

Human Capital Management: Past and Present

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Abstract: The article is devoted to the study of the issue of human capital in the railway sector. The history of the railway industry is considered in the framework of the study of human capital. The prospects of human capital development are studied on the example of modern students. The changes that are taking place in the railway industry with human capital at the present stage are analyzed.

1 INTRODUCTION

The concept of "human capital" was first used by the economist D. Minser in 1958. Then T. Schultz in 1961 and Becker in 1964 continued to develop this idea. The Great Russian Encyclopedia defines "human capital", which considers the combination of human skills and satisfaction of social needs (Balashov, <https://bigenc.ru/>). Initially, the theory of human capital explained action of the factors of production influencing cumulative release of goods and inequality in income. Then the term began to be interpreted more broadly, including human consumer spending. here is a distinction between individual, corporate and national factors, as well as general and specific, negative and positive human capital. The human capital is affected by mentality, quality of education, health, accumulated knowledge, economic freedom, supremacy of law, and safety of business and citizens.

In this study, we are most interested in the formation of individual capital of railway workers and employees in the past and present. We will describe those areas that influenced the quality of training of specialists. These include education, medical care, social security, and housing programs.

The development of the railway industry in Russia begins in the 19th century, when the need for differentiation of the workforce has not yet been formed. Employers value, first of all, the ability of an employee to work. Their social investments in the employee provided for the provision of the labor function: provision of food and housing needs. But the railway industry, as a technological production, required not only ordinary workers, but also trained

and skilled workers. Therefore, even before the start of regular rail service, a system of training engineering specialists was organized. Then there were also technical schools where junior technical personnel were trained for the railway. It can be said that working on the railway required literacy and preparedness from employees.

To attract specialists, the railway created some conditions for its employees. It built houses, organized training courses and educational institutions, formed a decent level of wages. Since the 1880s, pension funds have been formed, including on railways, both private and state-owned (Paintings from the life of railway workers in the Russian Empire, 2016). Pensions were paid not only to the employees themselves, but also to the families of railway workers, in case of loss of the breadwinner. The wages of workers and employees of railways in the XIX — early XX century were a little more than 30 rubles (Lashina, 2012), which was higher than the incomes of factory workers. Programs were implemented to provide railway workers with housing. Such events contributed to the development of the human capital of the railways. The increase in the number of workers in the railway sector in connection with the construction of railways had an impact on the socio-economic processes in the country.

In modern Russia, there are other areas where highly qualified specialists are required. The railway industry has serious competitors in the field of air transportation. The aviation sector today requires more complex training and is also interested in creating certain preferences for its employees. Therefore, it is important not only to preserve the

traditions of railway transport in relation to employees, but also to develop new promising directions in social terms.

2 "HUMAN CAPITAL" ON THE RAILWAY

Despite the fact that the concept of "human capital" is comparatively new, we can compare the quality of human capital in different eras. Description of the knowledge, skills and abilities of railway workers was carried out in the 19th, 20th and 21st centuries. We will look at the level of training and quality of life of railway workers, try to identify the changes that have occurred in this area and analyze the human capital management program adopted by Russian Railways JSC.

In order to understand how the railway industry responds to the challenges of the time, we must analyze its development and current state, assess the potential that has been laid and is developing in the present conditions.

We used the method of comparative analysis, the method of document analysis, the method of sociological survey of students.

Quite a lot of specialists have been engaged in the study of human capital on the railway in one way or another. We turned to those of them who analyze the situation of workers and employees of the railway, reveal the content of strategic plans for the development of the railway industry.

Consider the situation of railway workers in the past.

Let's start with such an indicator of human capital as vocational education. The beginning of professional transport education was laid in 1809. At first, education was more of a construction profile, but then they began to train locomotive drivers, locomotive firemen, repairmen of rolling stock. Educational institutions (Institute of the Corps of Water and Land Communications, Military Construction School) produced engineers and average technical personnel.

The railway was a technological sphere of production and competent specialists at all levels of work were required here. Since 1869, railway schools and conductor schools began to open, which were funded from public and private sources. Since 1886, specialists have been trained according to unified programs, focusing on the applied nature of training.

By the beginning of the XX century, there were "158 general education schools and 46 technical

schools with a three- to four-year period of study" on the railways of Russia" (Kuznetsov, 2016). Education in schools was paid, but the children of poor railway workers were exempt from payment (Lashina, 2012). College students were given the opportunity to live in dormitories, paying a moderate fee for accommodation. Teachers were paid a salary and provided with housing from the railway. The boards of Trustees at the railways opened libraries with reading rooms for workers and employees of the railway. The use of the funds was free.

Among the educational institutions of the railway industry, the tradition of patronage and charity was widespread (Cherkashin, 2005).

In connection with the construction of railways, there was a need for housing for workers and employees of the railway. Despite the development of standards for living space, little has been done in this direction. Workers' barracks were provided for the workers, where they could spend the night, but not live permanently. Day laborers were not provided with housing. Those who occupied a more important position in the service, were a qualified employee, could count on providing relatively comfortable and inexpensive housing.

The working conditions on the railway were difficult, so the diseases of the workers were frequent. The Board of Railways provided medical care to its employees, which could be used by family members and servants. Infectious diseases were frequent, because railway workers and employees communicated with many people and visited different regions of the country. Workshop workers were most often injured at work. Shunting masters, switchmen, connectors were often injured at work, because they worked in any weather and for several days. Eye injuries were common among blacksmiths. In case of illness and disability, there were benefits and pensions. Full-time workers were treated and provided at the expense of the Railway, day laborers were charged a certain percentage of wages.

The researchers note that the employees of the railway sector were quite well provided. (Vulfov, 2007). Large private railways were interested in attracting qualified personnel and therefore tried to create a better social infrastructure than their competitors.

In general, the life and work of ordinary railway workers were difficult. The management of the roads was saving on their people. Employees could not always count on receiving benefits and pensions. Nevertheless, for a villager, getting a job on the railway meant that the family would not starve, that living conditions would improve. Railway workers

were provided with summer and winter uniforms. The lower ranks received uniforms for free, which was a great financial help.

With the active participation of P.P. Melnikov, even under Nicholas I, conditions were created for career growth for representatives of different classes. At the end of the 19th century, the railway admitted women to personnel positions. Women served in the auxiliary units that ensured the functioning of the railway: communications, education, healthcare, office management, service sector.

The largest entrepreneurs purposefully invested money in the development of the human capital of the railways. The road needed full-fledged specialists. During the construction of railways in Central Asia, the authorities noted how quickly the qualitative improvement of the skills of workers and their overall development was taking place. In order not to form a cadre proletariat in the region, not to create prerequisites for the labor movement, it was prescribed to mainly use the Russian-speaking population, inviting them to work in Central Asia. Working on the railway contributed not only to the development of technical skills, but also to the expansion of horizons, the formation of professional thinking. It is interesting to note that after the October Revolution of 1917, it was the railway workers who took the initiative to hold subbotniks.

Today in the Russian Federation there is a whole network of professional educational institutions that train specialists for the railway. Some have survived from earlier times, others appeared at a later time. The Perm Institute of Railway Transport (PIRT) "grew" into an institute from a railway school and a railway technical school, it became the first specialized school in the Urals for the training of railway workers. The Ural State University of Railway Transport, which includes PIRT, trains its specialists according to federal state educational standards. Familiarity with the programs of railway universities shows that they assume a unified system of training specialists in the country, because they are branch universities. This indicates the preservation of continuity in the "railway" education.

The salary of modern railway workers is still attractive for job seekers. Social security programs are also preserved. In Russian Railways JSC "in January – October 2021, the average monthly salary increased by 6.4% compared to the same period last year and amounted to 65,414 rubles, (as of August 2021, the average salary in the Russian Federation is 52,355 rubles" (Konstantinov, 2021).

The current situation of railway workers and employees has preserved continuity and traditions.

Russian Railways JSC has developed a set of measures for the development of human resources on the railway. The website of Russian Railways JSC presents all the points of care for employees: social guarantees, women's protection, health and wellness, housing policy, labor protection, culture, sports, volunteering (The official website of JSC Russian Railways, <http://rzd.ru>).

Important elements of employee training and development are: staff development, training, preparation, refresher courses, certification and motivation (Samarina, 2020). According to the "Railway Transport Development Strategy for the period up to 2030", the company shows its interest in improving working conditions for its employees. It provides for cooperation with the Ministry of Education and its subordinate services. Thanks to the links with universities, it is possible to lay the prospects for the scientific development of the relevant departments of railways: this includes research, the creation of research centers, and the creation of new equipment.

According to the target program "Youth of Russian Railways" (Innovative digest: all the most interesting things about the railway. Target program "Youth of Russian Railways JSC (2016-2020)", <https://olddoc.rzd.ru>), measures are provided to support young workers in the field of education, employment, integrated development of young personnel in the field of sports, international cooperation, and volunteer movement.

Training programs for older employees, which have been implemented since 2019, are interesting (Samarina, 2020). The programs allow senior employees to master new competencies: to work remotely, to master new skills.

Interesting research is being conducted on human resources and training programs for specialists on the railway (Shepilova, 2021). Russian Railways JSC is looking for new forms of cooperation with educational institutions – network training formats, introduces methods of mathematical analysis of personnel training. It can be noted that scientific publications of railway educational institutions react to many scientific developments and offer their solutions to Russian Railways JSC.

Human resources in the company are developing both directly – through training programs, and indirectly – through stimulating employees with social guarantees, improving working conditions, introducing employees and their family members to an active lifestyle.

The requirements for human capital on the railway have been modernized. Today, not only the

ability to work is valued, but also the possession of modern digital skills, the willingness to share the interests of the enterprise. Russian Railways JSC consistently implements a corporate development program that affects numerous aspects of the development of the company and its employees

3 CONCLUSIONS

It is worth pointing out that students of railway educational institutions are an important factor in the future development of railways.

As part of the collective work (Gavrilova, 2022), a study was conducted on the ideological values of students, including the Perm Institute of Railway Transport. When analyzing the questionnaires of 1st-year railway students, it was found out that 50% of them are believers, Christians, 40% of them identified themselves as Orthodox believers, 30% are hesitant and choose Christianity as a close denomination, 20% are non-religious. Among the most important civil rights, 70% of students attributed the right to life, the right to freedom and personal inviolability, the right to privacy. In the fourth place was the right to determine nationality, in the fifth – the right to inviolability of the home. In sixth place is the right to use the native language, in seventh place is the right to freedom of conscience. In eighth place - the right to freedom of movement and choice of place of residence, in ninth place – the right to secrecy of correspondence, telephone conversations, postal, telegraphic and other messages. 80% of respondents admit the existence of a civil society in modern Russia. Half of the students surveyed associate patriotism and citizenship, 40% do not associate these concepts and 10% do not know whether this connection exists. Half of the respondents associate nationality and citizenship. 70% of respondents believe that patriotism is inherent in any resident of Russia, 20% think that it is more inherent in rural residents, and 10% - city residents. 70% of students believe that "homeland" is a place where a person feels good and comfortable (i.e. they express cosmopolitan views), 20% associate the concept of "homeland" with the concept of "state" and for 10% "homeland" is a place of residence. 30% are close to the communist ideology, 30% are social-democratic, 20% do not define their political views, 10% are liberals, 10% have declared themselves as nationalists (which is alarming). The majority of students are ready to defend moral and universal values. 90% are ready to help people. Family comes first in the value system, followed by health, freedom (3), justice (4),

knowledge (5), friendship (6), education (in 7th place), love (8) and career (9th place). The cultural preferences of our students have the following form: 40% can visit the theater once a year, preferring different performances, of which 30% like comedy productions. Cinemas are visited about once a quarter, preferring different genres, although in most of the recently viewed films, only comedies were named. Exhibitions are visited by 20%, and they could not name the subject. On average, they read 5 books a year, preferring fiction (40% named foreign authors from recently read ones). 20% do not read at all. The most common recreation is walking, watching movies, girls like to visit cafes, about 50% of respondents are engaged in sports.

Thus, students of the Perm Institute of Railway Transport support quite traditional values: family, health, freedom, they are ready to defend moral and universal principles of existence. They are inclined to the Christian religion, value the right to life, freedom and personal integrity. 2/3 perceive the concept of patriotism quite positively, while for the most part they are cosmopolitans, believing that the homeland can be considered the place where it is good, and not where you were born and needed. More than half adhere to social democratic views and position themselves as activists. Reading and intellectual activities are not a priority activity in free time. Accordingly, the program items on the scientific and technical work of the staff should take into account these data and adjust the development programs.

Such surveys will help to identify the predisposition of future railway workers to something and take these points into account in strategic human capital management programs during the development of the industry.

The railway industry has accumulated a lot of experience in solving many issues related to workers in this field. Many traditions have continuity. Care for the education of railway workers, support of social guarantees at industry enterprises, education of railway transport workers, development of scientific and technical traditions.

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