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Research of Practices of Formation and Development of Human Capital in Companies of Various Industries on the Russian Market

E.S. Yakhontova, D.V. Kutyavin
RANEPA, Moscow, Russia

ABSTRACT

Almost all global trends create a synergistic effect, which increases the importance of forming and developing human capital to ensure the survival of companies in the market and their confidence in the future, regardless of their size and type of activity. However, despite the unflagging and continued interest of the scientific community in the issues related to human capital, there are still many “white spots” in this area. **The aim of this work** is to explore the approaches to forming and developing human capital applied by companies doing business in Russia in the current realities and modern conditions, to identify industry specifics and to outline recommendations. To achieve this goal, the authors conducted a questionnaire survey of managers of enterprises from different segments of the economy. As a result of the analysis of the obtained data, the conclusions were made that not all organisations have a generally accepted definition of HR and not everywhere there are procedures for its assessment. The problems related to personnel development, creation of competitive labour conditions for employees, search for potential employees and internal filling of vacancies were also revealed. **The methodology** of this work is based on a systemic approach and surveying, as well as general scientific methods such as synthesis, analysis, comparison, and generalization. **Research results:** Despite the fact that, in the opinion of the authors of the study, it did not consider all the problems of human capital formation and its impact on the sustainability of organisations, the obtained results allowed for the identification of the peculiarities of approaches to forming and developing human capital, considering industry specifics, and can be useful to develop practical recommendations for managers of companies aimed at improving this activity. **Originality:** This study presents, for the first time, a comprehensive overview of the approaches to forming and developing human capital in companies across various industries in the Russian labor market.

Keywords: human capital; personnel management; formation of human capital; knowledge economy; labor market

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INTRODUCTION

Virtually all global trends in today's business environment are associated with an increasing demand for improving the quality of management's work on building human capital (HC) of companies to maintain their competitive position and progressive development in a dynamic and poorly predictable environment. Thus, the McKinsey Global Institute research has convincingly shown that such management activities for the purpose of personnel development and effective management give enterprises a competitive advantage.¹ Despite the fact that the problem of human capital is in the sphere of scientific interests of foreign and some domestic researchers, many issues of its formation and development remain open. International consulting companies from time to time conduct studies of approaches to the consideration of this problem, however, without affecting the activities of organisations doing business in the Russian Federation.

In general, the important role of the human factor in economic activity was emphasised by the founders of classical economic theory — Petty [1, p. 324], Ricardo [2, p. 308], Smith [3, p. 490]. The founders of the modern theory of human capital in the world scientific community are considered to be T. Schultz and G. Becker, who proposed this term in the 1960s. [One of the authors of this article has already written about it earlier [4, p. 55–67]. Under the term human capital Shultz meant the totality of investments in a person, increasing his ability to work [5, p. 455–458]. According to G. Becker, these investments are mainly directed to education, production training, health care, labour migration [6].

¹McKinsey Global Institute. 2023. Performance through people: Transformation human capital into competitive advantage. URL: <https://www.mckinsey.com/mgi/our-research/performance-through-people-transforming-human-capital-into-competitive-advantage?stcr=6684B0CCFEED47-309268B8BB1A7E6B51&cid=other-eml-ttn-mip-mck&hlkid=dc78ca3265f2423ea1b76a69b0ba17d8&hctky=2136184&hdpid=c88cd392-ac9a-4010-8b2d-0c7649781db8>

The dividends from this kind of investment are the development of human potential, human intelligence, as well as the growth of the productive capacity [7, p. 534].

Among the representatives of domestic science, we can also identify scientists whose scientific interests relate to the sphere of the considered type of capital. These are R.I. Kapelyushnikov, who considers human capital as a certain stock of knowledge, abilities and motivations that are inherent in a certain person [8]; A.N. Azriliyan, who considers human capital as “education, qualifications acquired in the process of production; knowledge and skills embodied in the labour force” [9, p. 470]; E.S. Yakhontova, who called human capital a set of competencies of the company that belong to it and contribute to the achievement of its goals [10, p. 48–55]; S.A. Dyatlov, who perceives human capital as a certain stock of health, knowledge, skills, abilities, motivations formed as a result of investments and accumulated by a person, which is expediently used in one or another sphere of social reproduction, contributing to the growth of labour productivity and production efficiency and thus affecting the growth of earnings [11, p. 10].

We can distinguish human capital of an employee (individual), organisation and state [4, p. 55–67]. Human capital of an individual is a set of personal qualities, knowledge, skills, and abilities of a person, which are used by him/her in production activities in order to obtain benefits. The quality of an employee's existing human capital should be maintained to ensure competitiveness in the labour market by reinvesting part of the benefits received in his education and health, as well as using on a regular basis in production activities the knowledge and skills available to him. In turn, the human capital of a company is the total human capital of its employees, which is used effectively to achieve its goals, and the total human capital of employees of enterprises within the territory of one country is the human capital of the state.

There are two mechanisms for building an organisation's human capital — training personnel to acquire the missing competencies and hiring employees who already possess the required skills “from outside”. In order to maximise the benefits of human capital, companies need to create the conditions that would help to fully develop it. Organisations compete with each other to obtain the best human capital; employees have the right to choose where to realise their abilities — this is the mechanism of the labour market. The systems of formation of human capital of the state were described in the works of the founders of the theory — Schultz and Becker [7, p. 534].

Current problems of the domestic labour market are described in the macroeconomic analysis conducted by R.I. Kapelyushnikov in 2023. The author states the loss of labour force and employment associated with the action of demographic factors — the reduction in the total population of Russia and its gradual ageing [12, p. 78]. The situation can be alleviated by the launched processes of digital transformation, which naturally leads to a decrease in the composition of some categories of personnel with a simultaneous increase in the requirements for others [13, 14].

The current situation is complicated by the geopolitical situation and its impact on human capital and the economy. Thus, according to V. Gimpelson, the combination of sanctions, counter-sanctions and import substitution is a strong shock for human capital [15, p. 234–238]. The existing problems are also stated in current studies, according to which 60% of companies have a shortage of staff, and the number of unoccupied vacancies is estimated in hundreds of thousands,² which naturally leads to the degradation of human capital.

The purpose of this paper is to study the approaches to human capital formation used by companies (in the context of the turbulent situation in the Russian economy in general and in the labour

market in particular) and to identify its industry specifics. To achieve this goal, the authors link the solution of such tasks as conducting a questionnaire survey of company managers, analysing the obtained data, and developing recommendations for further research and improvement of approaches to work with personnel in companies.

RESEARCH METHODOLOGY

The study was conducted in three phases:

Stage 1 (preparatory phase). At the end of 2022, the goal and objectives were formulated, the target audience and sample were defined, and a questionnaire was developed using both Likert scales and closed-ended questions. The questionnaire contained 5 thematic blocks and consisted of 34 questions covering the following processes:

1. General understanding of human capital in an organisation. Human resource policy of companies: results of implementation and difficulties.
2. Evaluation of human capital: evaluation criteria and frequency of evaluation.
3. Practices of human capital development.
4. Staff retention. Working with the potential of employees.
5. Assessment of the company's position in the labour market.

The target audience was managers of various levels. The general population included all 2,600,000 registered domestic companies (data from the Federal Tax Service of Russia³). The sample used was a probability sample, which is a set of elements selected randomly and independent of each other. The sample size was calculated using a sampling calculator⁴ based on the following values: target population size — 2,600,000 organisations; confidence level — 95% (generally accepted standard); margin of error — 10%. The calculation showed that in order to ensure a cer-

² Golden Hands: Russia has a total deficit of personnel. Forbes Business. 2023. URL: <https://www.forbes.ru/biznes/497478-zoloty-e-ruki-v-rossii-total-nyj-deficit-kadrov>

³ The number of companies established in the Russian Federation in Q1 increased by 17% year-on-year. Interfax. 2023. URL: <https://www.interfax.ru/business/895266>

⁴ Sampling size calculator. URL: <https://ru.surveymonkey.com/mp/sample-size-calculator/>

tain level of error, the sample should consist of at least 97 participants.

Stage 2 – testing of the questionnaire. Prior to the practical part of the study in 2022, the authors conducted pilot tests in three companies in different sectors of the economy [FMCG⁵; IT and software development (hereinafter referred to as IT); education, science, and healthcare]. The validity of the questionnaire was confirmed using test-retest methodology. Different employees at the selected enterprises were tested with an interval of three months. Based on the feedback received from the respondents, the questionnaire was finalised.

Stage 3. Conducting the survey. The survey was conducted in June 2023 in the format of an online questionnaire. The questionnaire was posted on the Google Forms platform,⁶ and

everyone could answer the questions contained therein. 20% of the results were verified by the authors by calling respondents and conducting oral interviews. The questionnaire was distributed via social networks in business communities (Leaders of Russia, Skolkovo, etc.) and alumni associations (RANEPA, MIPT, MSU, etc.). Frequency analysis was used to analyse the results.

The study involved representatives of various sectors of the economy, such as oil and gas and extractive industries, industrial and agricultural production, FMCG and others. (Fig. 1). The total number of unique respondents was 106, of which 28% represented foreign companies operating in the Russian market and 72% represented domestic enterprises. When summarising the results, the authors of the article selected one unique representative per company.

The division of respondents by management level is as follows: 51% are the top management of organisations; 23% are heads of line departments; 19% are middle managers, and 8% are heads of HR departments. The survey participants

⁵ This refers to the production of everyday goods or consumer staples (Engl. Faster-Moving Consumer Goods, FMCG).

⁶ Online questionnaire form. URL: https://docs.google.com/forms/d/1rZ-GkBrwnrEztDba_IV1ip5DuX78rISZYwR_Alq-0d4/edit?pli=1

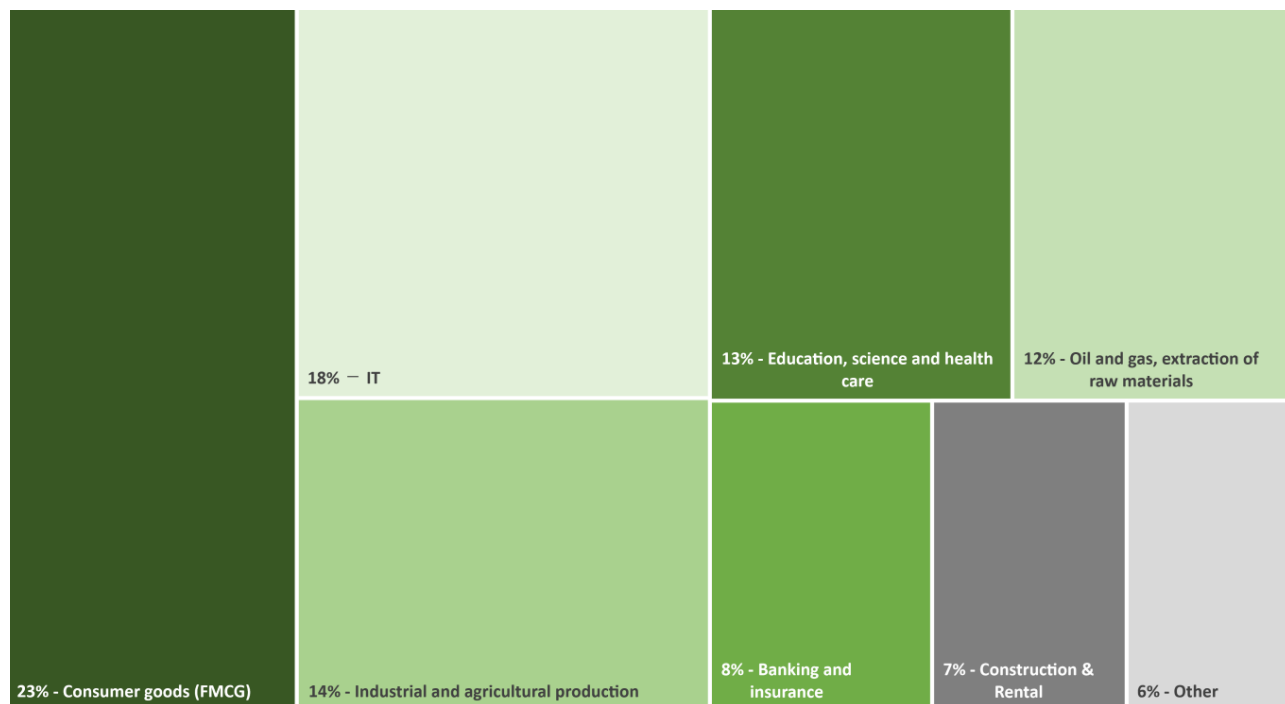


Fig. 1. Number of companies (by industry) whose representatives took part in the study

Source: compiled by the authors based on the results of the study.

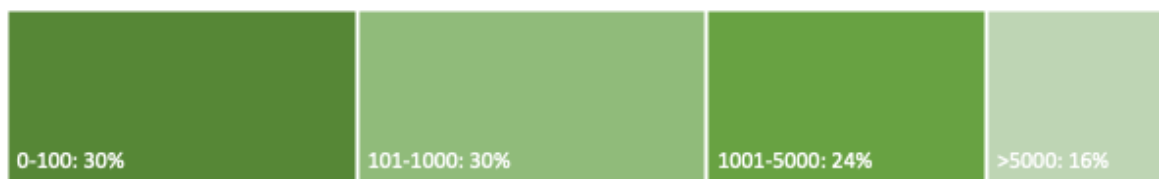


Fig. 2. Number of employees in companies whose representatives took part in the study

Source: compiled by the authors based on the results of the study.

were representatives of companies with different numbers of employees (Fig. 2), which made it possible to assess the situation at enterprises that differ in scale.

RESULTS OF THE RESEARCH

The authors present the results structured by thematic blocks, which correspond to all stages of the work carried out in the course of the study on the formation and development of

human capital. Some of the results are shown in the context of industries (where the obtained indicators are differentiated).

1. General understanding of human capital in an organisation. Human resources policy of companies: results of implementation and difficulties.

Regardless of the type of activity of an organisation, it is important that its employees use a common conceptual framework. Its exist-

Table 1

Companies' definition of the Human capital

Sector of the economy	All human resources	Personnel competencies used to achieve organizational goals	Corporate talent	Do not operate with such a concept as human capital
Banking and Insurance	37.5%	50.0%	0.0%	12.5%
Information technology and software development	57.9%	31.6%	0.0%	10.5%
Oil and gas, mining, and quarrying	53.8%	15.4%	0.0%	30.8%
Education, science and healthcare	64.3%	14.3%	0.0%	21.4%
Industrial and agricultural production	33.3%	33.3%	6.7%	26.7%
Consumer Goods (FMCG)	41.7%	41.7%	4.2%	12.5%
Construction and leasing	57.1%	28.6%	0.0%	14.3%
Other	16.7%	66.7%	0.0%	16.7%
The labour market	47.2%	33.0%	1.9%	17.9%

Source: compiled by the authors based on the results of the study.

ence allows the staff to “agree” on key issues of strategy more easily and quickly, to understand and communicate a common goal at all levels of management. The first thing the authors of the article wanted to determine was whether companies have an understanding of what human capital is. According to the survey results, 47% of organisations present on the market define human capital as all human resources, and another 33% define it as competencies of employees that allow them to perform their tasks. At the same time, almost 20% of enterprises do not operate with this concept (*Table 1*), i.e., there is no common agreement among the management as to what human capital means to them. The worst result is observed in the companies operating in

the field of mining (31%), industrial and agricultural production (27%).

The survey also showed that, according to the respondents, at the majority of Russian enterprises the HR policy leads to the development of human capital (59%) or its preservation (21%) (*Table 2*). At the same time, there are differences between industries — for example, among FMCG companies the policy leads to the development of human capital in 83% of cases, and this is the highest indicator demonstrating the attitude of the industry to work with this type of capital. As for a number of other sectors, respondents either indicated that their companies are negatively affected by policies in this area (>25%) or found it difficult to answer: banking and insurance (25%),

Table 2

The Impact of the HR or Personnel Policies on the organisations’ human capital and Audit Committee of Organizations

Sector of the economy	Your organization's HR policy leads to...			
	development of human capital	preservation of human capital	reduction (degradation) of human capital	Difficult to answer
Banking and insurance	37.5%	37.5%	0.0%	25.0%
IT and software development	68.4%	15.8%	10.5%	5.3%
Oil and gas, mining, and quarrying	53.8%	23.1%	7.7%	15.4%
Education, science and healthcare	57.1%	14.3%	28.6%	0.0%
Industrial and agricultural production	26.7%	33.3%	13.3%	26.7%
Consumer Goods (FMCG)	83.3%	0.0%	8.3%	8.3%
Construction and leasing	42.9%	57.1%	0.0%	0.0%
Other	66.7%	33.3%	0.0%	0.0%
The labour market as a whole	58.5%	20.8%	10.4%	10.4%

Source: compiled by the authors based on the results of the study.

education, science and healthcare (29%), manufacturing and agriculture (40%).

It is also worth noting that in the majority of foreign companies operating in the Russian market the human capital policy leads to a positive result (70%); as for domestic companies, according to respondents, such a result is achieved only in half of cases (53%).

One of the key methods to improve the level of human capital of companies is personnel development, which, according to the authors of the study, should be implemented through the adoption of long-term training plans or included in the company's roadmap. The study revealed that only 66% of organisations operating in the Russian market have personnel development reflected in their development strategies. A further 22% of respondents said that their companies

have no plans for staff development; 12% found it difficult to answer (*Table 3*).

The authors of the article identify a number of industries whose enterprises should pay attention to this aspect. For example, in the construction sector, 57% of firms either do not have the above strategy or management found it difficult to answer; in the industrial production sector, the number of such companies is 47%; in the banking sector and in education, science and health care the number of such companies is 50%. These organisations need to develop and implement staff development plans to better adapt to changes in the market, improve business performance and strengthen their competitiveness. The best performers in this area are companies in such industries as IT, mining, FMCG.

Table 3

Inclusion of personnel development plans in the strategy of companies by industry

Sector of the economy	Yes, as long-term staff training plans	Yes, it is included in the HR strategy and business strategy	Difficult to answer	No
Banking and insurance	25.0%	25.0%	12.5%	37.5%
IT and software development	15.8%	57.9%	5.3%	21.1%
Oil and gas, mining, and quarrying	38.5%	38.5%	0.0%	23.1%
Education, science and healthcare	21.4%	28.6%	7.1%	42.9%
Industrial and agricultural production	26.7%	26.7%	33.3%	13.3%
Consumer Goods (FMCG)	16.7%	66.7%	12.5%	4.2%
Construction and leasing	14.3%	28.6%	0.0%	57.1%
Other	16.7%	50.0%	33.3%	0.0%
The labour market as a whole	21.7%	44.3%	12.3%	21.7%

Source: compiled by the authors based on the results of the study.

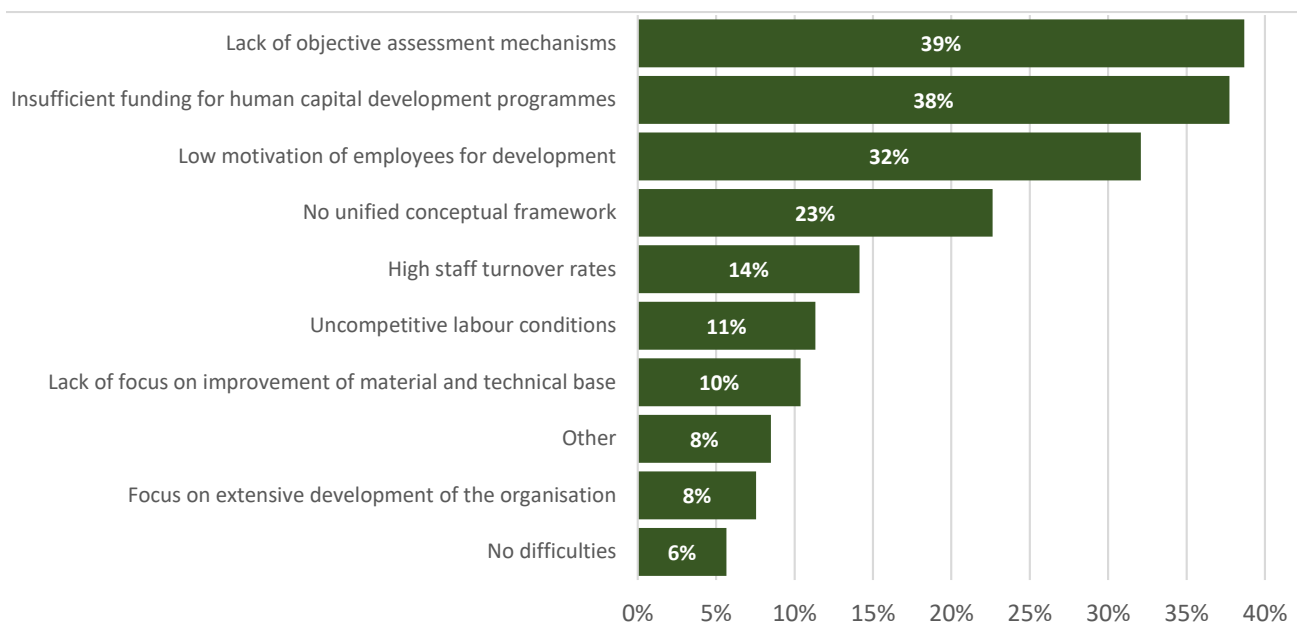


Fig. 3. Difficulties faced by companies in the process of forming a HC

Source: compiled by the authors based on the results of the study.

The survey also revealed the most common difficulties faced by companies in building human capital (Fig. 3). More than a third of respondents indicated that the main problems are related to the lack of mechanisms for its objective assessment, insufficient funding for human capital development programmes and low motivation of employees for training.

No differentiation between industries on this aspect was revealed, therefore the results are given for the labour market as a whole.

2. Human capital assessment: assessment criteria and frequency of evaluation.

Procedures for assessing human capital and the dynamics of its development/reduction are the starting points that give management an understanding of the current state of affairs. They are also necessary for drawing up an action plan and understanding the effectiveness of the work carried out. Human capital should be assessed on a regular basis. According to the authors of this article, the optimal frequency is once a year.

In the labour market as a whole, only 59% of companies conduct human capital assessment

with such frequency or more frequently; another 29% do not conduct it at all, and 12% of respondents found it difficult to answer (Table 4). Taking into account the fact that the management of organisations was interviewed, which should be involved in assessment activities to a greater or lesser extent, the authors propose to equate the answer “I find it difficult to answer” to the option “No assessment is carried out”, i.e., a significant number of companies (41% of the total number of companies on the market) do not have such assessment procedures in place.

Particular attention should be paid to management in the following industries: banking and insurance (50%); industrial and agricultural production (53%); construction and leasing (71%). Without assessing the effectiveness of the measures taken, companies may rely on the subjective opinion of managers at different levels or executives, which can lead to significant errors and failure to achieve the desired results.

It is recommended that the management of enterprises carry out a systematic assessment, which will allow them to understand the current situa-

Table 4

Assessment of the system of human capital formation

Sector of the economy	Once every two years or more	Evaluation is not carried out	Difficult to answer
Banking and insurance	50.0%	12.5%	37.5%
IT and software development	73.7%	26.3%	0.0%
Oil and gas, mining, and quarrying	53.8%	38.5%	7.7%
Education, science and healthcare	57.1%	35.7%	7.1%
Industrial and agricultural production	46.7%	40.0%	13.3%
Consumer Goods (FMCG)	70.8%	8.3%	20.8%
Construction and leasing	28.6%	71.4%	0.0%
Other	50.0%	33.3%	16.7%
The labour market as a whole	58.5%	29.2%	12.3%

Source: compiled by the authors based on the results of the study.

tion more accurately, identify necessary measures and develop plans based on objective data, which can contribute to improving the performance and sustainability of companies in the market.

The research revealed the most popular areas of human capital assessment used by Russian organisations (Fig. 4), including the following:

- assessment of personnel loyalty and satisfaction level — applied in 43.4% of companies;
- comparison of salary levels with similar companies — in 38.7%;
- assessment of personnel training and development costs — in 34.0%;
- dynamics of competences — in 32.1%;

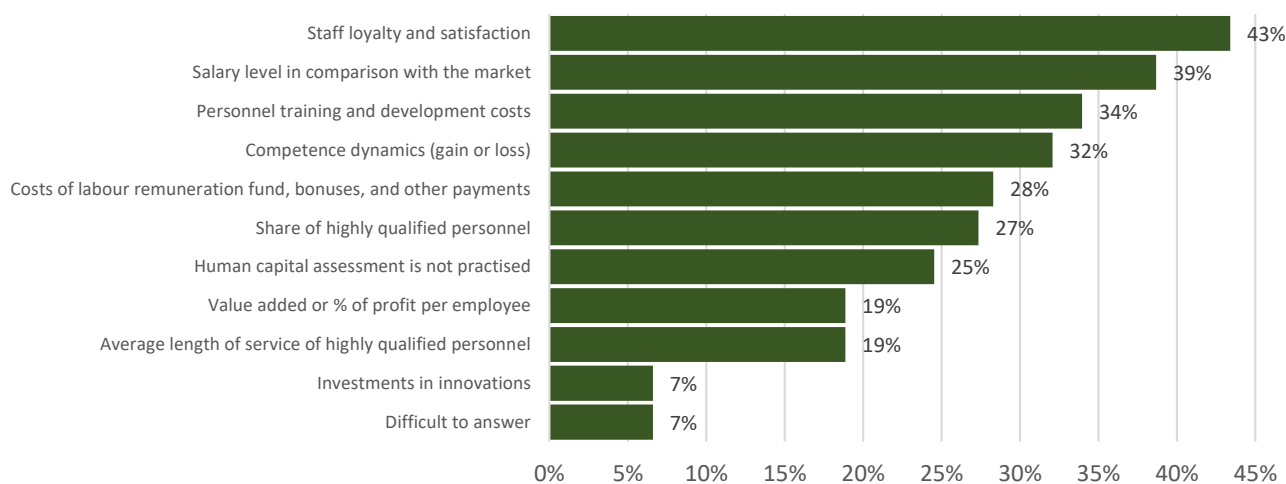


Fig. 4. Directions for assessing human capital or the effectiveness of its formation

Source: compiled by the authors based on the results of the study.

- estimation of expenses on salaries, bonuses, and other payments — in 28.3%.

Based on the obtained data, we can conclude that the types of assessments based on cost accounting (cost-based) have a great weight [16, p. 26], but they are not predominant. A significant part of companies pay attention to staff loyalty (43%) and competence (32%). As a rule, attention

is paid to at least 2–3 aspects. It can be concluded that among the organisations assessing their human capital, this issue is elaborated and does not require operational adjustments.

3. Human capital development practices.

This block considers the practices of improving human capital through the development of company employees, since this type of capital is

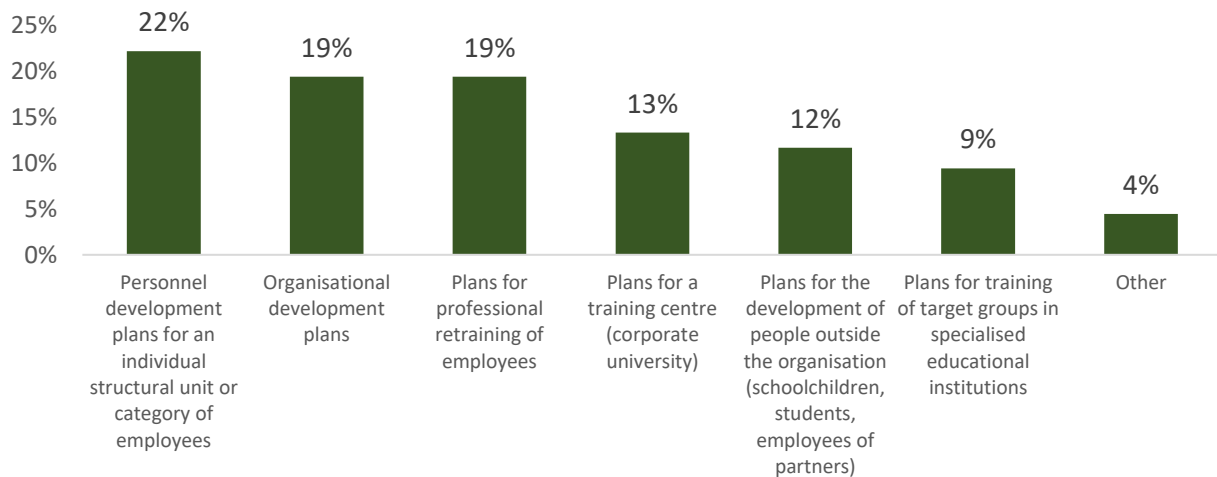


Fig. 5. Components of the personnel development strategy

Source: compiled by the authors based on the results of the study.

Table 5

Conducting a training needs assessment by industry

Sector of the economy	Is there a training needs analysis?		
	Yes	No	Difficult to answer
Banking and insurance	50.0%	37.5%	12.5%
IT and software development	73.7%	15.8%	10.5%
Oil and gas, mining, and quarrying	84.6%	15.4%	0.0%
Education, science and healthcare	57.1%	35.7%	7.1%
Industrial and agricultural production	60.0%	20.0%	20.0%
Consumer Goods (FMCG)	79.2%	8.3%	12.5%
Construction and leasing	57.1%	28.6%	14.3%
Other	83.3%	16.7%	0.0%
The labour market as a whole	69.8%	19.8%	10.4%

Source: compiled by the authors based on the results of the study.

inseparable from its bearer. In the first block it was indicated that only in 66% of organisations employee development is part of the strategic plan. The majority of approaches to human capital improvement mainly concern current employees, while only 12% of strategies contain plans for the development of individuals outside the organisation, such as schoolchildren, students or employees of partner companies, and only 9% take into account training programmes for target groups in specialised educational institutions (*Fig. 5*).

The low percentage of external candidates included in development plans means that companies miss the opportunity to consider this category of individuals as a potential for forming their own human capital. It is important to note that most companies that have an employee development strategy tend to use more than two components.

Before building a strategy for personnel training and development, management needs to assess the need for training — assessment activities give them the opportunity to understand the starting point and form plans not on the basis of their own beliefs, but on the basis of objective statistics. Such measures are implemented by 70% of enterprises. According to the authors of the study, this is quite a high indicator. There are three industries in which the vast majority of companies (>70%) carry out this type of assessment: IT, mining, FMCG (*Table 5*).

A difference between the priorities in training was revealed — for example, in 50% of Russian organisations it is aimed at improving professional skills, while the focus in foreign companies is equally divided (37%) between professional skills and interpersonal interaction techniques (*Fig. 6*). This, in our opinion, is the evidence of a strategic approach to the development of their human capital, as the approach typical of Western firms is based on more systematic investment in the training and development of their staff.

The distribution of training areas by industry is presented in *Table 6*. It is worth noting that the

greatest attention to the development of interpersonal skills is paid by companies in the FMCG industry; enterprises of other sectors are focused on functional and technical competencies and employee safety (labour protection, fire safety, etc.). Formalised training is absent in 15% of organisations. In our opinion, mastering “technical competences and safety” does not contribute to the full development of employees and their human capital; therefore, it can be assumed that 32% of companies in the Russian market do not focus on the real development of their human capital, which determines their loss of stability under the pressure of unfavourable environmental factors.

The correlation between interpersonal skills and professional skills is not crucial, as it is determined solely by the organisation’s field of activity and business context. For example, in the FMCG industry the main focus is on interpersonal skills, because most of the work processes are outsourced by companies, and the task of personnel is to manage them. The opposite situation is observed in IT, industrial production, education, and healthcare sectors.

One of the key tools for personnel improvement is a personal development plan, which is drawn up by mutual agreement between an employee and a superior manager (including HR). In our opinion, this document should reflect the delta between the current state of the employee (his/her competences, performance) and the desired level and include a list of specific actions. The development plan is adjusted by the employee and the involved management on a regular basis. As part of the research, the respondents answered questions about the practice of using personal development plans and their terms. *Table 7* presents the results with a breakdown by economic sector. Based on these data, the following conclusions can be drawn:

- In almost 1/3 of companies on the market, employees do not have formalised personal development plans.



Fig. 6. Focus areas in employee training and development

Source: compiled by the authors based on the results of the study.

Table 6

Direction of focus in the training and development of employees by industry

Sector of the economy	Interpersonal Skills	Professional skills	Technical competence and employee safety	There is no formalized development of employees
Banking and insurance	25.0%	37.5%	0.0%	37.5%
IT and software development	5.3%	68.4%	10.5%	15.8%
Oil and gas, mining, and quarrying	38.5%	30.8%	30.8%	0.0%
Education, science and healthcare	7.1%	42.9%	28.6%	21.4%
Industrial and agricultural production	6.7%	66.7%	13.3%	13.3%
Consumer Goods (FMCG)	50.0%	29.2%	12.5%	8.3%
Construction and leasing	0.0%	28.6%	28.6%	42.9%
Other	16.7%	66.7%	16.7%	0.0%
The labour market as a whole	21.7%	46.2%	17.0%	15.1%

Source: compiled by the authors based on the results of the study.

- In 37% of companies, only a certain part of personnel (e.g., potential employees) have development plans; in 26% — every employee.

- The undisputed leader in this area is FMCG segment, where there is a practice of personal development planning; IT companies in the industry and mining companies have similar indicators.

- Development plans (if any) are mostly prepared for 1 year or less (48%); for 2–3 years (21%) and from 3 years and more (3%).

- The largest percentage of organisations that prepare long-term development plans (for a period of more than 3 years) is in the “Education and Science” and “Health Care” industries (7%),

Table 7

Practice of using personal development plans and their deadlines

Sector of the economy	Development plans				Timeline of development plans			
	Every employee has	Yes for some categories	Difficult to answer	No development plans	up to 1 year	2–3 years	> 3 years	No development plans
Banking and insurance	25.0%	0.0%	25.0%	50.0%	37.5%	12.5%	0.0%	50.0%
IT and software development	10.5%	52.6%	15.8%	21.1%	42.1%	31.6%	5.3%	21.1%
Oil and gas, mining, and quarrying	23.1%	38.5%	15.4%	23.1%	76.9%	0.0%	0.0%	23.1%
Education, science and healthcare	7.1%	42.9%	7.1%	42.9%	21.4%	28.6%	7.1%	42.9%
Industrial and agricultural production	13.3%	46.7%	0.0%	40.0%	46.6%	13.3%	0.0%	40.0%
Consumer Goods (FMCG)	50.0%	33.3%	8.3%	8.3%	58.3%	29.2%	4.2%	8.3%
Construction and leasing	28.6%	14.3%	0.0%	57.1%	28.6%	14.3%	0.0%	57.1%
Other	50.0%	33.3%	0.0%	16.7%	50.0%	33.3%	0.0%	16.7%
The overall result	25.5%	36.8%	9.4%	28.3%	48.1%	20.8%	2.8%	28.3%

Source: compiled by the authors based on the results of the study.

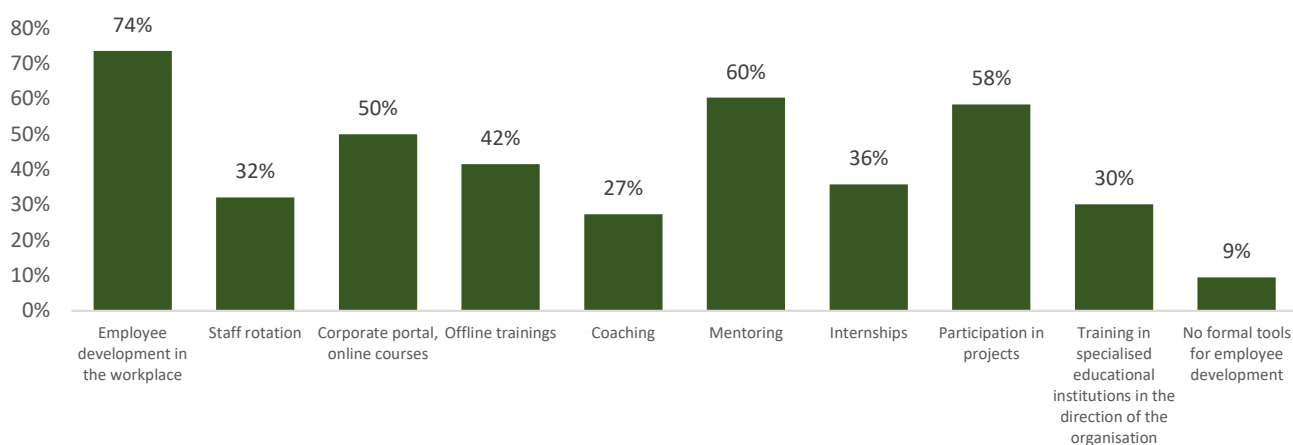


Fig. 7. Employee training and development tools used

Source: compiled by the authors based on the results of the study.

which is due to the increased cycle of staff tenure due to the high science-intensive nature of work processes.

The absence of development plans in almost 1/3 of companies in the market as a whole and up to 60% in certain industries is an area for improvement, as well as a signal to management, indicating the spontaneous nature of personnel development, which does not contribute to the development/accumulation of human capital. The results showed that firms that pay attention to employee training do so in an integrated way – respondents noted the use of an average of four educational tools in one company. The most popular are on-the-job development (used in 74% of companies); mentoring (60%) and project participation (58%). (Fig. 7).

Formal development tools are absent in 9% of organisations. This value is not critical on the market scale. It should be noted that in recent years the need for online training has increased [17, p. 56–64] and, judging by the survey data, this format is already used by half of the enterprises. The cycle of employee development is completed by the evaluation of the conducted training, which is necessary to understand the levels of quality and effectiveness of training, staff satisfaction, as well as to analyse the effectiveness of the use of investments in education. The most popular assessments on the market

are the degree of satisfaction with training and the level of performance change (Fig. 8).

Since the goal of most organizations is to make a profit,⁷ one of the key indicators, in our opinion, should be the evaluation of the return on investment in training programmes. The survey revealed that only 7% of companies apply this criterion; 6% do not assess it at all.

Almost all enterprises in the market face a number of difficulties in the process of training and development of their employees. The most common answer among respondents was “lack of time” (18%) (Fig. 9), which implies, among other things, a high workload of employees and their managers in the main business process, as well as the distribution of priorities in favour of other tasks after performing direct work duties.

One solution to this problem, suggested by the authors of the article, is to allocate time for employees and management for “development processes”, which company management should consider as an investment in increasing the human capital of the organisation, allowing to improve the knowledge and performance of the staff. A consistent solution to the problems identified represents the companies’ potential to contribute to its sustainability in the face of uncertainty.

⁷ The purpose of entrepreneurial activity is to make a profit. Federal Tax Service (official website). 29.11.2012. URL: https://www.nalog.gov.ru/rn48/news/activities_fts/4263891



Fig. 8. Evaluation of applied training programs

Source: compiled by the authors based on the results of the study.



Fig. 9. Difficulties identified in the learning process

Source: compiled by the authors based on the results of the study.

Table 8

Working conditions in companies in the Russian market

Sector of the economy	Working conditions in your company			
	The company strives to occupy leading positions in the industry	The company maintains competitive labour conditions	It is difficult to answer	Labour conditions are worse than those of the competitors
Banking and insurance	37.5%	25.0%	12.5%	25.0%
IT and software development	36.8%	57.9%	0.0%	5.3%
Oil and gas, mining, and quarrying	30.8%	61.5%	0.0%	7.7%
Education, science and healthcare	14.3%	64.3%	7.1%	14.3%
Industrial and agricultural production	20.0%	60.0%	13.3%	6.7%
Consumer Goods (FMCG)	58.3%	37.5%	4.2%	0.0%
Construction and leasing	14.3%	85.7%	0.0%	0.0%
Other	66.7%	33.3%	0.0%	0.0%
The overall result	35.8%	52.8%	4.7%	6.6%

Source: compiled by the authors based on the results of the study.

4. Staff retention and motivation. Working with the potential of employees.

Staff retention and motivation are important conditions and elements of the system of formation of human capital of enterprises for a number of reasons, because:

- allow retaining valuable experience and knowledge that employees bring to the company;
- ensure stability and continuity of work, which contributes to the sustainability of the business;
- contribute to an organisation's unique culture;
- help reduce the cost of training new recruits.

We have identified the following aspects that need to be taken into account by management in order to solve the problem of retaining and motivating qualified personnel: providing interesting work; creating high-tech jobs to stimulate professional growth; a competitive system of remuneration and working conditions; availability of benefits and career development opportunities. Since the movement of qualified employees, who

form the core of human capital of companies, takes place mainly within the industry, in this section of the survey respondents were asked to assess the situation at their company in comparison with others in the same industry.

89% of managers defined working conditions in their organisations as either being at a competitive level (53%) or corresponding to the best possible for companies in this sector of the economy (36%). In general, the situation on the market is the same in all sectors, except for FMCG and banking. In the first case, competition is the greatest — 58% of representatives of organisations say that they strive to create the best working conditions in the industry. In the banking sector there is a polarity of answers: on the one hand, 63% of respondents positively characterise the company's actions; on the other hand, according to 25% of survey participants, working conditions at their workplaces are worse than those of their competitors (*Table 8*).

Table 9

Creation of high-tech jobs in the Russian market

Sector of the economy	Do you have high-tech jobs in your organization?			
	Yes, occupies a leading position in the industry	Yes, corresponds to the state of affairs in the industry	Difficult to answer	No
Banking and insurance	12.5%	37.5%	25.0%	25.0%
IT and software development	26.3%	47.4%	15.8%	10.5%
Oil and gas, mining, and quarrying	46.2%	38.5%	7.7%	7.7%
Education, science and healthcare	7.1%	57.1%	7.1%	28.6%
Industrial and agricultural production	20.0%	60.0%	0.0%	20.0%
Consumer Goods (FMCG)	20.8%	54.2%	12.5%	12.5%
Construction and leasing	0.0%	57.1%	0.0%	42.9%
Other	33.3%	33.3%	16.7%	16.7%
The overall result	21.7%	50.0%	10.4%	17.9%

Source: compiled by the authors based on the results of the study.

Table 10

Comparison of the system of remuneration for work and the provision of benefits

Sector of the economy	Remuneration system				Additional benefits for employees			
	Industry leading	Competitive	Difficult to answer	Below industry average	Industry best conditions	Similar to competitors	Difficult to answer	No
Banking and insurance	0.0%	62.5%	25.0%	12.5%	0.0%	62.5%	0.0%	37.5%
IT and software development	15.8%	68.4%	5.3%	10.5%	15.8%	63.2%	0.0%	21.1%
Oil and gas, mining, and quarrying	0.0%	76.9%	0.0%	23.1%	0.0%	69.2%	0.0%	30.8%
Education, science and healthcare	0.0%	35.7%	7.1%	57.1%	7.1%	35.7%	14.3%	42.9%
Industrial and agricultural production	13.3%	46.7%	6.7%	33.3%	0.0%	60.0%	0.0%	40.0%
Consumer Goods (FMCG)	4.2%	79.2%	4.2%	12.5%	16.7%	79.2%	0.0%	4.2%
Construction and leasing	0.0%	71.4%	28.6%	0.0%	0.0%	71.4%	0.0%	28.6%
Other	0.0%	83.3%	16.7%	0.0%	16.7%	50.0%	0.0%	33.3%
The overall result	5.7%	65.1%	8.5%	20.8%	8.5%	63.2%	1.9%	26.4%

Source: compiled by the authors based on the results of the study.

For the professional development of employees, organisations need to create high-tech workplaces. In terms of application of high technologies and their improvement, the greatest competition is noted in the sphere of raw materials extraction. Polar values are noted in the construction sector: according to 57% of respondents, the technologies used correspond to the situation in the industry, but 43% believe that their company loses to competitors in this area.

According to the authors, there is a “healthy” situation in the market in general, with 22% of companies striving to occupy leading positions, regularly bringing innovations, and introducing modern technologies to the industry; 50% striving to meet the benchmark position in their sector; and 18% not withstanding the competition. 10% of respondents found it difficult to answer (*Table 9*).

Table 10 summarises the results of the survey regarding the remuneration system and fringe benefits for employees. Organisations need to keep up with competitors and either provide better conditions to retain employees or invite staff from other companies. The study found that the remuneration system and benefits provided in more than 60 per cent of the companies are competitive. In terms of wages, 6% of companies strive to provide the best conditions, and 9% of companies strive to provide the best conditions in terms of compensations.

The data obtained shows that in two sectors of the economy the level of remuneration and benefits is lower than that of competitors — “Education, science and health care” (representatives of 57% of companies consider their salaries lower than those received at other enterprises in this sector, and employees of 43% of organisations have the same opinion about the benefits provided); similarly, the situation is in industry and agricultural production — 33% are dissatisfied with remuneration for labour, 40% — are dissatisfied with benefits. It is also noteworthy that respondents highlighted the lack of fringe benefits (food, health insurance and mobile phones) in over a quarter (26.4%) of companies in the market. The FMCG industry stands out favourably, which once again confirms the high degree of employee support and focus on the key type of capital inherent in its companies.

In today’s world, when the concept of “Lifelong learning” [18] has a high practical applicability, the possibility of transforming personal development into professional development plays an important role and becomes one of the factors contributing to staff retention. The study identified the economic sectors with the largest share of companies contributing to such transformation: IT — 63%, FMCG — 67%, industrial and agricultural production — 60% (*Fig. 10*). The most critical situation is observed in companies in construction (29%) and raw materials extraction (46%).

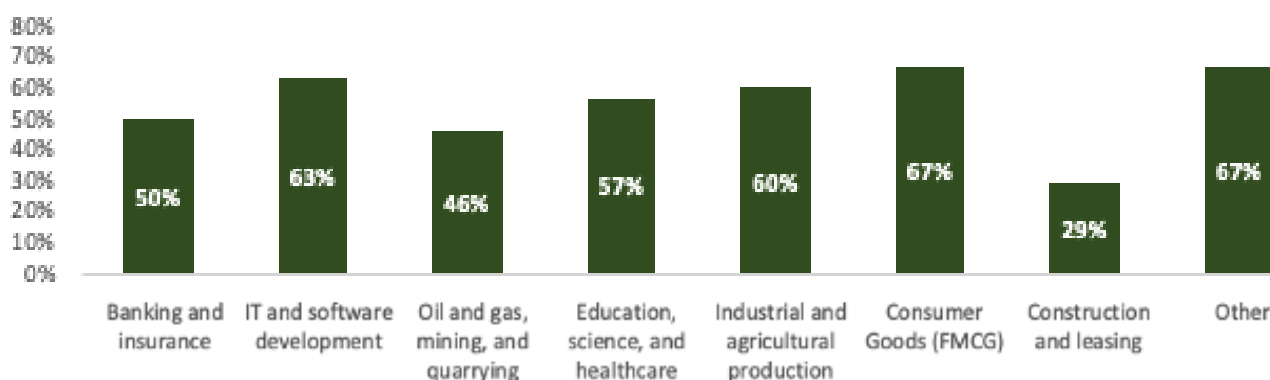


Fig. 10. Share of companies in the industry that contribute to the transformation of personal development into professional development

Source: compiled by the authors based on the results of the study

On average, 58% of organisations in the market help employees realise their potential and ambitions by transforming personal development into

professional development; 16% of respondents found it difficult to answer; 26% gave a negative answer.

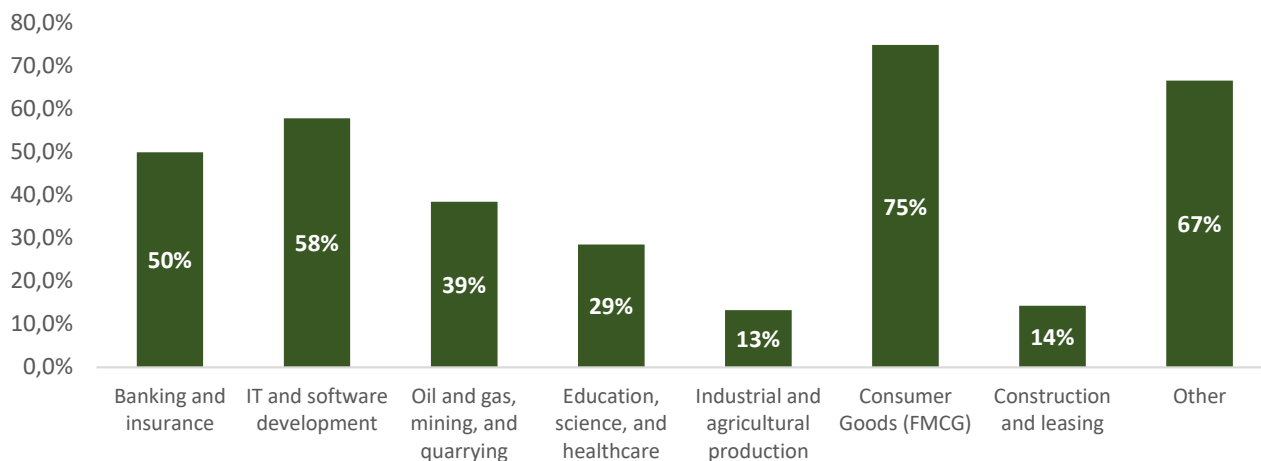


Fig. 11. Share of companies in the industry that assess the potential of employees

Source: compiled by the authors based on the results of the study.

Table 11

Filling vacancies and the effectiveness of succession programmes

Sector of the economy	Vacancies are filled mainly by			Are succession programs working effectively?		
	internal candidate	difficult to answer	external candidate	Yes	difficult to answer	No
Banking and insurance	12.5%	33.0%	56.5%	12.5%	33.0%	56.5%
IT and software development	26.3%	5.3%	68.4%	36.8%	5.3%	57.9%
Oil and gas, mining, and quarrying	38.5%	23.1%	38.5%	30.8%	7.7%	61.5%
Education, science and healthcare	42.9%	14.3%	42.9%	57.1%	28.6%	14.3%
Industrial and agricultural production	33.3%	6.7%	60.0%	33.3%	20.0%	46.7%
Consumer Goods (FMCG)	58.3%	16.7%	25.0%	66.7%	12.5%	20.8%
Construction and leasing	0.0%	14.3%	85.7%	28.6%	14.3%	57.1%
Other	33.3%	16.7%	50.0%	33.3%	33.3%	33.3%
The overall result	35.3%	14.7%	50.0%	43.4%	16.0%	40.6%

Source: compiled by the authors based on the results of the study.

The long-term development of companies depends to a large extent on ensuring staff succession, which also contributes to the development of human capital. However, the work on its potential should start with assessment, but such activity is characteristic of only 46% of organisations (Fig. 11).

The FMCG sector is the undisputed leader in this area, where more than 75% of enterprises assess the potential of their employees. The IT sector (58%) and the banking industry (50%) also have quite high indicators, and this is directly related to the largest representation of Western companies in these sectors, whose orientation to work with personnel has historically been at a higher level.

An indicative result of talent management is the percentage of vacancies closed by internal candidates (Table 11) — according to respondents, 35% of companies in the market as a whole do so. The effectiveness of succession programmes and good results are confirmed by the management assessments of 42% of companies. The highest percentage was noted in the FMCG sector (58 and 67% respectively), as well as in the Education, Science and Healthcare sectors (43 and 57%). According to the authors, investment in succession is a contribution to both the human capital of the

company and the “final” result of investing in the human capital of a particular employee.

Working on continuity and succession is a difficult and time-consuming process. Thus, as a result of this study, typical accompanying problems were identified (Fig. 12):

- high workload of the personnel is noted by more than one third of respondents;
- professional burnout is a concern for 19% of companies.
- insufficient level of competence and professional maturity of novice employees worries 17% of the total number of organisations;
- unwillingness of experienced employees to share their knowledge was emphasised by 9%;
- low motivation for development in general is observed in 7% of companies.

5. Assessment of the company's position in the labour market.

In the final part of the survey, respondents were asked to assess the position of the company on the labour market relative to its competitors. Despite the fact that the answers in this section are subjective in nature (as the management considered the results of their company), they reflect the degree of confidence of managers in the company and the strategies adopted by it.

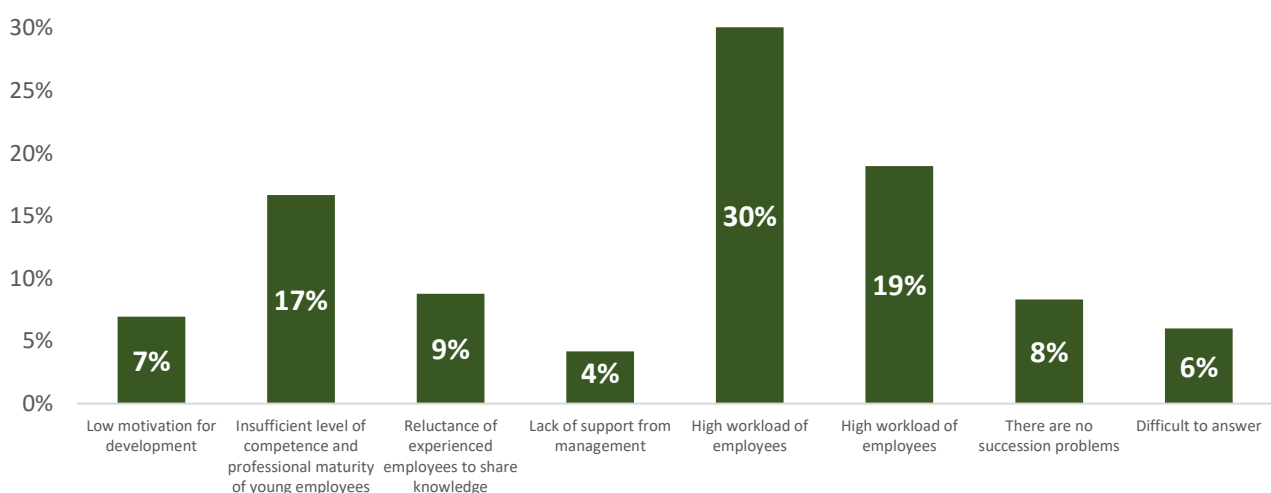


Fig. 12. Problems and challenges in succession development and in the formation of continuity

Source: compiled by the authors based on the results of the study.

Table 12

Management assessment of the position of their companies in the labor market

Sector of the economy	Position of the company in the labor market			
	Outperforms competitors and acquires competences when changing personnel	Loses out to competitors for top talent, but gets stronger in the process	Loses out to competitors and loses competences when staff changes	Difficult to answer
Banking and insurance	25.0%	12.5%	37.5%	25.0%
IT and software development	52.6%	26.3%	15.8%	5.3%
Oil and gas, mining, and quarrying	53.8%	15.4%	23.1%	7.7%
Education, science and healthcare	7.1%	35.7%	14.3%	42.9%
Industrial and agricultural production	40.0%	13.3%	20.0%	26.7%
Consumer Goods (FMCG)	33.3%	25.0%	8.3%	33.3%
Construction and leasing	0.0%	0.0%	28.6%	71.4%
Other	50.0%	33.3%	0.0%	16.7%
The labour market as a whole	34.9%	21.7%	17.0%	26.4%

Source: compiled by the authors based on the results of the study.

When assessing their organisation's position relative to competitors on the labour market, 35% of respondents said that their company is winning the battle for staff and gaining the necessary competencies by building up its human capital. According to 22% of respondents, despite the fact that their company is losing to competitors, it manages to strengthen its position; representatives of 17% of companies admitted that they lose human capital when recruiting staff; and 26% found it difficult to answer (*Table 12*).

Although a large percentage of respondents could not clearly formulate their opinion, the authors highlight the most frequently occurring answer options. For example, 38% of respondents from the banking and insurance sectors said that their HR policies do not allow them to build up human capital when applying to the labour market,

and they are losing out to competitors. In turn, more than half of the respondents in the IT and mining sectors emphasised that their companies are strengthening.

When assessing turnover in relation to competitors, the opinions of respondents from different sectors did not differ too markedly. On average, more than half of the organisations (55%) noted the same level of this indicator (*Table 13*).

Based on these data, we can conclude that the situation is most similar in companies in the construction industry: 86% of them gave the same answer.

Table 14 compares the results of answers to the question about the presence of recruitment problems and assessment of organisations' attractiveness. Representatives of the majority of enterprises (69%) emphasised the attractiveness

Table 13

Management assessment of staff turnover relative to that of competitors

Sector of the economy	Turnover in your company relative to competitors			
	High	Difficult to answer	At the same level	Low
Banking and insurance	0.0%	12.5%	50.0%	37.5%
IT and software development	10.5%	10.5%	47.4%	31.6%
Oil and gas, mining, and quarrying	7.7%	7.7%	46.2%	38.5%
Education, science and healthcare	14.3%	7.1%	50.0%	28.6%
Industrial and agricultural production	13.3%	0.0%	60.0%	26.7%
Consumer Goods (FMCG)	4.2%	4.2%	54.2%	37.5%
Construction and leasing	0.0%	0.0%	85.7%	14.3%
Other	0.0%	0.0%	66.7%	33.3%
The labour market as a whole	7.5%	5.7%	54.7%	32.1%

Source: compiled by the authors based on the results of the study.

Table 14

Management assessment of hiring problems and attractiveness of the company

Sector of the economy	Does the organization face hiring problems?			Is your company an attractive employer?		
	Yes	Difficult to answer	No, or there are insignificant ones	Yes	Difficult to answer	No
Banking and insurance	37.5%	12.5%	50.0%	50.0%	37.5%	12.5%
IT and software development	10.5%	0.0%	89.5%	68.4%	21.1%	10.5%
Oil and gas, mining, and quarrying	23.1%	7.7%	69.2%	84.6%	7.7%	7.7%
Education, science and healthcare	42.9%	7.1%	50.0%	50.0%	14.3%	35.7%
Industrial and agricultural production	66.7%	6.7%	26.7%	53.3%	40.0%	6.7%
Consumer Goods (FMCG)	45.8%	4.2%	50.0%	91.7%	4.2%	4.2%
Construction and leasing	42.9%	0.0%	57.1%	57.1%	28.6%	14.3%
Other	66.7%	0.0%	33.3%	66.7%	0.0%	33.3%
The labour market as a whole	39.6%	4.7%	55.7%	68.9%	17.9%	13.2%

Source: compiled by the authors based on the results of the study.

of their campaigns as an employer, which was confirmed by the absence of serious problems related to recruitment (56%).

It is worth noting the results of the assessment of the attractiveness of companies in the FMCG sector (92%) and mining (85%). Such figures indicate a high level of market competition in these industries, as the majority of companies simultaneously believe that they are able to attract talent. According to respondents, IT industry organisations are experiencing the least number of problems.

CONCLUSIONS

In accordance with the previously stated objectives, a study of the approaches to human capital formation used by companies operating in the Russian labour market was conducted. In the course of the work, industry specifics were identified. The results obtained allow us to draw a number of conclusions:

1. There is no universally accepted definition of human capital in most organisations, although many (>50%) see a link between human capital and HR policies.
2. Human capital assessment procedures are the starting point for making decisions based on a real understanding of the current state of affairs. However, they are only conducted in 60 per cent of companies.
3. There are systemic problems in personnel development at enterprises and beyond — most of them conduct training needs assessment (70%), which allows to develop an educational strategy based on objective data. In the market as a whole, up to 60% of companies in certain industries do not have personalised employee development plans, which requires improvement and is a signal to management.
4. Most organisations cite improved (36%) or competitive (53%) working conditions as their goal. Approximately 20% say they lead their industry in creating high-tech jobs. More than half of firms say they have a competitive compensation

system and provide fringe benefits compared to others in the industry.

5. To strengthen their position, companies can pay attention to interaction with potential employees. Thus, only about 40% of respondents emphasise the effectiveness of succession programmes at their place of work, which corresponds to a low percentage of internal vacancy filling (35%). The high workload of employees is cited as the main reason that hampers companies' capacity development efforts.

The authors of the study acknowledge that not all aspects of human capital formation and its impact on the sustainability of organisations have been considered. Special attention should be paid to the study of the influence of managers' worldview and thinking on HR management practices, as well as the formation and development of human capital. It is interesting to study the mutual influence of human capital and organisational culture. In particular, how can the latter, being traditional and hierarchical with dominant authoritarian management styles, be at the origin of vertical and horizontal cooperation of managers with the aim of formation and development of human capital?

The authors of the article also consider it relevant to analyse approaches to planning and budgeting in a turbulent environment.

RECOMMENDATIONS FOR COMPANY MANAGEMENT

The research allowed us to develop a set of interrelated recommendations, the implementation of which will contribute to the formation and development of human capital of companies, including the following:

1. Development of a commonly accepted definition of human capital in the context of management for use within companies.
2. Introducing the practice of regular assessment of human capital using comprehensive indicators to monitor the dynamics and improve the effectiveness of human resource decisions.

3. Using a systematic approach to improving corporate HR policies that promote the development of human capital.

4. Funding of development programmes and motivation of employees for training in order to overcome difficulties related to human capital development.

5. Paying attention to the implementation of strategic partnerships with relevant educational institutions to improve the effectiveness of succession programmes.

6. Allocating time for staff training and development as one of the priority areas within business process optimisation programmes and projects.

7. Adopting a comprehensive approach to improving its reputation as an employer, including the creation of high-tech workplaces.

8. Creating and maintaining an ecosystem around it aimed at early professional orientation of young people.

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ABOUT THE AUTHORS



Elena S. Yakhontova — Dr. Sci. (Sociology), Professor of the Department of Corporate Management of the Higher School of Management of the RANEPA, Moscow, Russia
<https://orcid.org/0000-0002-2640-8771>
yakhontova-es@ranepa.ru



Dmitrii V. Kutyavin — MSc, Business Systems User Support Product Manager, Mars Russia, RANEPA, Moscow, Russia
<https://orcid.org/0000-0001-8126-4099>
Автор для корреспонденции / Corresponding author:
Kutyavin.dv@gmail.com

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