p. 357]

It is important to note that since the process of team building is not the main goal of organizational activity, but only a way to achieve a business strategy, it should be clearly understood for what purpose the team is formed and developed and what specific benefits the organization can acquire from the team interaction of its employees.

Thus, in the process of achieving the organizational goal, the following factors can be identified, dictated by the process of optimizing the team approach:

- organizational goal should be directly related to the interests of real and(or) potential team members;
- team members can have the information that the organization needs to achieve this goal, however, the organization should be established a process of effective exchange of information through vertical and horizontal communication channels;

- team members should be aware that the level of their professional competence depends on the effectiveness of the organization as a whole and the degree of achievement of its organizational goals in particular, be responsible for decisions and their consequences;
- technical, control and incentive subsystems of personnel management of the organization are configured to support the team method of achieving goals, and organizational management styles do not contradict the team method of solving current problems;
- and finally, potential members of the team and the organization in which the process of team building takes place, often do not experience negative emotions from the prospect of joint activities.[54, p. 358]

Justifying the reason for the introduction of teamwork in enterprises at the moment, it can be noted that the results of the team can have a very effective impact on the functioning of the organization as a whole.

However, in order for the interaction of the team and the organization to have a positive result, it is necessary to identify the main criteria for the success of the team itself.

The first criterion is as follows: due to the small composition (previously it was stated that the team often has no more than ten individuals), the team is easy to put together. Namely, each member of the team, having a clear idea of the team's interests and development prospects, as well as having a personal interest in their achievement, is aimed at a team-wide result. Due to the small size of the team, there are no visible barriers to blocking information channels: all information is transmitted without significant distortion. Of course, each member of the team community has its own personal interest in achieving common goals, but this does not interfere with the process of interaction between the team and the organization. It is important to note that the scope of responsibility of all participants in this interaction is clearly defined.

The second criterion is as follows: timely diagnosis of problems contributes to their timely solution. Namely, it implies that many of the difficulties and difficulties can be successfully overcome if they are detected in time. In turn, according to experts, there are a number of common features, thanks to which we can say that there are problems in the team that need to be solved.[98, p. 119]

Among them are the following:

- "shot down guidelines", the situation in which the leaders of the team are in the misconception that all the other members of team interaction completely share their ideas about team values and goals;
- lack of a coordinated position, a situation in which the members of the team interaction completely or partially lack a common opinion on the main team priorities;
- lack of deep understanding, a situation where representatives of one team community do not coordinate (coordinate) their actions with the team priorities, and their professional actions do not correspond to the decisions taken earlier;
- the lack of focus on the strategic objectives, the situation in which the common efforts of the members of the team are being wasted on the solution to the current (daily) problems, the solution of the strategic tasks fully or partially ignored;
- inefficient interaction, a situation in which representatives of one team seek to show that they are in favor of establishing professional relations with other members of the team community, but in practice do not seek close cooperation and constructive dialogue. For this situation, characterized by: the lack of critical remarks in the address of infeasible solutions, the acceptance of questionable strategies team development, etc;
- non-constructive behavior, a situation in which the lack of skills and abilities to conduct an open dialogue completely blocks the possibility of a variety of opinions, points of view, the exchange of positive experience.
 This entails both minimizing the creative potential of the individual and his adaptive potential to market changes;
- the inability of the team to update, a situation in which most of the members of the team interaction does not seek to restructure their work according to the new organizational conditions (preferring to act "in the old way"), thereby significantly slowing down the process of organizational development.[98, p. 122]

Very often, even though many teams and their leaders recognize the need for organizational renewal, this commitment is purely declarative. There may be several reasons for this. Namely:

- this is personal dissatisfaction, which is formed due to the incomplete use of the team members of the interaction of the possibilities of their own human capital. For this reason, even in spite of career and professional growth, the individual has a strong sense of their own lack of

demand, movement in the opposite direction (from their own aspirations), etc.

- isolation of the team, which may occur due to the fact that some team leaders do not pay due attention to external information, the source of which are other organizations. However, this information, provided it is processed in a timely manner, could have an extremely positive impact on the adoption of key strategic organizational decisions.
- lack of individual skills of team members. Not all leaders and representatives of the team community are able to admit this drawback, which, in turn, entails a lack of personal development and personal growth.[98, p. 123]

Therefore, in order for the team to be effective and its activities to be successful, it is important for the leaders of team communities not only to focus solely on their own experience (albeit positive), but also from time to time to refer to the world practice, in which many specialists in the field of human resources management have already developed effective methods of After all, today it is no secret that the so-called "team effect" can be achieved only by reducing the loss of working time through interchangeability of employees, unlimited intensification of labor, increased personal initiative of a single unit of personnel, constructive interpersonal and professional communication, rational distribution of roles and work ahead of the curve within a single team, group, team.

5.3. Methods of organization personnel management: from classical to behavioral

Labor activity of any organization without exception is impossible without its main and main resource – employees. A lot depends on the staff of the enterprise, namely – the final result of the organization. It can be expressed in various economic indicators, including the level of profitability, the cost per unit of production, the volume of profit. Any changes that result in a change in the structure of production and economic relations within the enterprise (regardless of its form of ownership), entail the need to improve the human resources management system of the organization. As a result, there is an objective need to give the human resources management system of the enterprise more modern and relevant

to the current period of time properties and qualities. These new properties and qualities of the management system should certainly be adequate in relation to the current conditions of the functioning of enterprises, directly affecting the improvement of its efficiency. Currently, all organizations (regardless of ownership) seek to solve a common problem, namely to find effective ways to manage the labor process, ensuring the activation of the personal potential of each employee.[76, p. 113]

It is important to note that, to date, human resources departments no longer serve as a liaison with other units, services and departments of the organization. In this connection, most domestic enterprises, as a rule, have a low organizational status. This has a direct impact on the nature of the powers they exercise, which are increasingly theoretical rather than practical. Unfortunately, human resources departments no longer act as a focal point for the organization's human resources work. [76, p. 113]

According to modern researchers, the current trends in the development of management theory and practice are such that the management of human resources must necessarily apply effective scientific knowledge and the latest technology in this field. At the same time, the process of human resources management can not be carried out qualitatively without due attention to the management of the enterprise to the issue of training (retraining) and advanced training of its employees.[74, p. 356]

Currently, a qualitative analysis of an effective set of methods of human resources management of the organization, as well as possible ways to improve them, due to the growing personnel crisis, the need to systematically increase productivity in the enterprise.

In this regard, classical methods of management require radical rethinking and revision, they must be adapted to the dynamically changing conditions of the environment. In turn, modern management methods, which today there are a great many, of course, need a detailed analysis and careful testing in the course of practical management activities. However, both classical and modern methods have one thing in common – all of them must necessarily take into account the specifics of a particular enterprise, as well as be focused on achieving its commercial goals.[74, p. 355]

All methods of personnel management (both classical and modern) imply a purposeful and systematic actions that would allow to organize joint work and achieve certain level and quality results. Many modern

specialists in the field of personnel management determine the methods of human resources management is nothing but the specific ways of management impacts on the employees of the organization, the overall goal of which is to achieve the required indicators. [74, p. 355]

Speaking about the classical set of methods of human resources management, it is important to mention that among them science includes administrative and economic. It is these methods that are most widely used in the classical approach in the management of enterprise personnel.

Domestic and Western scientists agree that administrative methods in their practical implementation involve such methods of influence on the human resources of the organization as:

- influence on the employee of the enterprise on the part of the organization as a whole, and the line Manager, in particular, on the basis of a rigid hierarchy of management, subordination with respect to official powers, as well as a clear assignment of leadership and Executive functions to their holders;
- administrative influence on the employee of the enterprise on the part of the organization as a whole, and the line Manager, in particular, on the basis of the description of the organizational functionality of the individual, which, in turn, determines the area of responsibility of each unit of personnel separately;
- material impact, which is based both on the developed system of incentives (generally accepted and specific, characteristic of the enterprise), and on the system of punishments of employees;
- disciplinary action, which determines the full range of situations in which the employee will be sanctioned;
- administrative impact, which serves as an indicator of the degree of participation in the labor process of the management system.[78, p. 115].]

The fundamental science of human resources management postulates that all administrative methods, without exception, are based on internal regulations, namely: norms, rules, requirements for work.

The use of administrative methods in the process of personnel management has strict regulations. The list of documents regulating their practical application can include the Charter of the enterprise, and the specifics of its organizational structure, and the provision on the internal activities of the enterprise, and job descriptions of employees, as well as

staffing, and items of the employment contract. In General, it can be noted that the application in practice of all administrative methods can significantly streamline the work of the organization, radically improve its manageability, as well as clearly define the scope of responsibility of each employee individually.[78, p. 115].]

It is important to bear in mind that all administrative methods can lead to both positive and negative results. Among the positive consequences in the application of administrative methods, experts include:

- a higher degree of manageability of the organization, which is possible due to strict regulation of its internal processes, in particular, the activities of personnel;
- better understanding by employees of their duties and rights due to their clear description;
 - standardization of all internal organizational processes;
- shorter period of time required to make management decisions (it should be noted that this rule applies only in situations of normal activity of the enterprise);
- $-\,$ strict adherence to and strict compliance with labour legislation. [77, p. 107]

However, along with a large number of advantages, it is possible to distinguish also negative consequences to which application of administrative methods of management can lead.

Among the obvious "cons" experts include:

- decrease in the level of emotional involvement of the company's personnel in the working (labor) process;
- the use of mainly standard normative documents that do not reflect and do not take into account the specifics of the organization, and, as a result, do not perform their functions;
- the lack of "flexibility" of the organizational structure, which blocks the introduction of innovations;
 - rather formal approach to management processes. [77, p. 107]

Among the classical methods of management (as noted earlier) are not only administrative, but also economic. Their main tool — material (monetary and non-monetary) stimulation of employees of the enterprise. Accordingly, they are effective where there is a clear material interest on the part of the employee. Among the economic methods include bonuses and bonuses, and directly the salary itself, and the participation of

personnel in the profits of the company, and benefits with privileges, and, in some cases, a system of penalties. That is, the whole complex of methods that are directly related to the distribution of material values of the organization among its employees.

The application of economic management methods at the enterprise is regulated, including a number of normative documents (laws and acts), among which the main is the Labor code of the Russian Federation. It is the TC of the Russian Federation that establishes the conditions, procedure and size of the use of economic methods, which the employer must strictly observe.[51, p. 271]

Among the undeniable advantages of the use of economic methods of personnel management of the enterprise include:

- reliance on the basic (vital) needs of employees;
- close relationship of employment growth with total results of operations;
- a sufficiently high degree of efficiency (however, it is important to note that it is possible only if the system of material incentives for employees is built taking into account the motivational preferences and needs of the employee);
- clarity, transparency and simplicity in calculations through the
 use of regulated standards of remuneration of personnel;
- social guarantees and protection of workers of the enterprise. [51, p. 272]

However, if economic management practices are used disproportionately, selectively, unreasonably and unfairly, they can also have negative consequences. Among them, according to experts, include:

- increase in employee turnover rate at the company because of insufficient level of their remuneration, excessive fines, lack of social protection and guarantees;
 - increase in the level of tension and conflict in the workplace;
- reduction of labor productivity indicators, the degree of satisfaction with the labor process and the quality level of the duties performed.

However, in this scientific work we would like to reveal not only classical methods of personnel management, but also to dwell in more detail on the essence of the behavioral approach in human resource management. Social and psychological methods play a priority role in the behavioral approach, according to modern researchers.[98, p. 122]

For example, an analysis of an individual's personal abilities, professional preferences, and aptitudes to a particular type of work can allow the Manager to fully involve the employee in the process of achieving organizational goals.

Moreover, built on the basis of the leading motives of employees, the system of stimulation of work at the enterprise, will give the opportunity to

According to the adherents of behavioral management methods, they provide an opportunity to create an extremely favorable organizational environment for the employees of the enterprise, which will give the opportunity to fully disclose, and in the future to realize their personal qualities, professional knowledge, skills, to ensure continuous professional growth.

Behavioral methods of personnel management, based on social and psychological knowledge about the individual, allow to influence the personal (personal) characteristics of employees, to reveal their abilities, to promote the implementation of their motives, to satisfy the individual's internal desire for joint activities.

A number of modern studies confirm the fact that behavioral methods can lead to the maximum effect in management, as they are oriented and take into account the internal aspirations of individuals to leadership, cooperation, development of its abilities, as well as meeting the needs for self-realization, recognition and respect from other members of the workforce.[98, p. 123]

However, it is important to remember that the key to effective practical application of behavioral management methods is a detailed analysis of the social and psychological structure of the workforce. In other words, the Manager should have a clear idea of the abilities of each individual subordinate, to understand and accept his social position, to promote the development of sustainable social relations and interactions with colleagues.

Behavioral management methods, as the practice of their application in various organizations shows, can significantly increase the personal interest of employees both in the labor process and its result. They have an extremely positive impact in cases where the situation requires to increase the level of cohesion of the workforce. Some experts believe that behavioral methods have a synergistic effect – a situation in which the results of labor efforts of a group of workers are several times greater than the sum of individual results of labor activity of each of them. Moreover, behavioral methods of personnel management provide a real (not illusory) opportunity for members of the workforce to constantly improve and develop.

However, there are some restrictions that can significantly limit the use of behavioral methods. The main obstacle to their practical implementation is the high level of their complexity. Behavioral methods require an extremely integrated approach, they begin to give a positive effect only if they are closely related to the financial and organizational objectives of the enterprise.

In contrast to the classical methods of management, behavioral require indirect, indirect nature of the impact. They do not accept an authoritarian style of management, and are possible only in those organizations where the leadership adheres to democratic views. One of the main advantages of behavioral management methods is that they contribute to the strategic development of the enterprise, strengthening its competitiveness and development of professional potential.

In conclusion, it is important to note that both classical and behavioral methods have absolute advantages. However, their illiterate practical application can lead to irreversible (negative) consequences. And administrative, and economic, and socio-psychological methods of personnel management have both advantages and disadvantages. The maximum effect they can give only when applied comprehensively and meet the organizational specifics.

5.4. Modern methods and procedures of personnel management and evaluation of their effectiveness

Modern methods of management staff actively used the previous experience, accumulated knowledge and practices of the previous management of the schools. However, according to the requirements of modern society, it complements them with the latest technologies, means and methods of impact on human resources.

It is important to note that the analysis of modern management methods fully confirms the fact that over the past few decades the approach to the perception and determination of the term "personnel" has changed radically. According to domestic researchers, the staff from the cost item called "personnel" was upgraded to the investment item called "strategic resource".[77, p. 107]

Experts note that all modern methods of human resources management of the enterprise are developing in three strategic directions. Namely:

- resource;
- procedural;
- structural.[77, p. 102]

If we study and consider the employees of the organization through the prism of the resource approach, the methods of management of employees of the enterprise should contribute to the development of this resource, as well as increase its quality level. The resource approach is based on such methods as:

- personnel assessment and certification;
- professional development of human capital;
- improving the efficiency of internal communications within the organization;
 - improving the system of motivation of employees.

As part of the procedural approach, the human resources management procedure is examined from a process perspective. In turn, methods of management of workers are considered as component (connecting) elements and (or) stages of the General process of the organization of collective (joint) work. Adherents of the procedural approach believe that the main role here should play such areas of work with the staff as:

- personnel selection;
- professional and psychological adaptation of personnel;
- training, retraining, advanced training of personnel;
- motivation and stimulation of personnel;
- staff business career development.

The structural approach and its followers seek to study and describe the process of human resources management as a system with a fairly stable structure. In turn, management methods are investigated here as a tool that affects the components (elements) of this structure. It is important to note that the structural approach takes into account the internal and external management system of employees. Within the framework of the structural approach, the following main procedures can be identified:

- creating a positive image of the company acting as an employer;
- internal and external marketing of human resources;
- attracting employees with a certain set of professional and personal qualities;
- building effective internal communication processes and connections.[77, p. 103]

Currently, the science of personnel management is quite cosmopolitan. In modern management, effective methods accumulated within the framework of scientific schools of different countries are actively used. [74, p. 357]

For example, American and Western European schools have introduced a wide range of procedures and methods of working with personnel into the Russian practice of human resources management. These include:

- 1. Management by objectives. This procedure implies that the assessment of the effectiveness of the company's personnel is carried out depending on the degree of achievement of key performance indicators, the level and quality of implementation of the goals. In turn, the planning of the quantitative and qualitative composition of the staff is carried out depending on the goals of the organization.
- 2. Controlling. This method involves the standardization of human resources management processes, which should be based on the identification of performance indicators of each individual employee of the organization, representing its specific unit. Here, what is important, strict monitoring of the achievement of the set indicators should be carried out.
- 3. Time management. The practical implementation of this procedure assumes that working time should also be the object of management. Namely, the procedure of optimization of working time in practice can significantly reduce staff costs, increase the productivity of human resources of the enterprise, to introduce and further successfully implement new means of motivating employees.
- 4. Formation of favorable socio-psychological atmosphere in the working group. In turn, this procedure is implemented through support and

assistance to new members of the workforce and, as a result, contributes to the strengthening of interpersonal and professional relationships, significantly reduces emotional tension.

- 5. Professional development of personnel. It involves, first of all, a competent and objective assessment of the current level of professionalism of employees, their skills and competencies. At the end of this procedure (ideally) should be developed individual and(or) collective programs to improve the professional level and skills. Experts note that managers who pay due attention to the professional development of their subordinates are able to maintain a stable level of interest of employees in the productive and quality of the labor process, which in turn contributes to the competitiveness of the enterprise.
- 6. Creation of effective intra-organizational interaction. This method gains the greatest efficiency in large holdings, and also the companies having branched organizational structure with numerous representations and branches. The practical implementation of this method is based on its "transparency" and awareness-raising activities for all participants. In other words, it is assumed that each employee of the company should be clearly aware of the goals and objectives of their work, as well as objectively assess their contribution to the overall organizational results. Practice shows that the involvement of human resources of the enterprise to the collective discussion aimed at finding and eliminating problems in the personnel management system, significantly increases the efficiency of the management process. [98, p. 119].

Thus, all modern procedures and methods of human resources management are generally focused on solving specific organizational problems, which should result in an increase in the performance of the enterprise as a whole.

Evaluation of the effectiveness of various procedures and methods of human resource management is determined solely by the results achieved by the workforce in the course of joint activities. For example, the economic effect is calculated from the difference between the total cost of employees of the organization and the total financial result of the entire working group (team). The main indicators of the economic effect of the use of "right" methods of human resources management is considered to be:

steady increases in labor productivity;

- stable growth in the quantity and quality of manufactured goods, services, etc., which occur due to the increase in labor productivity indicators;
- strengthening of competitive positions of the enterprise which occur owing to stable growth of quantity and quality of the let-out goods, services, etc.;
- reduction in personnel costs, which occur through procedures aimed at optimizing the organizational structure, the steady fall in staff turnover, a steady increase in the quality of work of the working group in particular and workforce in General. [98, p. 123]

Analysis of scientific literature shows that the most common indicators that assess the effectiveness of the procedures and methods of personnel management in management practice are:

- labour productivity;
- the growth rate of labor productivity;
- share of income from core activities derived from productivity growth;
- conditional "saving" of personnel costs while increasing productivity.

According to domestic experts, labor productivity indicators reflect the contribution of each individual employee of the enterprise to the overall results of the organization.[98, p. 122]

Productivity is one of the key financial indicators that measure the level of effectiveness of human resources management procedures and practices. Of course, depending on the application of certain procedures and methods of management by employees of the enterprise, the indicator of labor productivity can fluctuate (increase or decrease). However, the labor productivity indicator itself does not give an opportunity to assess the situation in the dynamics of its development. To do this, it is important to calculate the growth rate of labor productivity. However, it should be remembered that an important indicator of the effectiveness of personnel management is the calculation of the optimal staff required to perform the full scope of labor functions.

Modern management science considers personnel as a strategic resource, and the costs associated with the development of this resource as an investment. Accordingly, according to the researchers, the indicator of the effectiveness of procedures and management methods is determined, among other things, as the return on investment.[188, p. 103]

The degree of effectiveness of procedures and methods aimed at the professional development of the company's personnel depends on:

- growth rate of labor productivity;
- process optimization of working time;
- improving the quality of work performed;
- reduced staff turnover;
- increasing the level of staff loyalty.

However, it should be noted that in addition to the economic effect, which can lead to the "correct" use of procedures and methods of human resources management, experts in the field of management also note the social and psychological effects.[188, p. 119]

Social impact is measured by the presence of indicators such as:

- changes in the internal structure of the workforce;
- strengthening intra-organizational relationships and interactions;
 - the reduction of information barriers;
- increasing the sense of responsibility of the members of the working group;
 - the emergence of responsibility for the common cause.

The researchers note that the social effect also has a number of indicators that serve as an indicator that the procedures and methods of personnel management in the enterprise are implemented in the right direction. For example, reducing the level of staff turnover makes it possible to assess how effective social "tools" impact on employees.[51, p. 269]

Coupled with the social effect, it is customary to talk about the psychological effect, which also occurs due to the use of "correct" procedures and methods of human resource management. The main indicators of the presence of psychological effect is the steady growth and development of personal (personal) and professional qualities of employees, their knowledge and skills, directly affecting productivity. Another equally important and effective indicator of the psychological effect of the members of the workforce is their overall satisfaction with the labor process and work in the company. This indicator helps to calculate special tests to identify the attitude of employees to the quality and results of their own work. The

result will enable the management to understand what proportion of employees are satisfied with the work, and what – experiencing a sense of discomfort that can push the employee to leave the organization.

Analysis of the set of procedures and methods of personnel management, which are currently used in various enterprises, makes it possible to conclude that their combined use may entail economic, social and psychological effects. And the process of personnel management can and should be studied through the prism of such aspects as:

- legal (regulatory strict implementation of labour laws, organizational regulations, compliance with formal rules and regulations);
- organizational and managerial (regulating accurate execution of the labor functions and duties assigned to them by various divisions and services of the company);
- economic (regulating compliance with the terms and procedures of remuneration, as well as all other material (monetary and nonmonetary) options to stimulate employees);
- social and psychological (regulating compliance with social and psychological characteristics of interaction between employees in the process of business communication).[77, p. 107]

Thus, giving the author's assessment of the effectiveness of modern procedures and methods of personnel management, it can be summarized that they all give a positive result only in situations of their rational, integrated and systematic application. No single procedure or method is inherently universal and does not guarantee a lasting positive effect when the Manager works with his subordinates.

5.5. Goals and objectives of the enterprise personnel assessment procedure

Staff assessment in the organization is a procedure that is very important. Currently, managers pay special attention to it, as the success of the enterprise as a whole depends on the effective work of employees. At the present stage, specialists in the field of management identify three main elements in the system of evaluation of employees of the organization:

- 1) Managerial;
- 2) Informational;

3) Motivational.

The first element – management – is implemented through the adoption of a set of administrative decisions. These include: increase or decrease in the career ladder, direction for training, advanced training or retraining, rotation (transfer to another position on a horizontal trajectory), dismissal from the organization, etc. All of the above administrative decisions should be taken on the basis of the results of the evaluation procedure of employees. This procedure is carried out, among other things, by ascertaining the compliance of the qualification skills of employees with the requirements of the workplace. The resulting information provides an opportunity to put for consideration and General discussion the question of making changes in the organizational policy of the enterprise in the field of remuneration. In other words, to develop a compensation system based on a fair and efficient distribution of remuneration between the staff of the organization, which would make it possible to establish a direct relationship between the labor contribution of a particular employee and the amount of his salary.

The second element – information – is implemented through the ability of the management of the organization to obtain reliable information about the degree of efficiency of their employees, as well as to bring to them information about the list of requirements and indicators that employees must meet. This information gives the staff of the organization the opportunity to form an idea of what exactly they expect from the head and what actions aimed at improving the quality of working life should be taken.

The third element — motivational — is implemented due to the fact that an effectively built system for assessing the results of labor activity of personnel, and, as a result, an effective system of payment for its work, forms the interest of employees in the qualitative performance of their work functions. Moreover, by itself, the procedure of personnel evaluation stimulates employees to maximize their efforts to achieve a great result. Some experts believe that in this case plays an important role psychological factor, namely, the individual's desire to be evaluated is not worse than all the others. [188, p. 179]

Along with the management, information and motivational components of the personnel assessment procedure of the organization is designed to solve a set of tasks. Modern specialists in the field of personnel

management believe that it helps to determine the degree of compliance of a particular employee with the requirements of the workplace, to obtain reliable information about the quality of work performed and the degree of its effectiveness and on this basis to enable the line Manager to establish feedback with his subordinates. At the same time, the personnel assessment procedure enables the Manager to understand the employee's labor potential and thereby minimize the risk of unjustified promotion (promotion) of incompetent employees to new positions. No less important task, the solution of which is aimed at assessing the personnel of the enterprise, is the development of training programs and a clear definition of the costs of their implementation. After all, it is well known that timely training (retraining) and advanced training of personnel contribute to the formation of its work motivation, maintain employees 'sense of justice. [76, p. 117]

During the assessment procedure the staff decided to allocate the object, the subject and the object. In the role of the object of evaluation is the one to whom this procedure is carried out. The object can be a specific employee of the enterprise, and a whole group of employees, formed at the discretion of the management of the enterprise.

The subject of evaluation (i.e. those who evaluate) is, as a rule, a representative of the management corps. It can be an employee of the personnel service of the enterprise, and the line Manager, and an independent expert invited from a third party organization that does not have a direct relationship to the individual acting as an object. [76, p. 117]

As practice shows, it is often line managers who act as the main actors in the implementation of the staff assessment procedure. This is due to their daily, close cooperation with the assessed individual, which gives them the right to have the most complete information about the results of his labor efficiency. Line managers are responsible for the degree of objectivity of the assessment. They are authorized to bring to the attention of the people in his Department (Department) information about the upcoming assessment and to ensure the completeness of the information base for the implementation of this procedure. The prerogative of the line Manager as the subject of evaluation is also conducting evaluation interviews. [75, p. 109]

All subjects of evaluation (line managers, employees of the personnel service of the enterprise, independent experts, etc.) can be divided into two groups:

- 1. The formal subjects of the evaluation.
- 2. Informal subjects of the evaluation. [75, p. 119]

It is accepted to refer to formal subjects line managers, representatives of personnel services of the enterprise and other officially authorized persons. Formal subjects of an assessment are allocated with the right of acceptance of administrative decisions following the results of the carried-out assessment.

Colleagues and subordinates of the object of evaluation, as well as an independent expert invited from an external organization can be considered as informal subjects of evaluation. Informal evaluators are not empowered to make any administrative decisions. Their main function is to form an opinion, which will be taken into account by the formal subjects of evaluation in the course of information processing for management decision-making. [74, p. 357]

In the management practice of the last ten years, a combined evaluation system is often used, in which the appraiser is not one individual, but a whole group of experts. The combined assessment makes it possible to obtain a more objective and independent (from subjective opinion) result. [51, p. 272]

As a subject of assessment of the personnel of the enterprise it is accepted to consider efficiency of work of the specific employee (object of an assessment), his business and personal (personal) qualities, process of his labor activity. [51, p. 273]

It is important to note that when considering a candidate for a vacant position in the organization, the evaluation procedure is carried out in several stages. At the first stage, an initial interview is conducted by a representative of the personnel service or Department (division) for work with personnel. After that, candidates who have successfully passed the first stage of evaluation are selected by the future immediate supervisor.

Along with the determination of the main tasks to be addressed by the evaluation procedure of staff in the modern organization, it is important to give due consideration to the goals towards which it is oriented. In our opinion, this should be done in order to understand more precisely how the assessment of employees of the enterprise should be integrated into the human resources management system, as well as to understand what functions it performs. [78, p. 113]

The first and the main goal, which is aimed at achieving the personnel assessment procedure, is to determine the efficiency of the company's employees.

First of all, the evaluation procedure is carried out to determine the effectiveness of the work of each individual employee. Based on the results obtained, it can be concluded whether the employee contributes to the achievement of the goals of the organization through the performance of their duties.

If, in the course of the evaluation procedure, staff members who are unable to perform their duties are identified, they may be given the opportunity, at the discretion of the management of the organization, to attend training courses aimed at improving their skills, as well as the acquisition of missing knowledge. [78, p. 114]

If the results of personnel evaluation procedure in your organization regularly to identify staff members who fail in their official capacity, it shows, according to some experts, the unreasonable recommendations of the employee for the vacant jobs and, as a result of incorrect operation of the service in staff recruitment. There can be many reasons for the discrepancy of the position, but the main ones are professional and personal characteristics of a particular individual, which were not properly assessed during the selection process. Based on the identified inconsistencies, the line Manager of the decision on the moving of the employee to another working position or dismissal.

This situation may be due to the lack of an effective system of evaluation of the applicant for a vacant position in the organization during the recruitment process. [74, p. 351]

As the experience of large international companies shows, the dismissal of an employee who has not successfully passed the evaluation procedure is quite common.

The next, no less important goal, which aims to achieve the procedure of personnel assessment in the organization is to develop an effective system of remuneration.

Employees who successfully cope with their duties, reasonably expect that their labor success will be marked by management and properly compensated (paid). As practice shows, those organizations that use in their work an equalizing system of remuneration or one that does not take into account the personal (personal) contribution of employees face long-term problems. The lack of proper attention to this issue may lead to increased dissatisfaction on the part of employees to the organization and its management and, as a result, their care. The personnel assessment procedure should contribute to the development of an individual approach to solving the issue of the amount of wages for each employee individually, taking into account the results of his work, as well as personal characteristics.

According to the estimates of modern specialists in the field of personnel management, the development of compensation policy based on the assessment of the individual labor contribution of a particular employee is today one of the most effective ways to motivate the human resources of the enterprise. This system enables employees of the organization to experience a sense of fairness on the part of management and creates a desire to make every effort to obtain even greater remuneration. At the same time, an effective compensation policy developed on the basis of an assessment of the individual labor contribution of the personnel allows not to overpay those employees of the enterprise who regularly show unsatisfactory results. Therefore, as practice shows, the establishment of a close relationship between the assessment of human resources of the enterprise and the level of their remuneration, can significantly optimize staff costs and promote labor motivation of all employees without exception.

The third goal, which is aimed at achieving a well-built procedure of personnel assessment in the organization, is the development of employees. Since the assessment of human resources should be based not only on summarizing the past results in their work, but also to give everyone the opportunity to grow and develop professionally. Often, the more experienced the employee becomes, the more complex job duties he performs. This, in turn, gives him the opportunity to move (if desired) to the next step in the hierarchy of positions characteristic of his organization. Setting tasks of a new professional level for the subordinates, the management, thereby, gives them the opportunity to develop. In turn, for the management corps it is a good chance to identify potential candidates for promotion.

The next (fourth) goal of the staff assessment procedure in the organization is to provide feedback.

The personnel assessment procedure provides an excellent opportunity for the company's employees to get an objective feedback on the results of their work from the line Manager. As, for example, to declare his professional achievements and to report on plans for further progress, to specify mistakes and to provide assistance on the way to higher labor rates. [74, p. 352]

There are often situations in which the success of the personnel of the enterprise remain unnoticed and unappreciated, which leads to the formation of a reasonable sense of injustice among employees. The lack of clear instructions that an employee must follow in order to achieve effective results in the course of their work is also not uncommon.

When carrying out the procedure for assessing the human resources of the organization, the problem of uncertainty about the standards of work is often revealed. During the preparation of job descriptions, it is necessary to clearly define not only the list of responsibilities that correspond to this position, but also to build clear standards and performance indicators. As, for example, how much specific work time will be required to perform certain tasks.

Thus, as a result of consideration of the main characteristics of the personnel assessment procedure, it can be concluded that today it is an integral part of the personnel management of any enterprise and allows the management to understand the degree of efficiency and effectiveness of employees of the enterprise, to identify their professionally significant competence. At the same time, the procedure of evaluation of human resources of the organization makes it possible to obtain objective comprehensive information about the personnel of the enterprise, which, in turn, will give the opportunity to make informed management decisions and develop an effective system of motivation.

5.6. The procedure of personnel assessment in the organization

In a market economy, the main characteristics of which are the rapid exchange of information, as well as universal access to modern technology, great interest and relevance acquire effective management processes. Western and domestic science studies them as a unique product, acting as

an integral element of a particular organizational system. A special place in such a management system of any company and enterprise should be given to work with human resources.

Over the past few decades in the theory and practice of management science there has been a complete rethinking of the place and role of staff in the organizational structure. Thus, if in the middle of the twentieth century the company's employees were perceived by its management as a kind of significant expense, today, as noted by researchers in the field of personnel management, the human resources of the enterprise are the most valuable asset of the organization. And it is this asset that has the most powerful investment potential. [54, p. 11]

In any successful company, each of its employees, implementing an individual set of duties and functions, interacts in the course of their work with other representatives of the organization. This interaction, in turn, contributes to the achievement of organizational goals and leads to the final result, the effectiveness of which is directly due to its quality level. That is why managers of large companies unanimously agree – the successful achievement of the most important (strategic) goals of any enterprise is impossible without an effectively built and well-established system of management of its employees. [54, p. 9]

The human resources of the organization act as a leading factor in the competitiveness of the enterprise, which is why it is particularly important for it to ensure the most effective human component. That is why at present any company faces the task of developing an objective system of evaluation of its employees, which would allow to evaluate each employee individually, in the context of those official powers that are assigned to him.

Effective assessment of the human capital of the organization allows to solve several management tasks at the same time. First, it provides objective information about the employee, on the basis of which the Manager can make administrative decisions. Secondly, the personnel assessment system, being one of the main directions of personnel policy and interacting with all its elements, serves as an indicator of its status and development. [54, p. 9]

The whole range of measures aimed at the implementation of an objective assessment of the company's employees is designed to determine the degree of efficiency and effectiveness of the work of its employees. At the same time, it helps to identify their presence (or absence) of significant

professional competencies. Personnel assessment is a procedure that is exclusively always carried out in order to determine the degree of compliance of the employee with the position he occupies. It enables the employee to better understand the nature of their work responsibilities and the requirements that apply to him the line Manager and the company (based on the results of the assessment of the individual is provided with information about the degree of performance of their production functions).

According to modern researchers, the assessment of human resources of the company significantly contributes to the strengthening of labor motivation among employees, the growth of their interest in their work responsibilities. [188, p. 79]

At the same time, a well-functioning system of human resources assessment allows the organization's management to establish a more competent system of remuneration, which should be based solely on staff performance indicators. Thereby reducing unreasonable costs, which may result in the presence in the company of "useless" employees whose work does not contribute to the achievement of strategic goals of the company.

As noted earlier, the evaluation of the company's employees acts as an important element of the personnel management system; without it, to date, the successful operation of any enterprise is impossible. [188, p. 88]

Referring to various scientific sources, we can see that the concept of "personnel assessment" is interpreted differently by the authors of this term. A number of researchers share the view that the procedure for assessing the human resources of the organization is aimed at identifying the specifics of the individual qualities inherent in a single employee, which are necessary for him to perform a number of functions. Other scientists believe that the personnel assessment procedure allows the management of the organization to form a clear idea of the extent to which this job functions are implemented in the course of employment.

Personnel assessment is a kind of diagnosis of professional and individual personal qualities inherent in a single employee. This procedure is carried out according to pre-established criteria and should be based solely on the job requirements that are accepted in the organization. The final stage of the personnel assessment procedure must contain recommendations for more effective management of the company's employees, disclosure and stimulation of their individual (personal) potential development. [188, p. 88]

The personnel assessment procedure allows the management of the enterprise to determine the degree of efficiency of the individual employee in the process of implementing the tasks assigned to him by the organization. Very often, the assessment of human resources of the company enables its Manager to accumulate the necessary information that will be required for him in the future to make competent management decisions. [185, p. 7]

Having systematized different approaches to the interpretation of the concept of "personnel assessment", we can give the following definition. The personnel assessment procedure is a systematic process of collecting information, its detailed analysis and effective evaluation, which gives the management body of the organization a complete idea of how effectively employees perform their delegated authority, as well as to what extent their work behavior, performance and individual characteristics meet the requirements of the company and the head. [185, p. 10]

The human resource assessment procedure can be differentiated in two ways. The first method involves assessing the performance of the employee of the company, and the second – an assessment of the inherent employee professionally significant features.

With the help of the procedure for assessing the results of labor activity, it is possible to identify the degree of efficiency of labor activity of the organization's personnel. It is important to emphasize that the meaning of the term "efficiency" is often equated with productivity. Although these two terms are closely related to each other, they still have a fundamental semantic difference. Speaking about the effectiveness of labor activity, scientists often mean not only the ability to achieve the tasks in the most optimal and rational ways, but also the strict implementation of certain production indicators.

Moreover, labor efficiency can be expressed (as opposed to labor productivity) in quantitative and qualitative terms. Accordingly, the higher the productivity and less labor costs with the required quality of work, the higher the labor efficiency indicators will be. [75, p. 109]

Performance indicators of personnel are based on the following list of requirements:

exact matching of the labour process carried out by the worker,
 the objectives of the company and regulatory it requirements;

- use of knowledge, skills and abilities of the employee at the maximum level;
- implementation of labor operations in the most economical and rational ways (methods).

It is important to note that the procedure for assessing the level of professionalism of an individual, as well as his professionally significant qualities that are important for the organization, can be carried out twice. The first stage is carried out at the stage of consideration of a potential employee of the organization during his interview for a vacant position. Reevaluation of professionally significant qualities can be carried out at the stage of decision-making on his promotion.

In the first case, the representative of the organization may face the problem of lack of ability to accurately assess the labor performance of applicants. Therefore, here, in addition to the procedure for assessing the level of training of the individual and the availability of the required knowledge, experience and qualifications, it is important to assess the degree of his aptitude. Assessment of the professional suitability of the candidate for the vacant position allows to assess the degree of compliance with his individual (personal) features, the requirements of the future profession, his ability to implement the labor functions assigned to this profession.

This approach is based on the opinion that the personal characteristics of the individual determine his potential ability to carry out successful work. Personal characteristics have an impact on many factors, namely: how to receive, process, transmit information and make key decisions based on this information. The existing methods of evaluation of potential employees of the organization, as well as its staff, allow to build a forecast of the degree of success of employees with a high probability. [75, p. 107]

Of course, the current trends in the evaluation of personnel, which are currently used in organizations, allow to measure not only the results of the work of employees, but also to monitor the manifestation of staff competencies that contribute to the effective work. [75, p. 109]

Thus, an integrated approach to the assessment of the organization's personnel should contain three main components: managerial, informational and motivational. And its object should be the factors that affect the productivity of labor both directly and indirectly. Currently, the

evaluation procedure of employees is an integral part of the personnel management of any organization. It aims to identify the degree of efficiency of labour activity of the personnel of the company for the purpose of determining the employees professionally significant competences. At the same time, the personnel assessment procedure provides a variety of information about the employees of the organization and allows you to make informed management decisions, thereby contributing to the development of an effective motivation system.

CHAPTER 6. PRACTICAL ASPECTS OF BUILDING A SUCCESSFUL TEAM IN THE ENTERPRISE

6.1. Modern methods of building a successful team in the organization

Recently, many researchers in the field of personnel management, both domestic and foreign, a lot of talk and write on the importance of teamwork in the organization. It is a well-known fact that the so-called team effect is based on the high motivation of its representatives to work together, aimed at a common result. Often, the motivational background of team members should reach such a high level that it was able to "cover" the increased requirements for the performance discipline, the transition to the "irregular" work schedule. At the same time, the motivational background should be able to "cover" the expected external and internal risks of the organizational environment. [74, p. 351]

Scientists involved in the study of team problems in the organization, believe that in the process of forming a successful and well-coordinated team of representatives of the workforce, it is necessary to take into account a large number of factors, such as:

- existence of friendly relations between certain employees of the company;
- the overall morale of the organization's staff (which has a significant impact on the efficiency of the process of achieving organizational goals and solving organizational problems);
- the degree of desire of the company's employees to perceive the new, to adapt to the rapidly changing external environment, to the dynamics of the current social and economic situation. [74, p. 357]

Speaking about the existing (actual) methods of team building today, we should not forget that any Manager, every leader (formal and (or) informal) in the organization is very important to use modern technologies of team building, relevant at the moment. Today, the modern theory and practice of management science knows several ways to form a team. All these variants are derived from English terms, which are included in the professional vocabulary of Russian managers in their original sound. Namely:

teambuilding (team building);

- re-teaming (Retiming);
- team forcing (importing);
- team design (Tim design). [76, p. 117]

Teambuilding (teambuilding) is one of the most popular and well-known options for building an education team). However, as you know, the idea taken as a basis for intra-team building is not new. The desire to control the collective mind and to find ways of non-standard impact on individuals with the aim of fostering team spirit long enough was implemented in a military environment. After all, most of both large-scale military exercises and local training within the headquarters are aimed at developing team behavior skills. Such classes, as an integral element of army training, involve the ability to work harmoniously in a team, where success does not depend on the behavior of an individual, but on the coordinated work of the whole team. "War games" allow you to acquire and consolidate the necessary patterns of behavior in any of the most complex, sometimes emergency situations, to work out useful and coordinated actions for any situation. After all, the main task of the military is the ability to respond quickly in an extreme situation.

However, the military sphere is not the only platform for the development of team behavior skills. So, for example, in many professional areas (be it sports or, for example, Astronautics) it is very important to learn synchronous interaction with colleagues. In turn, "training alarm" for firefighters or emergency workers are an integral part of the training of future professionals. All of the above options make it possible to understand that teamwork (coordinated) work is sometimes much more important than the actions of an individual. [76, p. 115]

However, the direct connection of the military sphere and teambuilding (teambuilding) was not mentioned by chance. Back in the mid-50s of the twentieth century in England were taken one of the first ways to educate team spirit among employees of business structures with the help of a rope course, which has long been used for the formation of team compatibility and the development of psychological skills in the team of the British army and special units. Rope's course or rope course proved to be such an effective way of rallying people that a few years later it was widely used to create cohesive teams within the business space of North America.

Modern researchers believe that teambuilding ,along with the team spirit, is designed to develop personal initiative, leadership skills, ability to act quickly and effectively in non-standard situations, to be persistent in solving operational and long-term tasks. [76, p. 115]

Practice has shown that successful overcoming of difficulties through collective efforts brings very positive experience and has a positive impact on the work of the organization as a whole. So, teambuilding (teambuilding) can significantly help with:

- starting a new project;
- creation of new departments (divisions) and representative offices of the organization;
 - recruitment and hiring of new employees in the company;
 - professional staff promotion.

Along with this, teambuilding (teambuilding) assists in solving such tasks as:

- team building aimed at harmonious and synchronous work,
 increasing the efficiency of collective work;
- analysis of interpersonal relationships of employees in the team in order to identify both leaders and "outcasts", as well as to understand the role of each team member;
- improve the quality and increase the degree of interaction between employees of the same Department (Department);
- modeling of various business processes that are likely to occur in the future, as well as increasing the efficiency of communication processes in the organization;
- minimizing stress and chronic fatigue syndrome in the organization's staff;
 - extension fields motivation in most employees. [188, p. 177]

Teambuilding (teambuilding) in the course of its wide practical application has acquired various options and methods that have taken as a basis the basic ideas of team building. Among the most popular forms it is customary to allocate:

- sports games and activities that have a team basis, such as rafting, paintball and more;
- creative activities, such as: quest, intellectual competitions such as "What? Where? When?"or "KVN", team competitions;

 active training, which as a guide take as a basis the principles of interaction of "players" in the team, such as: already mentioned earlier rope course.

The main ideas of teambuilding today are widely implemented in Russian companies. Various forms and types of practical implementation of this option of team building are already quite a lot in the domestic business environment.

Depending on the degree of the results of the organization as a whole, Russian researchers distinguish the following "derivatives" teambuilding (teambuilding):

- corporate events and informal meetings involving, for example,
 animators and artists have minimal positive impact on business results;
- quests, story-dynamic games, creative activities, the duration of which can be reconciled from 2 to 5-6 hours have an indirect impact on the development of corporate culture and business results. These programs are carried out by involving participants in the game through an interesting idea, and the main result of such events should be to strengthen the sense of "we", increase loyalty to both the organization and each other, readiness for further joint work;
- often in the form of programs, where with the help of creative tasks one or another side of business processes and professional activities is modeled. For example, examples of such aspects of business activity can be: promotion of a new product and (or) service, implementation of a sales plan, market conquest or strengthening of own positions, etc. Active business games have a positive impact on the emotional sphere of the participants, who gain valuable experience used in the future as part of their professional activities.
- outdoor-training, the duration of which can be reconciled from 1 to 2-3 days. This version of teambuilding (teambuilding) is usually carried out outside the organization and aims to build (in order to further consolidate) effective interaction between its members employees of the same organization. Very often, outdoor training programs are developed according to the interests of the "client" a representative of the organization. According to experts, the result will achieve maximum effect if senior managers are included in the outdoor training.

- programs aimed at the implementation and realization of corporate values. These programs can and should be conducted in a game and(or) training format. They contain elements of active group activity, which could allow participants to acquire practical skills, giving the opportunity to demonstrate their own attitude to the corporate values of the organization, and, subsequently, and consolidate them in the process of professional activity. As practice shows, the effect of the implementation of these programs is largely dictated by the extent to which the declared corporate values of the company correspond to their real interpretation by ordinary employees and especially by the management corps the heads of the organization.
- various types of combined programs (projects), which as a fundamental vector choose a specific business result. As a business result, the most diverse options can be presented, from, for example, consulting services or increasing sales of products to directly team-building goals. [75, p. 109]

It is important to note that teambuilding combines in addition to the above activities aimed at strengthening the team spirit, various actions of both image and communicative nature.

For example, the image campaign may well be the development of corporate identity, which is an integral part of every organization. Specific examples of demonstration of corporate identity of the company can be a variety of products containing the symbols of the enterprise, through which its partners, customers and competitors are able to identify it: notebooks, pens, stationery, office calendars, t-shirts, etc., made in the corporate color. However, the corporate identity, according to modern researchers, is not only and so much presented on the above items logo of the enterprise. This is, to a much greater extent, the quality of products, well-coordinated work of staff and high-level service. [75, p. 110]

However, the activities aimed at promoting their own brand, through the presentation of products and services that contain the corporate identity of the company, also carry a huge benefit in the formation of the team spirit of the company's personnel. These actions will be more informative and useful if they are held on a regular basis not only among the employees of the organization, but also among potential and real customers. Another group of shares – a communicative action, involving a variety of options for business communication of the management of the organization with the staff of the enterprise. Such options can be business corporate correspondence, and intra-Newspapers/magazines, and video/audio addresses of managers of the enterprise to employees, and corporate holidays/thematic evenings, etc. All these actions allow to adjust and qualitatively improve communication communication between employees of various levels (as, for example, the managing, production and service personnel).

The big advantage of the stock of a communicative nature is that they quite quickly form the feedback. This allows managers to learn about the General mood of their subordinates, affect their emotional mood.

Very often, within the framework of actions of a communicative nature, using various methods, managers resort to the so-called calendar of meetings, according to which each subordinate can Express his wishes/claims when meeting in person with the line Manager.

The second option is team building, mentioned earlier in this work is called re-teaming (Retiming). The literal translation of this concept into Russian means the formation/reformation of working groups (teams). Most often re-teaming (ritiming) is used in the organization, if the management of the latter aims to form, for example, a management team within a new company – that is, "from scratch". Another most common situation in which the organization resorts to re-teaming is the need to prepare the management of the organization for global organizational reforms, as well as in solving current problems that require employees of the enterprise the ability to synchronous team interaction.

Practice shows that the successful application of re-teaming (Retiming) enables the organization's leadership to unite subordinates, direct their creativity and professional activity on achievement of strategically important purposes, through sequential decision tasks. Very often, the results of the successful use of this option are teambuilding:

- of lack of staff, fear of change;
- the ability to efficiently and effectively operate in risk conditions;
 - acquisition and consolidation of team work skills;
 - honing the skills of communicative business communication.

Re-teaming (Retiming) was a Finnish "response" to an American teambuilding (team building). Although, it is important to note that within the framework of this scientific article, its authors do not aim to compare and contrast different modern variants of team building, but, on the contrary, seek to point out the commonality of their features and find similarities between them.

Many foreign researchers believe that the ability of the head to organize a successful team work is a sign of a high level of development of the organization. Accordingly, another popular option of team building is currently team forcing (team-building). However, it should be used only in cases when the top management of the enterprise is radically configured to replace key managers and the formation of a new team. New middle managers can become a source of progressive ideas for the organization, bringing the same experienced and highly qualified employees (subordinates). Already in the course of their work, they can train personnel in new behavioral patterns aimed at improving teamwork.

Finally, the fourth option of building a team is called team design (Tim design). It is the least known and least used by Russian managers as a team-building "lever". However, one of its most famous features is that it is more focused than all other types of team building on the principles of designing the group activity of the enterprise personnel and the distribution of individual roles of each individual employee. More about team design (Tim design) it is important to note that it is built based on procedural theories of motivation.

Thus, when forming and building a coherent team activity of the personnel of the enterprise, specialists in the field of personnel management recommend several rules, if you follow them, you can greatly facilitate the process of building a team and affect the degree of efficiency of its activities.

The first rule is that the team is formed for a particular individual Manager, so you need to choose the right Manager (provided that the team is already created in the existing team). It follows from this rule that the role of the leader is Central. However, we should not forget that the leader is only the coordinator of team work, and the key ideas are offered by the members of the team.

The second rule is that each team member should have a clearly defined area of responsibility, which allows the individual to feel like a full member. This has a direct impact on performance and can improve the performance of the entire team. The main task of the line Manager is the constant motivation of subordinates and the correct adjustment of their actions, because it is the line Manager who has a complete picture of the situation. Accordingly, the top management of the company should make every effort to recruit personnel with leadership qualities, able to "light up" business ideas and "cheer" for the overall result.

And finally, the most important thing is the mutual complementarity (not to be confused with the mutual substitutability) of the members of one team. The team should not be random or haphazard individuals, such as its representatives destroy command group contribute to more and intrigue. According to a large number of heads of domestic large companies, a competent Manager will not allow the presence of such employees in the team.

6.2. The role and importance of motivation of the organization's personnel

The topic of motivation is of interest to a large number of people. Some people have only a fleeting interest in it, trying to understand why they themselves or their surroundings behave this way and not otherwise. Some seek to understand in detail the issues of motivation, aiming to change their lives and create the most favorable conditions for their personal prosperity. Some, feeling craving for various kinds of experiments, want to explain the behavior of the people around them, referring to scientific theories.

Studying the sphere of professional communication and interaction of people, it is important to note that the topic of motivation, its understanding and study is extremely important here. Whatever goals the company has set for itself, it will require that the personnel who work in it strive to achieve them. The ability to influence the productivity of an organization's human resources depends on the balance between technology, processes and the personal efforts of the performers to produce services and goods. This equilibrium is called "performance management". Any organization has a particular interest in ensuring that all indicators that affect this balance are balanced. All elements, without exception, play

an important role in achieving the results of the organization. At the same time, a situation in which the organization's management focuses on improvement in one area only and ignores others will make it much more difficult to achieve its goals. [54, p. 7]

Employee motivation is often seen as a way to enhance the "human component" in performance management. However, the improvement of the company's condition and results of its activities, as well as efficiency in General, is impossible only by increasing the motivation of its staff. Here, as practice shows, you can only count on partial success. There are several reasons for that. First, in a situation where technology and processes are not effective, opportunities for staff motivation can be severely limited. And, secondly, the main part of employees are performers. And even the most motivated of them are not able to fundamentally affect performance if their efforts are the least important element of performance management. $\Box 54$, p. 7]

There are often situations when the motivation of staff is one of the components of the declared organizational values. It is important to note here that none of the companies that seek to be successful will choose as a guide values that could prevent it from achieving its goals. However, companies that officially declare their own values and show respect for employees are likely to find that it is much more effective to create conditions that contribute to the formation of internal rather than external motivation. External motivation, gives certain results, because in most cases it is formed with the help of promises and threats. However, this type of motivation is unacceptable with the stated formal values, according to which, the company's management "respects the views and opinions of its employees."

The management of the company, for various reasons, all the time trying to understand the behavior of people. Due to the extreme complexity and importance of the topic of motivation, most organizations continue to pursue this goal.

Motivation is an exclusively individual phenomenon that describes the internal state of a particular individual. And, since it is a personal matter of each person, organizations and managers can not impose it on other people. The desire, or motivation, of an individual to behave in a certain way stems from within. However, the management of companies can create incentives that encourage their employees to certain behaviors. For example, a Manager who promises to increase wages or move to the next level of the career ladder provides an incentive only to those employees who are willing to act in accordance with established standards for the sake of such remuneration (or results to which it may lead). If the head of the organization threatens his subordinates with certain types of punishment (to dismiss, to deprive the award, to criticize during a public meeting, to put a low assessment for efficiency during certification, etc.), he creates an incentive for those employees who would like to avoid such situations and are ready to act in a certain way for this. [78, p. 115].]

By supporting staff, providing them with the resources they need, and creating certain conditions for their professional and personal growth, organizations can influence the motivation of employees to behave in a certain way. For example, the policy of career advancement, which implies effective support from the company's management, contributes to the formation of a favorable environment that motivates staff to behave in a certain way. If, during the course, participants do not receive support from their supervisor and if the event is not significantly related to their work, it is unlikely that staff will be motivated to participate in such an event or will regard it as significant. The meaning of such an event is questionable.

Motivation is both a process of activating employees 'motives (internal motivation) and creating incentives (external motivation) to encourage them to work effectively and efficiently. The purpose of staff motivation is the formation of a comprehensive set of conditions that encourage the individual to carry out actions aimed at achieving the goal with maximum effect. The process of motivation in its General characteristics includes the following components of its elements:

- needs;
- motives;
- purposes.

The motives that motivate an individual to act are extremely complex, subject to frequent changes and are formed under the influence of a whole complex of external and internal factors. These include the life situation of a single person, his personal trajectory, social status and origin, abilities, material well-being, education, social status, public opinion and much more. In this connection, forecasting the behavior of team members in response to different motivation systems is very difficult. The term "motivation" has many definitions. Thus, according to one of the

formulations, motivation is nothing but an external or internal motivation of an economic entity to work for the sake of achieving a specific goal; the presence of interest in such activities and options for its initiation. [98, p. 122]

A number of modern authors believe under motivation internal processes that activate, guide and reinforce the behavior of the individual (especially behavior that is aimed at achieving a certain goal). According to his point of view, motivational processes are based on the lack or absence of any benefits. This definition corresponds to the essence of the theory of marginal utility, according to which each subsequent unit of good becomes even more useful than the previous ones. Accordingly, the person will be motivated by the fact that he or she is either completely absent or is in insufficient quantity. [98, p. 123]

Representatives of modern psychology argue that motivation is a kind of psychological concept that relates to the intensity and direction of individual behavior. [185, p. 9]

It is important to note that all the above authors of the term "motivation" proceed from the fact that any human behavior, regardless of what it is caused, is a consequence of motivation.

However, not all scientists blindly share this point of view. For example, some representatives of modern philosophy believe that motivation is associated exclusively with the element of "free will" in the behavior of the individual. The authors of this definition believe that motivation is the psychological mechanisms that determine the direction, intensity and consistency of actions; they should not be reduced solely to individual differences in abilities, or to the prevailing demands of society, which either constrain a particular action, or, conversely, encourage it. [185, p. 9]

A. J. Kibanov adheres to similar opinion. According to the modern Russian scientist, motivation, which is a consequence of the "kick", is not motivation, but a simple movement. The movement, according to A. Y. Kibanov, performs only the function of fear of receiving a negative sanction or fear of not receiving the external desired rewards," while motivation has such an important function – as personal growth, the reason for which was the receipt of internal rewards from a complex, at the same time interesting work.

According to most Western and domestic scientists, motivation is a kind of impulse behind human behavior. The behavior of different individuals is not the same, but all people are United by the fact that the impulse that motivates a person to act in a certain way is motivation. [98, p. 123]

The main difficult point faced by scientists who study motivation is that its motivation is not available to the visual senses, but simply impossible to see. What people see is only external behavior, or the result of this behavior. [98, p. 123]

According to the famous psychologist Z. Freud, only on the basis of the analysis of the continuous flow of people's behavior in society, it is possible to talk about motivational processes. However, it should be remembered that the behavior of an individual in a social group is influenced by a number of factors: from the external environment, forming and influencing the personality, to heredity (abilities, level of intelligence). Thus, the Austrian psychologist believes that it is possible to motivate people by influencing their subconscious mind, as very often a person is not able to clearly formulate the reason for their desires, encouraging him to take a specific form of behavior in a certain situation.

One of the reasons motivation is hidden is that it comes from a person. It is impossible to motivate a person to do something if he does not see any significant benefit (moral or material) for himself. Of course, a motivating force can be a reward that can be a tool to achieve something else (for example, a person may be motivated to do something that he or she believes is not rewarding in itself, because it will help him or her to achieve something else that he or she believes is rewarding). Moreover, remuneration has a double function — it can be a consequence of both achieving a positive result and avoiding a negative result.

Speaking about the theory as a whole, it is important to note that it is a set of postulates in which it is determined which variables are important and for what reasons. Along with this, the theory establishes a causal relationship of how these variables are interrelated with each other and why. The theory also defines the conditions under which variables must be related or not related to each other.

Speaking about the theory of motivation in particular, it is important to note that it is a theory that helps to find answers (often approximate) thinkers to questions such as: "Why do people make this and not another

choice?", "To what extent is a person's behavior a consequence of his own choice?", "Why in one activity the individual shows extreme persistence while in another he quickly gives up?".

Most sources of scientific literature classify the basic (basic) theories of motivation in different ways.

For example, A. Y. Kibanov offers the following classification:

- 1. The theory of needs motives values, in which the main emphasis is on the individual, his stable stereotypes and values, which form the basis of volatility of behavior" (for example, the theory of hierarchy of needs);
- 2. Theories of cognitive choice, in which important attention is paid to the cognitive processes of the individual, which influence its decisions and choices" (for example, the theory of expectations and the theory of achievement);
- 3. Theories of self-regulation and metacognition, which are based on the opinion that the main attention should be directed to the processes of motivation that underlie purposeful behavior (for example, the theory of goal-setting).
 - M. Armstrong divides the theory of motivation into:
- 1. Content theories that focus on what attracts the attention of the individual in himself or herself or in society, and what motivates and supports his or her behavior (e.g., hierarchy of needs theory, achievement theory, internal and external control theory);
- 2. Procedural theories that are directly related to the question of how to encourage, to direct, to continue or to change the behavior of the individual (for example, a theory of justice, theory of motivation, the theory of expectations). [74, p. 357]

Along with the above theory of motivation can be divided into the following two types. Theories in which the motivation is determined by the pressure from the external environment and the behavior is aimed at resolving the imbalance and restoring the previously achieved balance. As well as theories in which the motivation is determined by internal impulses and the behavior of the individual is aimed at changing the existing balance.

Thus, it is important to note that in both classical and modern science there is no consensus of its representatives on the understanding of what is the motivation of an individual. Every scientist, being a representative of psychology, management, human resource management Sciences in organizations or even philosophy, postulates this concept in his own way. However, they all agree that motivation is an integral structural element of each person's personality, motivation is something that "does not lie on the surface" of cognitive space, which in turn makes it so attractive as an object of study for many scientists.

6.3. Features of formation of loyalty of employees of the organization

In the conditions of modern society, the governing body of any organization should set itself absolutely new tasks. One of the main tasks is to strengthen the employees 'conscious sense of loyalty to the company, the sense of belonging to it. The most important thing here is that these feelings are stable, acquiring the character of a constant.

Today – it is a well-known fact that the commitment of employees of the organization in relation to it and the management body – one of the most important links in the organizational chain. This fact has been repeatedly confirmed by studies of both foreign and domestic scientists.[54, p. 5]

Within the framework of this scientific article, it is fundamentally important for us to determine this concept on the basis of collective information drawn from modern scientific literature.

So, in our opinion, the loyalty of the staff of the organization is nothing but a result (result) of the trajectory of self-identification of the employee with the propagandized image of the "ideal" representative of the labor collective of the company where the individual performs his labor functions and duties. This image is fully correlated with those professional qualities that should be endowed with such an employee, and which are approved by the managers of the enterprise. Thus, we can confidently say that loyalty is the result of a difficult and long process of identification of an individual with a particular company.[54, p. 9]

It is important to note that to describe the above processes can be expressed not only by the scientific term "loyalty". The degree of self-identification and identification of employees can be determined by the mass of synonyms of the concept of "loyalty", namely:

- devotion;
- commitment;
- reliability, etc. [54, p. 9]

Moreover, it is important to note that all these qualities of staff should be formed solely at the request of the employees themselves, be a manifestation of their personal initiative and desire, but not be formally enshrined in the job descriptions and charters (i.e. the list of normative documents) of the organization. After all, only in this case, according to Western researchers, they can have a significant positive impact on the overall condition and effective functioning of the organization.

However, it should be noted that the sense of loyalty towards the employer and the company with which the individual has a business relationship is subject to transformation. This proved the transition of Russian society to a market economy. Thus, in the market conditions, the level of staff loyalty, the measures of their commitment to the enterprise, largely depends on the degree of interiorization of market orientations and values by employees.

At the same time, the loyalty of staff to the organization is a powerful lever that affects the motivational level of employees as a whole. It (loyalty) also has a direct impact on the performance of employees, in which the individual is guided not only by their own (personal) interests, but also strives for effective results that have an impact on the work of the company as a whole.

Organizations of approximately the same scale, where the level of commitment of staff is at a high level, have much higher profits and more competitive advantages than companies where employee loyalty reaches the average and(or) below average.[51, p. 269]

Of course, this gives us the opportunity to say without a doubt that loyalty is a very important aspect not only in the management of human resources, but also in the entire process of functioning of the company.

Thus, the devotion and conscious identification of personnel in relation to their own company is the psychological state through which the management corps has the opportunity:

- clearly identify the direction of the vector of career expectations of their subordinates;
 - their professional and personal settings;

- degree of perception of the organization in General and its leaders in particular;
 - labour behaviour, etc.

In other words, it is safe to say that commitment (loyalty) has its own external attributes, namely:

- the desire not to conceal, but, on the contrary, to demonstrate loyalty to the organization in various ways (in conversations with colleagues from external structures at any convenient opportunity to talk about your company; handing out business cards, in every way to emphasize how important work is in this company, etc.).);
- loyalty to the company, which is manifested in a variety of situations (from a strong desire to link the future of the labor trajectory exclusively with the enterprise, to the reluctance to leave the organization in difficult periods of stagnation of key indicators of its development);
- honesty both in relation to the organization as a whole (its management), and in relation to colleagues and subordinates;
- interiorization, namely, not only external, division of organizational values, beliefs and policies of the enterprise, but also internal adherence to the values promoted by it;
- sincere expression of emotions (joy, grief, etc.) in situations of organizational "UPS" and "downs";
- willingness to "sacrifice "in difficult times for the company, to sacrifice personal interests;
- the desire to warn of the dangers if the smallest of information,
 posing a threat to the development of the company;
- the desire to best solve organizational problems, achieve goals and follow the organizational mission.[188, p. 133]

However, not all organizations pay due attention to the formation of commitment on the part of the company's personnel despite its importance. Thus, the analysis of the data of the secondary study of the level of employee loyalty in American enterprises, back in the early 2000s showed that about 30% of respondents consider it quite normal to "share" with the company its material values and take (in other words, steal) them for permanent use. What is important, these respondents do not see anything unethical in these actions.[188, p. 102]

In turn, similar studies, but already in Russian companies, make it possible to understand that some employees of domestic enterprises are also ready to share the trade secrets of their organizations, if favorable conditions exist. [188, p. 107]

Of course, the process of forming a sense of commitment on the part of employees of the organization is not cheap, as it implies, in some cases, significant costs to stimulate staff, maintain corporate culture, reduce staff turnover and much more. However, the company, which has formed a high level of loyalty in the ranks of its employees, has a clear advantage over competitors.

So, the obvious advantages in such a situation is generally proven facts that:

- employees who feel a sense of loyalty to the company, with other successful circumstances (correctly chosen marketing strategy, professional (competent) management of human resources, a decent level of goods and services, etc.) can easily provide leadership positions of their organization;
- employees who feel a sense of loyalty to the company, will strive in every way to keep the trade secrets of the company, and under no condition will commit treason against it;
- employees who feel a sense of loyalty to the company, optimally apply and use in the course of their work the available resources of the company to achieve the most effective result. It is important, in our opinion, that these resources may not necessarily be internal. Employees who are committed to their own enterprise, quite often on their own initiative, resort to consultations of external specialists, strive to constantly maintain their informative level, strive to study the latest research in the field in which their enterprise operates. A loyal worker, in some cases, may even initiate a vocational training and is making all efforts to make the process self wear regular. Along with this, a dedicated employee will try to find the best ways to improve the efficiency and effectiveness of their work;
- employees who feel a sense of loyalty to the company, clearly and intelligently follow all the requirements, both on the part of the organization and line managers, and do it sincerely and "from the heart". In turn, disloyal employees, if they try to follow the rules of the internal organizational order, do it rather because of the fear of negative authorization of their labor behavior on the part of management (such as, for example, deprivation of bonuses, remuneration);

- employees who feel a sense of loyalty to the company, as a rule, more often than others demonstrate a high level of responsibility to the enterprise. This is reflected in the strict implementation of the work plan declared by the line managers, compliance with the deadlines stated for the execution of orders and tasks, the desire to maximize the quality of their work;
- employees who feel a sense of loyalty to the company, always show interest in professional training, obtaining new (useful) professional knowledge and the development of existing professional competencies. This desire is dictated by the desire of employees to remain always useful for a long period of employment;
- employees who feel a sense of loyalty to the company build their professional relationships with management, colleagues and subordinates on trust, and the decisions of line managers are not challenged for the same reason (trust);
- finally, employees who feel a sense of loyalty to the company will not be willing to leave. In difficult times for the organization, they will "wait out" the difficulties and continue their labor trajectory in the same mode. Moreover, they will perform these actions not because of fears of a new place of work, the need to re-pass the path of professional adaptation, etc., but solely out of respect for the company, trust in its management, out of a sense of loyalty and devotion to their enterprise. [77, p. 106]

Speaking about the main levels of loyalty, it is important to note that in modern management science, there are several approaches to their determination.

Thus, according to Russian researchers, the level of loyalty can correspond to both positive and negative values.[77, p. 107] the List of identifiers indicating a positive level of loyalty are:

- self-identification of the employee with the company;
- set of personal beliefs of the employee;
- the quantity and quality of his professional actions and actions;
- attraction of the worker to external attributes of the enterprise that gives an opportunity to see how committed it is to their organization.

In turn, the negative IDs loyalty considered:

- latent disloyalty;
- demonstrative disloyalty.

It is important to note that in any organization there are employees who demonstrate a "zero" level of commitment to the organization. In other words, their organizational behavior is not expressed by explicitly positive and(or) explicitly negative indicators. The "zero" level of loyalty may well characterize an employee who has not formed a clear position in relation to the enterprise. Along with this, the same indicator of indifferent commitment (namely: "zero" and (or) neutral) may be in an absolutely foreign individual in relation to the enterprise.

In turn, I would like to note that the "zero" level of loyalty, namely — its absence, is not an identifier that this individual is disloyal in relation to the enterprise in which he works. Such behavior is possible in cases where the employee for some reason has not yet formed (perhaps not had time because of the status of a new employee) own clearly expressed position in the address of the organization. In other cases, this may be a consequence of the incompetent work of the management body, which does not bring to the staff the main (most important) elements of corporate culture in full, respectively, the individual has no opportunity to develop a clear reflex point of view on this position.

However, the behavior of employees, according to experts in the field of organizational culture and personnel management [51, p. 269] who do not Express obvious displeasure or approval of the corporate values of the enterprise, is quite unpredictable, sometimes unpredictable, nature. The leadership of the organization in which employees have this behavior, unable to assert with confidence the situations in which this employee will demonstrate the company's commitment, and in some situations, however, will operate "across" the existing corporate structure. In turn, the behavior of clearly loyal or clearly disloyal to the company of individuals, on the contrary, is quite predictable.

The organizational behavior of this category of personnel in the future will depend a lot on the specific under whose influence these employees will fall in the course of their work.

Now let us turn to a more detailed analysis of the identifiers with which the Manager has the opportunity to assess the level of commitment of an employee of the organization.

A little higher we gave positive examples of loyalty of the personnel in relation to the company. Thus, self-identification of an employee with an organization is an example of one of the highest levels of loyalty. The individual, whose loyalty level is at such a high level, is least affected by the environment (external). He rarely goes to the "risk" of termination of employment with the company, as his entire professional career is associated with this organization. This employee, as a rule, is characterized by a stable motivational background and extremely effective indicators of labor activity.

Further, we will dwell in more detail on the characteristics of the personal beliefs of the employee. This level of loyalty is most often characteristic of middle and top management. After all, at this level of commitment of the company's employees, according to HR specialists [75, p. 110], the sense of duty and responsibility towards the organization is strengthened. Such managers can "infect" their own example of subordinates, both within their Department and other divisions of the company. However, this level of identification is also characterized by some "weaknesses", namely: a sharp change in the vector of organizational values. If the new value orientations of the company will go in contrast to the previous (established) value orientations, the company, in the person of its management, will face strong resistance to its address from employees who have this level of loyalty. In turn, it may take a long time to rethink and change points of view.

Another obvious problem here may well be that the formation of beliefs based on the company's core values requires a very specific leadership style. Managers of the organization must necessarily have the gift of persuasion, leadership qualities that can captivate and interest the staff, and in some cases, the gift of suggestion, under the influence of which employees will be able to form certain attitudes and values.

The next indicator is the qualitative and quantitative set of professional actions and actions of employees. This definition implies that the company's staff clearly follows all elements of the corporate culture of the enterprise (organizational rules, business etiquette, traditions, etc.). According to domestic researchers, this level of commitment may be the most optimal because of its "openness" to employees, namely: if professional values are available to staff, it does not experience significant difficulties in their development. Practice shows that in most cases, each new employee tends to correspond to their professional environment and easily begins to share the positive values, the vector of which is set by the company.

Finally, the commitment of staff, which is expressed at the level of attributes. It is easy to identify, as in such a situation, employees are happy to demonstrate their own devotion to the organization by wearing branded clothing with the presence of the company's symbols and its distinctive signs. In other words, they are ready in any case to emphasize their own attitude to the status of the enterprise with the help of an appropriate style of organizational behavior.

Speaking about negative identifiers, it is important to note latent and demonstrative disloyalty.

Experts emphasize that with demonstrative disloyalty, the threat comes from the negative impact of disloyal employees on all other employees.[74, p. 357]

In turn, latent disloyalty is dangerous for the reason that its carriers externally adhere to the rules and norms prescribed by the company, but internally experience total disagreement with the established corporate way of life. Such employees tend to spread gossip and corporate rumors.

In conclusion, I would like to note that despite the diversity of different scientific points of view, affecting the issues of loyalty of the company's personnel to the organization, all of them, in the end, are reduced to the fact that the basis for the formation of a sense of commitment of employees to the company in which they work, is the corporate culture. And presence at the enterprise of the developed organizational culture is its obvious advantage as the settled corporate values always cause genuine interest both at "beginners" (new in relation to the organization of employees), and at representatives of already developed labor collective.

6.4. The process of formation of organizational culture as an integral element of a modern company

In the last few decades, the interest in the domestic management has significantly increased not just to the organizational culture as such, but directly to the extent to which the organizational culture has a strong impact on the development of the company and its individual employee.

It is important to emphasize that the term "organizational culture" is quite multifaceted. It intersects and simultaneously interact with the most heterogeneous elements that make up the essence of this concept. These are values, behavioral patterns, and professional traditions (derived from the cultural and social traditions of a particular society), and beliefs, and behavior, and business etiquette. That is, all that directly or indirectly affects the formation of a certain stereotype of behavior of individuals within their professional activities. [78, p. 111]

It is thanks to these "signal" elements that we can judge the degree of social integration of members of one labor collective, their professional maturity and level of loyalty to the organization.

Since most of its Mature life trajectory adult individual spends it at work, we can say that the organizational culture – this is the environment in which the employee spends his conscious life.

It should be noted that organizational culture as an integral part of any organization performs a number of functions in relation to it and its employees.

Many both Western and domestic modern researchers of the personnel management system offer different interpretations of them, but within the framework of this scientific work we will resort to their collective description. [54, p. 7]

Thus, one of the important functional characteristics of the organizational culture is that it is designed to provide a stable state of the enterprise, to stabilize the trajectory of its development. After all, the external environment in relation to the organization is constantly making adjustments through the changing conditions of development of political and economic spheres, production, etc.

The next function is that the organizational culture can and should act as the "link" that would unite all members of the team into a single whole, formed a stable team. Accordingly, we can confidently say that the organizational culture has a qualitatively positive impact on the process of team building in the organization. [54, p. 11]

Back in the mid-twentieth century, American researchers of organizational culture proved that one of its important functions is its direct impact on the formation of the degree of involvement of employees in the "common cause", assistance in achieving the most important organizational goals. Moreover, organizational culture helps to "engender" and strengthen the workers' sense of loyalty to the enterprise in which they work. In other words, in modern scientific language, significantly increase the level of staff loyalty to the organization.

According to Russian theorists in the field of human resources management at the enterprise, the process of formation of organizational culture has a super-constructive impact on the social and psychological atmosphere in the team, on the labor (organizational) behavior of employees. [98, p. 124]

Organizational culture and included in it the basic elements can have a significant impact on the formation of axiological belief systems and attitudes of the staff, thereby modeling desirable employment patterns. However, the practical production activity of many enterprises (both large and medium) shows that if the system of values promoted by the management body of the organization is in a strict "section" with individual views of employees, it has a negative impact on the trajectory of the formation of the organizational culture of the company. The business environment, in which managers declare "loud", progressive norms and values, forms a production space very far from the real interests of employees and their daily working life. According to modern researchers, this is largely due to the fact that artificial, implemented against the will of individuals, values and norms carry a conflict beginning and come into antagonistic contradiction with their real views and beliefs. [74, p. 352]

Today there are many different typologies of organizational cultures, however, in the framework of this scientific work we will focus more on the following: [74, p. 352]

The first type is bureaucratic or hierarchical culture. This type of culture prevails in organizations that are rigidly formalized and clearly structured. In the relationship of managers with subordinates (staff) is dominated by procedural methods: business correspondence, delegation of authority, etc. is carried out strictly through memos and recorded by the relevant departments. The management of organizations with a bureaucratic type of culture thinks only rationally, clearly adhering to the formal rules and official policy of the company. This type of culture is quite stable, but at the same time, it is characterized by strict control (in some cases, even excessive). Enterprises that adhere to a bureaucratic type of culture tend to focus on integration and internal organizational processes.

The second type of culture on which we would like to dwell is called adhocratic (translated from Latin means "on occasion"). This organizational culture can find an opportunity to implement in companies of a creative or entrepreneurial nature. From the governing body here welcomed and encouraged risky behavior, and employees working in the organization with adhocracies type of organizational culture must be ready at any moment to make personal sacrifices. As a liaison of the major elements of this organizational culture is the desire of the staff to the innovation. Managers who are ready to take any experiments and risks in order to achieve their goals also adhere to an innovative model of behavior. As a rule, the products (goods and services) of the company with a predominance of adhocratic organizational culture are unique and "nonbeat". The main qualities of the staff, which are approved by the management, are: personal initiative, leadership, creativity, ability to defend their own position and freedom of thought. Adhocratic organizational culture is inherently flexible and discrete, and, unlike the bureaucratic type, focused on the external environment in relation to the organization.

Along with the bureaucratic (hierarchical) and adhocratic types of culture in the modern organization is dominated by its market type. The market type of organizational culture is followed by management, which is clearly focused on achieving the goal (often, the result is achieved "at any cost"). The managerial body is characterized by rigidity, rigor, uncompromising and firmness in making management decisions. Even employees of the same unit regard themselves in relation to each other as competitors competing for attention, favor and praise from line managers. However, the staff of the company with a market type of culture for the sake of success in achieving strategic goals, maintaining organizational reputation is ready to unite in working teams for the sake of victory.

It is important to note that the market organizational culture, as well as bureaucratic, tends to stability and control, but at the same time, it, as adhocratic, is focused on external processes.

And, finally, the fourth widely known type of organizational culture is called clan. It prevails in those organizations where friendly relations among members of one collective which often reminds "big family" with a Patriarchal way of life are encouraged. Line managers play a paternalistic role in relation to their subordinates, often resorting to an educational function. In turn, staff members are less eager to take the initiative and rely entirely on management decisions. The key elements of clan organizational culture are: "healthy" moral climate, loyalty to the organization, following corporate traditions, unity of the team members. It

is dominated by team-building processes, and the solution of organizational issues is carried out at the collective rather than individual level.

Companies that adhere to the clan type of organizational culture, strongly promote as key organizational values — care for staff and good attitude to customers. Clan culture is quite flexible and discrete and focuses on the internal organizational environment and the integration of all organizational elements into a single whole.

Experts note that, despite the clear descriptive characteristics of modern types of organizational culture, in the "pure" form they are quite rare, and their boundaries are conditionally" blurred". More often, in practice, certain elements of one type are intertwined with elements of another. However, to judge what type of organizational culture prevails as a result, it is possible only on a dominant of its signs.

Combines all the currently existing types of organisational culture and their attributes.

The attributive part of the enterprise culture consists of such elements as:

- traditions and customs;
- management style;
- values;
- business etiquette;
- symbolism, etc. [78, c.115]

For example, regular corporate events (holidays, birthdays, significant dates for the company), which gather most of the team for a joint celebration, can be safely attributed to the traditions and customs of the company. It is proved that such events help employees to get to know each other better, get to know each other better in an informal setting, which has a positive impact on the official part of the labor process.

Management style (authoritarian, democratic, liberal) can and does have a significant impact on the formation of a particular type of organizational culture. For example, in state structures, the leadership often adheres to an authoritarian, less democratic style of human resources management of the organization. In creative collectives the liberal administrative mechanism prevails that gives the chance to the personnel to feel freely, outside the rigid framework established by the enterprise in the person of the employer.

Along with the traditions, customs and management style, its values play an important role in the process of forming the organizational culture, namely the value orientations of the company's employees. The management corps, which does not take into account the individual values and motives of its subordinates, obviously dooms its work to failure. A competent combination of corporate and individual values within the organizational culture – that's what makes it sustainable, forms a loyal attitude of employees to the company.

Speaking of business etiquette as a cultural attribute, we note that this term has entered the domestic organizational space relatively recently. Rules of business etiquette, publicly and(or) secretly operating in the organization, find their expression in the appropriate (required) command model, corporate clothing style, and work schedule (such as a clearly fixed working hours and a strict system of sanctions, even in the case of a slight deviation from the formal rules of labor regulations, or the loyal attitude of management to the "flexible" work schedule).

And finally, the symbolism of the enterprise, the essence of which is to broadcast information about the organization to "third" persons. The company has a lot of ways to "declare itself". This is a brand name or logo, and corporate color, and brand slogan, and trademark, and more.

According to some Western researchers, organizational (corporate) culture finds its practical expression in the following characteristics. Namely:

- the extent to which the employee identificeret with the organization where he works;
- the extent to which the employee shows a willingness to establish communication (business) relations;
- how the individual presents himself / herself within and outside the organization;
- how effectively the management of the organization stimulates its subordinates, and subordinates, in turn, implement their own motivational attitudes;
- in what direction between the members of one labor collective and its subdivisions professional relations are formed, etc. [78, p. 112]

Organizational culture is an integral part of any company. It is designed to unite members of the workforce, synchronize their labor efforts, direct actions in the right direction. It helps new employees to adapt to working conditions, educates and develops staff on key organizational issues, has a direct impact on the quality management of the production process. Organizational culture of the company helps to develop a strategy and tactics of relationships with competitors and business partners, solves the problem of regulatory and integrative nature.

Knowledge of the basic elements of organizational culture and the ability to manage them competently, allows the line Manager to establish close labor relations with his subordinates.

At the same time, it is important to note that the organizational culture carries a huge functional load when choosing the path of development of the enterprise. It can have both extremely positive and extremely negative impact on the "social well-being" of the organization's staff. Accordingly, any leader, focusing on a certain type of organizational culture in the management process should remember that in his hands focused "powerful" tool impact on subordinates and the results of their work.

CHAPTER 7. MANAGEMENT OF PERSONNEL RESERVE IN THE SYSTEM OF DEVELOPMENT OF PERSONNEL

7.1. Concept and essence of the term "Personnel reserve»

Global challenges of the modern economy in the field of personnel management pose the task of ensuring the continuity of management of modern organizations. The formation of the personnel reserve as a business process plays a key role in this.

In personnel management, the creation of a personnel reserve is one of the key ways of personnel development. This is due to several reasons:

- 1) Identification of key positions is linked to the organization's strategy and helps to achieve goals;
- 2) Selection to the personnel reserve increases the motivation of employees to perform their duties, gives them the opportunity to take the initiative and realize the need for professional development;
- 3) The process of formation of the reserve includes the assessment of the employee, which allows you to personally review him and assess professional achievements, the level of his personal competencies and potential for growth in the organization;
- 4) Enrollment in the talent pool and appointment to a key position can be part of building an employee's career;
- 5) Training of reservists in the framework of the program allows to develop employees in those areas in which the business needs;
- 6) The talent pool programme contributes to the continuity of management and human resources policy.

Formation of personnel value is associated with various areas of work with the staff, so it will be important for him to design the process. Process modeling is one of the modern approaches that is widely used in the description of operational business processes, as they constitute the main revenue stream. Modern business processes of personnel management, serving the main business are no longer linear and can affect the management and quality of the main operations. In this regard, the relevance of their construction and description increases.

The availability of reserves is more relevant for industrial and industrial enterprises. First and foremost in the creation of the continuity program interested companies with sectoral specificities. For example,

enterprises of the mineral sector. Secondly, in need of the enterprises in which long time there was change in management structure and in the future will need to replace management by more "young".

The real practice of working with the reserve is of great value. The practical approach is formed on the basis of many factors and depends on the development of other areas of staff development. Speaking about the personnel reserve, modern authors focus on the criteria for the selection of reservists, on the assessment of potential and compliance with the key position, on training programs for the position and ways to assess the effectiveness of the program. The articles separately pay attention to the stages of formation of the reserve, as it allows us to present a linear process, in this work we will try to get away from it and form a comprehensive view of the formation of the personnel reserve.

The main efforts in the personnel policy are focused on the creation of a well-trained reserve of candidates for the positions of leaders of the new formation, capable in a short time to master a new area of work and ensure the effective solution of the tasks facing them. At the same time, the emphasis is on creating a reserve of managers of a certain type and level of management, taking into account new approaches to the organization of work and the company's strategy.

The availability of personnel reserve allows to prepare candidates for newly created and subject to replacement vacant positions in advance on a planned basis, on a scientifically and practically justified program, effectively organize training and training of specialists included in the reserve, rationally use them in various directions and levels in the management system.

The personnel reserve is a group of employees of the organization, formed on the basis of the assessment of their professional knowledge, skills, business and personal qualities, who have undergone systematic targeted training and are internal candidates for vacancies of higher positions [154]. This definition is not quite accurate, as it describes only the internal reserve. M. amstrong defines a talent pool as a targeted' selection of candidates through various assessment tools to fill vacant positions' in the future. This is the most General definition. Speaking about the personnel reserve, he writes that succession planning is a part of career management in the overall system of human resources development of the organization, together with professional training and planning [6].

Consider the definitions of the following authors, V. V. Travina and V. A. Dyatlov note that "the reserve is created for the implementation of targeted and continuous training of managers that make up the core of the organization", "the reserve provides for reliable continuity in the replacement of senior positions of structural units of the organization, minimizing the risk of appointment to the position of an employee who does not meet the requirements of the position" [16].

Here there is an emphasis for the replacement of leadership positions, this position can be clarified in the works of A. Y. Kibanov. He emphasizes that in the formation of the personnel reserve it is necessary to know exactly the qualification requirements for the position to which the specialist is enrolled in the reserve and take into account what special knowledge and experience are necessary in each case to provide highly professional leadership [5, 10].

Turchinov A. I. considers the personnel reserve from the point of view of revealing the potential of employees. He writes that human resources' reserve is specifically formed on the basis of set criteria the group of prospective employees who have the required extension professional, business and morally-psychological qualities, positively proven themselves on the posts, passed the required training and is intended to replace the regular posts' [10, 87].

From the presented and studied definitions we will make our own definition. The personnel reserve is a specially formed group of candidates designed to fill key positions of the organization. The definition covers the formation of both external and internal reserves.

Purposes of formation of personnel reserve [90, 92]:

- 1. Prevent the possibility of a crisis situation in the event of the departure of an employee holding a key position.
- 2. To provide the enterprise with a reserve of highly professional and effective managers ready to develop business according to the accepted strategy and culture.
 - 3. Retain and motivate talented leadership leaders.
 - 4. Maintain a positive employer reputation.
- 5. Reduce the cost of recruitment and adaptation of a new employee.
- 6. There are several types of personnel reserve for different reasons.

Table 7.1. Types of personnel reserve

In relation to the company	Internal	Reserve consisting of full-time employees of the company
	External	Reserve consisting of candidates outside the organization
By the method of determining the	Target	Reserve of employees, where each key position is defined
position	Competitive	Reserve of employees, where several reservists apply for a key position
By level of training	Operational	Reserve consisting of employees ready for appointment to a key position
	Promising	A reserve of staff with the potential to be appointed to a key position but requiring training.
By position level	(Strategic)	Reserve of managers applying for the position of Top managers
	Level 1	Reserve of managers applying for the position of middle-level managers
	Level 2	Reserve of specialists applying for the position of entry-level managers
	Level 3	Reserve of students of specialized universities applying for the position of employee of the organization

Source: compiled by the authors

When forming the personnel reserve it is necessary to observe the basic principles [88, 89]:

- 1. The principle of relevance of the reserve. He says that it is necessary to take into account the real need for the replacement of key positions and all employees enrolled in the reserve should have a real chance to enroll:
- 2. Correspondence principle. The candidate must match the position and type of reserve. Requirements to qualification and level of skills for the post should be taken into account;
- 3. The principle of perspective. The candidate must have the potential for development: focused on professional growth, have the appropriate education, age level, work experience in the post.

Availability of personnel reserve allows to solve the following tasks of personnel management services:

- qualitative closing of the vacancy in the shortest possible time;
- stabilizes the composition and as a result increases the overall professional level and motivation;

- increases the level of readiness of the staff of the institution to
 organizational changes through timely training and education;
- ensures continuity in management thereby helping to maintain company policy and carry out its mission;
- increases motivation of employees, if to achieve maximum transparency in matters of appointments and transfers. Employees should see a goal and ways to achieve it.

When selecting candidates for the reserve for specific positions, it is necessary to take into account not only the General requirements, but also the professional requirements to be met by the head of a Department, service, shop, site, etc., as well as the characteristics of the requirements for the candidate's personality, based on the analysis of the situation in the unit, the type of organizational culture, etc.

Sources of reserve personnel for senior positions can be:

- senior officials of subsidiary of joint stock companies and enterprises;
 - senior and leading specialists;
- specialists with appropriate education and a positive reputation in the production activity;
- young professionals who have successfully completed the internship.

Personnel reserve as an element of personnel development is associated with building a business career and talent management. They have a number of similarities:

- 1) Allocate groups of people;
- 2) Develop in professional activity of the employee;
- 3) Contribute to the release of existing capacity.

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- 1. Allocate groups of people;
- 2. Develop in professional activity of the employee;
- 3. Contribute to the release of existing capacity.

The differences can be attributed to the following characteristics:

- 1) The talent pool ensures continuity and efficiency through the smooth operation of key positions;
- 2) Business career is more focused on the staff and the organization needs as it motivates the employee for professional and career growth;
- 3) Talent management enables the organization to attract, use and retain employees, the most effective employees.

7.2. Chronology of stages of formation of personnel reserve of NP of the enterprise

In theory, the main stages of work with the personnel reserve are highlighted. Consider their chronological order. In the studied practices and theoretical sources the different number of stages is given, but summarizing it is possible to allocate 4 main parts of work on formation of a personnel reserve in which they logically keep within.

The first is to prepare and identify the need for a managerial talent pool at all levels of management. At this stage, personnel risks are analyzed and target positions are determined. Determination of the need for the reserve by identifying problem areas and their causes, such as the presence of difficult-to-replace, unique specialists; understaffing; sudden dismissal of employees from senior positions; lack of rotation in structural units; change in the organizational structure of the plant. In order to identify key positions it is necessary to:

- 1. Analyze the organizational structure and staffing of the company to determine the staffing of the structural units of the company;
- 2. To analyze the age composition of the management of the enterprise, to identify the most critical management positions in terms of urgency of training reservist
- 3. Determine which positions have a special contribution to the business results and what are the prospects of release in this position.

Further work is based on the existing list of positions, namely, the optimal number of reservists for each position is planned. Quotas are set by each organization independently, in some companies this limit on the number of reservists for a position, for example from 1 to 3, in others this

number is limited by the percentage of reservists to the number of key positions, for example 120% (number of reservists/number of key positions).

Each post should have its own profile, which will be the basis for evaluation and training. The position profile is based on the job description and the competency map available to the organization. It reflects the criteria for the post. Part of the criteria should be objective and include the following aspects: regulatory, organizational and managerial. The second part is subjective criteria and includes the following aspects: professional, personal, ethical. An example of such a list of criteria can be [154].]:

- 1) compliance with the requirements for the position to be provided with the reserve (education, work experience);
- 2) positive results (conclusions and recommendations) of the last certification;
- 3) successful results of current operations (including prizes at scientific and technical conferences, competitions, etc.).);
- 4) the results of the capacity assessment and the level of severity of the corporate competencies of the candidate:
 - competencies of the candidate;
 - the recommendations of the guide.

Item 4.and it requires a separate development in the organization and should be formally enshrined in the corporate model of competencies. A competency model is a complete set of characteristics that allows an employee to successfully perform the functions corresponding to his or her position. HR specialists identify the following types of competencies [129]:

- 1. Corporate (or key) that apply to any position in the organization. Corporate competencies follow from the company's values, which are fixed in such corporate documents as strategy, code of corporate ethics, etc. the Development of corporate competencies is part of the work with the corporate culture of the company. The optimal number of corporate competencies is 5-7.
- 2. Management (or managerial), which are necessary for managers to successfully achieve business goals. They are designed for employees engaged in management activities and have employees in line or functional subordination.
- 3. Professional (or technical), which are applicable to a certain group of positions and are related to the specifics of the business processes in which the employee is employed.

The result of this stage is a list of positions with the described criteria that must be met in order to successfully perform the prescribed duties. To move to the next stage, it is necessary to gather an evaluation Commission and conduct information work with the staff in three areas:

- 1. HR employees who will be additionally involved in the work with the reserve. They should understand the purpose and procedure of formation of reserves, to help and give advice to the candidates in the reserve and reservists;
- 2. The evaluation Committee, which participates in the selection of candidates for the reserve and meets in advance from representatives of different units to perform the role of experts. The Commission should have the same understanding of its role, be familiar with the list of posts and agree with the descriptions of job profiles;
- 3. Employees of the company who will be invited to participate in the selection of the reserve. They should be made aware of the situation, the list of posts and the opportunities offered by their participation.

The second stage - the selection of reservists in the personnel reserve. Candidates for inclusion in the reserve can be recommended by managers, HR employees, self-nomination is possible. In practice, this stage is made multistage. The entire pool of candidates fills in the form of the reservist. The initial screening is carried out by the evaluation Commission on formal grounds and criteria. With the remaining candidates, the potential of candidates is assessed, which may include testing, business case solution and competency interviews. The assessment centre is often used as a platform for evaluation. This platform creates a set of research methods and tools to solve the specific problem of competence assessment. Personnel assessment is now widely used as an effective tool to effectively and fully assess the employee in a short time, making a detailed description of his success profile, professional competence profile, as well as to assess its importance for the company and the potential that can be under certain conditions disclosed and effectively applied.

At the same time, as tools and technologies for personnel assessment can be [60, 154, 93, 127]

- Assessment center (assessment center);
- "360 degree" method»;
- Competency based interviews;
- case studies;

- Tests and questionnaires;
- deep interview;
- testing;
- business game;
- expert evaluation;
- psychological interview;
- intermediate certification stages;
- writing essays;
- internships.

After carrying out the evaluation activities, the result of this stage is the final list of employees who will be enrolled in the reserve. The reserve is credited to employees who have:

- 1. Desire to develop
- 2. High integrated assessment rate

Relevant core and leading competencies to the required level according to the competency profile [156].

Lists are drawn up in accordance with the quota and it is here that the division into types of reserves. At least the company forms two types of reserves:

- 1. Operational consisting of employees who meet the profile of the position and are ready to be appointed to a key position;
- 2. Strategic consisting of employees in need of training and education, but with the potential to develop and achieve compliance with the post.

There are examples of the division of managerial posts into levels. They determine the level of the current position of the candidate and the key position, while the movement is possible only within 1-2 levels up. The level not only regulates the possibility of movement, but also affects the content of the training program of the reservist.

The result of this stage is a list of reservists. For the effective functioning of the personnel reserve, it is necessary to strictly coordinate the list of its members with the managers and owners of the company, otherwise the economic efficiency of this process will decrease [111]. This will prevent a possible problem during the period of work with the personnel reserve, namely, maintain the priority in the appointment of candidates included in the reserve.

The third stage of work consists of training of reservists. An individual development plan is drawn up with each reservist. The basis for the development of reservists is a comparison of actual and required post qualifications. Usually these are training activities within the framework of a modular program, development in the workplace, coaching and mentoring by more experienced colleagues from among the leaders [111]. Work with reservists at this stage is arranged differently depending on the level of the position, we give an example of distribution at one of the enterprises (EVRAZ ZSMK). Four sections of the personnel reserve training were identified:

- theoretical training as part of the reserve training program;
- training in compulsory qualifications (required by the requirements of the subordinate bodies) in accordance with the requirements of the post and training in General managerial knowledge.

Development of managerial competencies includes classroom training; distance learning; self-education; training (team building, conflict management, business communication, public speaking, negotiation, etc.); work in temporary target groups (management, solution of practical problems).

- performance of duties of the future position with the right of decision-making of the level of the head on which replacement the worker prepares, for the period of business trips, holiday, illness;
- internships at another enterprise or in another division of the plant [154];
 - protection of the final work.

Thus, reservists of the first and second levels took MBA Express courses on the basics of top management, leadership as a management style, the basics of management negotiations and the basics of Finance for non-financial managers. Reservists of the third level studied the basics of Department management, a systematic approach to the preparation of management decisions, project management improvements and the basis for improving the financial efficiency of the production capacity of the enterprise. Managers of the fourth and fifth levels of management were trained on the topics: "Management of subordinates", "Building partnerships and effective communication" [156]. An example of the most common training modules in the programs of personnel reserve development: the development of basic management skills, development of

skills of acceptance of administrative decisions, themes, motivation of subordinates, the development of management thinking, personal effectiveness of a Manager, skills of team work, team leadership.

Among the possible methods of working with reservists can be identified:

- conversations with heads and specialists of divisions during which effective methods of management were studied and the emphasis was placed on implementation in division of the main administrative functions — planning (including resource planning), the organization, control and an assessment of efficiency of activity, adoption of corrective actions;
- familiarity with the production technology and technical and economic documentation in each structural unit;
- receiving a task from the head of the unit for collective work,
 containing the wording of the problem relevant to the management of this unit;
- group project work under the guidance of business coaches,
 including a collective analysis of the problem, and the development of a
 draft solution to the proposed problem;
- drawing up a list of problem areas and solutions based on the results of work in each unit;
- expert assessment of the work of reservists in the unit according to the parameters corresponding to the basic managerial competenceм;
- scientific and technical conferences, competitions of young managers, professional skills, etc., which allow to improve the professional and managerial skills of future reservists, to develop their creative activity [154];
- implementation of individual project assignment in accordance with personal professional specialization, aimed at solving the key problem in the management of the relevant activity, preparation for which was carried out throughout the internship.

The training program may include:

- 1. Extension of duties of the employee
- 2. A wage premium
- 3. Provision of additional social benefits
- 4. Organization of temporary replacement of the head
- 5. Opportunity to become a mentor for less experienced employees

In some sources, there is a practice of interim assessment, it is performed during training, to adjust training activities and lists of reservists. An interim assessment can be in the form of a conversation of the reservist, the employee responsible for training, in which an individual work plan, its feasibility and the usefulness of the chosen methods of work are evaluated. The second version of the interim evaluation of the progress of the development of the candidate and the determination of the current compliance position. After training on an individual plan, the employee is re-evaluated. The following areas of evaluation can be distinguished:

Assessment of production results - how labour productivity has changed.

Evaluation of the results of the General training program and individual development plans - how much the professional and managerial qualities of the reservist have improved.

Evaluation of the results of project work - what results are obtained from the implementation of development projects.

The level of training of each reservist is reviewed by the Commission within no more than one month after the reservist performs the entire volume of activities provided for in the training plan. [40, 86, 155]. Summing up, the evaluation Commission gives an opinion on each candidate and recommendations: to Appoint to a position, to undergo additional training, or to exclude from the reserve.

The result of the stage: the Promotion of trained reservists to the vacant target positions, the preservation of the personnel potential of the enterprise by retaining promising employees in the personnel reserve.

Appointment, next, fourth stage. After the appointment, some companies regulate measures for the adaptation of the employee from three months to six months. In the absence at the time of completion of the program of training of reservists open target vacancies, planning for the retention of promising employees at the enterprise. As recommendations for adaptation are proposed [40]:

- introduction of the "mentoring Institute" to help employees with low professional qualities;
- increase in the probationary period for appointment to senior positions from the personnel reserve
- duplication, work for up to one year in conjunction with the adviser - the former head

independent work under the supervision of the immediate head
 of the new head, or a combination of these methods.

At the fourth stage, it is possible to analyze the results of the work on the creation of the reserve. One company conducted a study in which it was found that only one in three managers consciously sought the position, and the appointment coincided with his interests.

Only 24.7% of the managerial staff considered themselves ready to work in a new place.

Only one in five freely adapted to the new position. In most (62%) cases, the complexity was perceived as insignificant. Almost 60% of respondents required psychological support and assistance in mastering professional issues. During the period of "growing into the position" a lot depended on the team, many (52.1%) had tangible support from colleagues, 34.8% helped the authorities. In 41.7% of managers, the duration of the adaptation period was up to 3 months, almost a quarter of respondents had a phase of getting used to new working conditions and new responsibilities up to one year.

According to the results of the survey, 53.1% of respondents have certain career aspirations, but in some cases career growth does not coincide with personal expectations, primarily due to non-compliance with the terms of promotion, as indicated by almost 45% of respondents [86].

7.3. Problems in the formation of the personnel reserve and ways to solve them

In the studied materials in the form of conclusions were listed the main problems faced in the formation of the internal personnel reserve. We list the common growth zones noted and the proposed solutions to the problems.

When the organization is engaged only in internal personnel reserve, there may be a lack of inflow of fresh ideas together with incoming employees and, as a result, some limited knowledge of employees [10]. To address this issue, staff are encouraged to contribute to the training programme by participating in projects, conferences, presentations and round tables, and other creative activities that generate new ideas.

Creating a reserve managers already holding key positions can be perceived as a threat, only conversations with managers, familiarization with the activities, involving them as experts will help here. Another of the threats to the protection of the reserve, so the opportunity to get into the reserve should be for all employees and the evaluation Commission should be represented by at least three specialists from different departments.

Some organizations are characterized by participation in the reserve not on their own, because the voluntary participation should be checked and employees who do not want to be in the reserve should be excluded from it, if they were forced. To prevent such situations, it is necessary to carry out information work with employees and explain to them the conditions of participation in the reserve.

The problem may be the demotivation of the personnel reserve participants, caused by the appointment of an employee not from the reserve, so own employees should be a priority in the appointment.

An incorrect definition of the quota for each key position can provoke an inflated reserve, the decision is to use the target maximum value of reservists, as an example of 120% of the total number of key positions.

One of the most difficult problems is the presence of errors in the selection of candidates due to the use of primitive methods of evaluation. The reason may be a superficial judgment about the candidate, so the evaluation system should be formalized and include not only personal characteristics, but also the assessment of professional knowledge and skills and performance.

The next problem is solved by the introduction of a comprehensive assessment of 360 degrees, the use of this tool allows you to take into account the opinion of colleagues and in the personnel reserve will get decent employees, not random people.

One of the implicit problems is the formal management of the personnel reserve, it will help to prevent the control of appointments. If there is an understanding that an employee who has been trained for a long time will not be able to take a position, then work should be carried out with him: attraction to new projects, expansion of his group, perhaps rotation, the most important is the absence of "stagnation" of the employee at the position.

HR staff should provide that moving an employee up will automatically open a vacancy in his place. There are no unambiguous

solutions, some sources suggest including in the reserve all employees with the potential to increase, some - to prepare a replacement for each senior position. One of the options close to implementation is the creation of a multi-level system of posts and the creation of a reserve at each level.

An open issue is the dissemination of the program, namely should it be only for managers or for all employees. In practice, this issue has not been fully studied, one of the options that solve this problem has already been proposed is the creation of multi-level training. It begins with simple specialists and selection of students of specialized universities for these positions, and ends with top managers of the company. At the same time, all practices form two types of reserves - operational and strategic.

These problems can be typical for all companies, but during the study, can be identified their own characteristics associated with the process of formation of the personnel reserve. Business processes will be built to analyze and identify problems in the enterprise.

7.4. Formation of personnel reserve at the enterprise as a business process in H

A business process is a collection of interrelated activities or tasks aimed at creating a specific product or service for consumers. For clarity, the business process in the work will be visualized using the flowchart of business processes.

There are three types of business processes:

Managers are business processes that control the functioning of the system. Examples of management processes include strategic management and corporate governance. Operational - business processes that make up the core business of the company and create the main revenue stream. Examples of operational business processes include procurement, manufacturing, marketing, and sales.

Supporting - business processes that serve the core business. For example, administrative maintenance, technical support, accounting, recruitment. Thus, all business processes in human resources management will belong to this type.

In order to work and analyze the business process of forming a personnel reserve, it is necessary to simulate it and draw up a flowchart.

All business processes can be modeled using different methods. One of the ways that we will use in this work is to create a model of business process "as is" (eng. as is). In the theoretical part, four stages of work on the formation of the personnel reserve have already been described, their sequence will be used in the construction of the business process model. After that, the business process model will be subjected to critical analysis in stages.

Because if you change the conditions of work of the organization adopted by the it system the business process of formation of personnel reserve may be ineffective, may be offered two ways: a targeted system change and the creation of entirely new, or optimizing a business process.

Optimization is a fundamental rethinking of the company's business processes to achieve significant improvements in the main relevant indicators of their activities.

To build a business process model "as it should be" (eng. to be), on an "as is" basis, certain actions must be followed. This procedure will improve the efficiency of the enterprise:

- 2. Several operating procedures to be merged into one, where possible. To make horizontal compression of process, it is necessary to write out and consider all participants of process and at each stage of formation of a personnel reserve to keep in sight. It is worth noting that if you create a team responsible for this process, it inevitably leads to some delays and errors that occur when transferring work between team members. An example of such a compression can be training in the framework of the formation of the personnel reserve, as it implies a set of activities, but is combined by one block of actions.
- 3. Performers should be identified in such a way that they can make their own decisions. At the same time there is a vertical compression processes. Giving employees more authority and increasing the role of each of them in the work of the enterprise leads to a significant increase in their impact. For the process of formation of the personnel reserve is characterized by such a participant as the evaluation Commission. Its composition may vary depending on the key positions for which the selection takes place. Since all included in the Commission perform common actions and come to a single conclusion, we can present them as a single participant in the business process.

- 4. The process steps are written in a natural, not linear, order. This allows you to parallelize processes where possible.
- 5. Processes have different variants of execution and each variant should be simple and clear.
- 6. The work is carried out in the place where it is appropriate. If this is the work divided between the boundaries of divisions and eliminates unnecessary integration.
- 7. The number of checks and control actions is reduced. They must be run in a debugged mode, which will reduce the time of the processes. Checks in the formation of the personnel reserve HR Manager can carry out through familiarization with the related documents, so they should be the optimal number.
 - 8. The number of approvals is minimized.
- 9. A mixed centralized/decentralized approach prevails. At the same time, business units can operate completely autonomously in the presence of a single corporate data warehouse.

There are four main principles of optimization:

The principle of the first. Optimization must have a basis. The essence of this principle is that before optimization, it is necessary to clearly identify business processes. We must first "see" the course of the processes, that is, to fix them in the form of models "as is". After all, if you can not describe the processes taking place at the present time, then there will be nothing to optimize. In this situation, it will be possible to build the process anew, evaluate their optimality and improve the already new process.

The second principle. It is necessary to evaluate the optimality from the particular to the General, identifying individual shortcomings, combining them into groups and quickly eliminating.

The third principle. Optimization solutions are ambiguous. There is a high probability that by eliminating not optimality by one criterion, we worsen the process by another. It is necessary to be able to identify such consequences, assess the advantages and disadvantages and make informed choices.

Principle four. The result of this optimization of processes is to strengthen the operation of the performers, so the inevitable resistance of the staff.

From the above principles follow the conditions and steps to optimize the process of formation of the personnel reserve:

- 1) Before starting work on optimization, it is necessary to describe the existing business processes in the company "as is" (to create their models). The descriptions should be clear, unambiguous and address the level at which the specific work of the staff is visible. Of course, the more processes described in the model, the better and wider you can assess their optimality.
- 2) Assessing the optimality, first of all it is necessary to analyze each part of the business process performed by a particular contractor (procedure). Evaluating it, it is necessary to check what results are obtained by the correct execution, what data or materials the performer receives in the end, what he does with them, how optimal his actions are, as well as the work time and duration of the procedure.
- 3) after Analyzing each procedure and identifying its obvious shortcomings, it is possible to assess the optimality of business process management and the optimality of the process group. The results of the optimality assessment should be identified weaknesses in the process and/or process group. In the course of analysis are highlighted and the procedures that need to be migrated to the new process without any changes.
- 4) Then it is necessary to develop proposals to correct the identified shortcomings, to rebuild the process model ("as it will be"), taking into account these proposals, to review the actions of the performers and the candidates of the performers themselves (if necessary), and most importantly to improve the means and tools used in the formation of the personnel reserve. Improve funds is to improve the forms of capture, storage and processing of data used in performing specific procedures.
- 5) The final step is to assess the possible deterioration of the proposed improvements in other areas of the process, including the possible resistance of staff.

Following the listed principles and the order of optimization, a business process for the formation of a personnel reserve is formed. On the basis of the flowchart can be traced to maintain the process, even if it has a parallel operation of different departments. The flowchart block is also used for the revision of the existing provision and is attached to it.

CONCLUSION

In the article, a study of human capital as an economic category, is proved by its role in innovation development of the enterprise, as well as the methodology of estimation of efficiency of investments in human capital for the company and conducted on the basis of its assessment of the effectiveness of these investments on the example of PJSC "Polyus".

Analysis of existing methods of human capital assessment showed that there is currently no single, generally accepted method of determining its value, which is explained by the complexity of human capital as an economic category. Also, the difficulty of measuring human capital and the efficiency of investments in it is largely due to the lack of statistical data necessary for the analysis.

With the help of SWOT-analysis of investment in human capital for the company were identified strengths and weaknesses of this process, as well as opportunities and threats.

Among the strengths of investing in human resources are highly qualified personnel capable of developing and producing innovative products, therefore, the enterprise has the opportunity to enter new markets that provide it with additional income.

The weak points of the process of investing in human capital are insufficient costs of the enterprise for training and advanced training of employees, long-term expectation of obtaining the effect of investment.

In the practical part of the work, the personnel costs of PJSC Polyus in 2012-2018 were analyzed, which made it possible to make sure that this enterprise actively invests in its employees by increasing the costs of training and professional development of employees, implementing various social programs and providing benefits (vouchers to health resort institutions).

To assess the effectiveness of investments in human capital, a methodology was developed that takes into account the effective and qualitative indicators, such as the average number of personnel, the total volume of goods produced, the net profit of the enterprise, the turnover rate, the average annual production of one employee, the profitability ratio of personnel. The practical value of this technique lies in the possibility of its application in any organization due to the simplicity and convenience of calculations, since the initial data for the analysis are contained in the

accounting and management reports of the enterprise, as well as comparing the final indicator in the dynamics between different organizations.

On the basis of the proposed methodology, the efficiency of investments in human capital for PJSC Polyus was evaluated, which showed that during the analyzed period (from 2016 to 2018), the expediency of investing in its employees by the enterprise was confirmed. If in 2015\6 the efficiency of investment in human capital was 1,169, in 2018 the value of this indicator became equal to 1,331 (see Fig. 3.1), which indicates a positive return on investment in staff.

Thus, the proposed method of assessing the effectiveness of investments in human capital on the basis of qualitative and effective indicators allowed to analyze whether there is an effect of investments in human capital of employees.

The proposed system of personnel reserve formation can be used in modern companies to build work with the reserve to preserve the continuity of management or be modified into a talent management model. The proposed solution remains flexible enough to be adapted to the annual change of requests and changes in staff requirements, but is focused only on the creation of a reserve in management personnel.

On the basis of the results obtained, the following ways to improve the efficiency of innovation in the enterprise by investing in human capital can be formulated:

- should reduce the turnover rate by optimizing the methods of stimulation and motivation of employees, changes in social policy in the field of sustainable development;
- it is necessary to increase the cost of training and advanced training of employees, as this type of cost is more positive impact on the innovative activity of the enterprise;
- it is advisable to identify the reasons for the dismissal of the employee and keep their statistical records for all dismissed employees;
- it is necessary to improve the methods of adaptation of new employees with the use of a mentoring system, carrying out activities for team building to reduce the likelihood of their departure to another organization;
- it is necessary to apply various types of incentives for workers, both tangible and intangible;

- career opportunities should be provided for staff performing their duties in a quality manner;
- it is desirable to constantly improve the working conditions of employees through the use of modern equipment and technologies, the availability of infrastructure, providing the necessary means of labor.

The proposed measures will ensure the long-term increase in the efficiency of investment in human capital of employees, and, consequently, will lead to an increase in the efficiency of innovation in the enterprise.

It can be concluded that at present the competitive advantages of the enterprise are largely determined by its ability to develop, produce and produce high-tech products, which is difficult to achieve without an appropriate level of human capital development. Therefore, the company needs to invest in the human capital of its employees to achieve high performance of its activities.

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