

Increasing the competitiveness of older age groups in the digitalization environment

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Abstract — The article considers demographic and economic aspects of the labor market in Russia associated with the use of labor of senior age groups. The paper analyzes the demographic and economic situation in the labor market, gives an assessment of the natural population movement, reveals the demographic aging of the population, which is manifested in the growth of the population of older ages, high economic activity of people in older age groups, which is mainly due to the causes of socio-economic nature. The social and economic factors of the formation of competitiveness, which determine the growth of employment in the older age group: lack of money for current consumption, the ability to communicate with people, the desire to make savings for the future, the desire for financial independence (independence), interest in work, habit, involvement in society. Increasing competitiveness requires the creation of a system of training and retraining of the staff of age groups in the digital economy, which should include the development and implementation of appropriate programs aimed at the active inclusion of the older population in the digital economy, as well as a change in the socio-cultural paradigm of "old age", which creates a perception of older people as a non-productive part of society. The purpose of the article is to systematize and clarify the approaches to the concept of competitiveness of older age groups in the digitalization environment. The main results of the research are reduced to the definition of the spheres of employment of senior groups and specification of the factors of competitiveness of senior age groups' personnel, which allows to identify the main problems of formation and use of senior groups' people in the conditions of digitalization. The study and the results obtained complement the scientific direction with an expanded and integrated approach to addressing the competitiveness of older age groups, which helps to identify key challenges and identify areas for improvement in their use

Keywords — *labor market, employment, older age groups, digitalization, competitiveness.*

I. INTRODUCTION

In recent years, Russia has seen an increase in the number of its population, with a population of 142,865,000 in 2010, rising to 146,880,000 by 2017, an increase of 2.8 per cent or 4,015,000. The population grew significantly in the age group up to 15 bands from 21769 thousand people to 25818 thousand people (an increase of 19%), as well as in the age group over 50 years old from 47686 to 51647 thousand people or 8%, while

the number of the population in the working age decreased. The identified trends show the positive effect of the programs to increase the birth rate, as well as the improvement of the quality of life and increase life expectancy.

Against this background, from 2010 to 2017, the number of people with labour force participation status decreased by 1,367,000, or 1.2 per cent, which indicates a reduction in the number of people of working age. During the same period, the number of employees in the economy decreased by 2208,000 people, or by 3.2 per cent. Against this background, there is a dynamic growth of the employed population aged 50 to 72 years, so from 2010 to 2017 their number of employed in this age group increased from 17818 thousand people (share in the total number of employed 25%) in 2010 to 19518 thousand people (27% of the total number of employed) in 2017, an increase of 9.5% or 1.7 million. The number of employed persons under 503,000 decreased by 503,000, a particularly serious reduction of the employed population to 30 years of age by 11 per cent, due to an increase in the proportion of the population in the older age groups and the intensity of their employment in the economy. In the structure of employment there is an increase in the share of older ages, so in 2010, at the age of 50 to 54 years 13%, at the age of 55 to 56 years 8.3%, at the age of 60-72 years 4.2% of the total number of employed, respectively, by 2017, 12.1% are employed at the age of 50-54 years, at the age of 55-59 years - 9.6%, at the age of 60-72 years - 5.3%. The level of employment in the older age groups is quite high and tends to increase: in 2010, at the age of 50-54, employment was 80.2%, in the group of 55-59 years - 58.6%, in the group of 60-72 years 18.5%, by 2017, employment in the population groups under consideration increased, so at the age of 50-54 years was 84.5%, at the age of 55-59 years - 62.4%, at the age of 60-72 years - 20.9%.

The number of employed people in the economy as a whole increased from 69934 thousand to 72142 thousand from 2010 to 2017, but the growth of employment did not occur evenly in the areas of activity [7-9, 15.16]. Thus, the demand for labor decreased in agriculture, forestry, manufacturing, public administration, and social security. A significant increase in employment over the period under review was observed in such activities as mining, hotel and catering, trade, information and communication, professional, scientific and technical,

educational, cultural, sports, leisure and other services, which shows the redistribution of employment from material production to services. According to statistics, in 2017, the large-scale use of older age groups was observed in manufacturing 14.3%, 11.8% engaged in trade, 10.1% in transport and communications, 11.9% in education and 10.1% in health care (tab. 1).

The share of older generations is growing in almost all professional groups, while there is an increase in the category of managers, highly qualified specialists, as well as the category of unskilled workers, the share of older age groups decreases in the category of employees, among skilled workers, operators. These trends indicate that the transformation of the structure of employment of the elderly had many features, people of older age groups come to jobs that are not occupied by young generations.

TABLE I. PROFESSIONAL STRUCTURE OF EMPLOYMENT BY AGE GROUPS, %, 2017

	<i>50-54 лет</i>	<i>55-59 лет</i>	<i>60-64 лет</i>	<i>65-72 лет</i>
Professional groups	8,5	8,7	9,3	7,8
Executives	21,9	20,0	21,8	23,2
Highly qualified specialists	12,9	12,0	12,0	10,3
Mid-level specialists	3,2	3,0	2,9	2,6
Employees	14,0	12,4	12,5	12,1
Service Workers	2,7	3,0	4,2	9,1
Agricultural workers	13,2	14,4	12,3	9,5
Skilled workers	14,5	15,9	11,8	6,9
Operators	9,2	10,6	13,2	18,5
Unskilled workers	100	100	100	100

The tendency of low employment of people of the older age group in the informal sector has been identified, those employed in this sector include individual entrepreneurs employed by entrepreneurs and individuals, helping family members in their own business, working without registration, employed in the household, and others. Of the total share of employees in this sector, the economy in 2010 at the age of 50-54 was 11%, 55-59 years-6.5%, 60-72 years 4.7%, in 2010 the share of employees by groups of the total It was 10.8% at the age of 50-54, 8.1% at the age of 55-59, and 4.7% at the age of 60-72 [8,9,15,16].

In general, it can be noted that before the adoption of the law on changing the retirement age, the number of employed people in the older age groups was significantly reduced, especially when they reached 55 years of age for women and 60 years for men, Russians more often than not to reach retirement age from 2010 to 2017 stopped working, women.

Changes in the sectoral and professional structure of employment of people of older age groups are consistent with

trends that are present in all age groups. In the observed period, there is a decrease in people employed in material production and an increase in employment in intangible production and the service sector, employed in low-skilled labor in favor of highly skilled employment. However, the gap in the professional structure of older groups, on the one hand, in favor of increasing the employment of highly skilled workers, on the other, is growing among low-skilled workers, as well as employment in agriculture, which significantly exceeds the share of employment in other professional groups. People of older age groups are more engaged in traditional activities, however, in the economy there is a change in the types of employment in the direction of progressive, in which other age groups are more involved [1,3-6,14].

II. RESULT

The modern development of the economy is in the direction of the widespread adoption of digital technologies, which in turn are a dynamically developing field. The active spread of information and communication technologies, information and telecommunication systems, broadband Internet access leads to an increase in the employment of people in the areas related to digital technologies. The proportion of people in older age groups employed in the fields of information and telecommunication systems is lower than in all other age groups.

In the course of this study, it is necessary to determine directions for increasing the competitiveness of staff of older age groups in the context of the active spread of digital technologies. Modern changes in the technological sector and socio-economic development are taking place on the basis of the introduction of digital technologies. High development dynamics are demonstrated by areas of activity with the widespread use of digital technologies, the implementation of the digital development program for the economy of the Omsk Region (approved by the Governor of the Omsk Region, Chairman of the Government of the Omsk Region A.L. Burkov and sent to the Ministry of Digital Development, Telecommunications and Mass Communications of the Russian Federation on December 14, 2018 in such fields of activity as agriculture, healthcare, education, urban environment, transport, in which senior people are traditionally employed ACTH groups will lead to the need to improve their competitiveness. The research is necessary to identify the factors affecting the competitiveness of the employed in the older age groups in the condition of digitalization and to identify ways of increasing the competitiveness of the older age groups in the labor market.

According to scientists in modern conditions, the content of the activity is changing when the activity of the template moves to activities based on digital technology. This leads to an increase in employment in the digital economy and a decrease in traditional industries. The increase in employment in the service sector, especially in the field of information and communication, points to the process of digitalization of the economy.

The activity of organizations in the use of Internet resources varies significantly depending on the sphere of activity of enterprises, however, the analysis of statistical information

[8,9,16] led to the conclusion that the most active Internet users in 2016-2017. There were enterprises of high-tech industries and services, including organizations operating in the mining industry, processing of raw materials, wholesale and retail trade.

The basis of successful activity of the enterprise is the competitiveness of personnel, which is the main factor of scientific and technological innovations, a decisive condition for the existence and development of the enterprise. Of particular urgency and urgency is the solution to the problem of increasing the competitiveness of workers in older age groups in connection with demographic processes and changing the boundaries of working age. Competition between young people entering working age and those released by middle and older workers is intensifying. The only stable factor in the effectiveness of a modern organization is the competitiveness of its staff.

The competitiveness of the employee is the ability to achieve individual achievements in work, representing a contribution to the achievement of organizational goals. The competitiveness of the employee is determined by the quality of the labor force, corresponding to the market demand for the functional quality of labor. An employee's competitiveness is considered as a criterion for the selection of workers according to the level of their potential and actual labor efficiency and ability to professional development. The indicators determining the potential and actual labor efficiency, i.e. indicators related to socio-demographic, physiological and motivational characteristics of the workforce, as well as determining the level and content of knowledge, skills, authority of the employee; private indicators reflecting the wishes and preferences of employers in the workforce and the quality of labor, i.e. indicators characterized by a measure of market demand for a qualitatively defined ability to work, as well as due to the possibilities of ensuring profitability of labor, the perception of new information, the growth of professional knowledge, self-investment in human capital, the potential for communication in a certain type of activity [3,6,7,11-13].

An employee's competitiveness is not one indicator, but an integral characteristic, which includes the following personality characteristics and characteristics:

- 1) a high level of performance;
- 2) the desire for a high-quality final result;
- 3) stress resistance, ability to overcome difficulties;
- 4) creative attitude to work, work;
- 5) the desire for professional self-improvement;
- 6) the ability to make responsible, sometimes risky decisions;
- 7) sociability, ability to cooperate, collaborate, create;
- 8) the ability to quickly learn a new business;
- 9) the ability to self-education, self-realization, self-development [3,6,7,11-13].

III. DISCUSSIONS

The ability to own achievements in activities that benefit to achieve the goals of the organization is the competitiveness of the employee. In other words, it is determined by the quality of labor corresponding to the market demand for the functional quality of labor.

Types of Competitiveness:

1. Differences in market demand for one or another quality of labor determine the corresponding types of competitiveness of the personnel (employee): stable competitiveness, temporary (semi-stable), unstable.

2. Depending on the level of uniqueness of the use value of the goods, "labor" in the labor market (its functional quality), the competitiveness of the personnel (employee) can be of three types: exclusive, diversification, and selective.

3. Differences in the nature of consumer demand for labor determine four types of competitiveness: explicit, latent, irrational, and promising.

4. Depending on the characteristics of the personnel strategy and personnel policy, we can distinguish competitiveness: when hiring; upon promotion to a higher position; upon admission to the reserve of personnel for a managerial position; when stimulating labor; during training; upon release etc.

5. Depending on the nature of labor mobility, intra-organizational and external competitiveness of the personnel (employee) can be distinguished, which, depending on the subject of competitiveness, can be of three types: intra-professional, inter-professional, and physical.

So, competitiveness in the labor market characterizes the property of human capital, which determines the measure of satisfaction of the market demand for labor.

Factors affecting the competitiveness of an employee in the labor market

The formation and development of the competitive advantages of employees is determined by many factors that can be divided into two groups - external to the employee and internal.

External factors affecting the competitiveness of workers [3,6,11,12,13]

Acquire digital competencies, which include information literacy, which includes the formation of digital needs, search, collection, analysis of digital information, content, data; sociability, creation, editing of digital content, the use of digital tools and so on.

Thus, the level of competitiveness of employees depends on many factors, most of which are not controlled by the employer. In particular, the physical and natural abilities genetically embedded in the individual, as well as his desire or unwillingness to actively act in order to improve his health, increase the level of education and training are a limitation for increasing the level of development of the necessary components of the labor potential of an employee.

A factor in the development of a person's competitiveness is its internal environment, activity and the need for self-realization. The object of development is the integral characteristics of the personality, orientation, competence, flexibility, self-awareness.

IV. CONCLUSION

Improving the competitiveness of workers is a suitability for work in market conditions, and compliance with the dynamic demand from various employers. We are talking about creating a system of adaptive training in the country and the market for educational services, about changing the organizational and methodological foundations of vocational training, about retraining and advanced training, a qualitative restructuring of the vocational training system, and debugging mechanisms to stimulate investment in people for people of pre-retirement age. There is a need for restructuring and reorientation of workers from the expectation of minimal social assistance from the state with forced unemployment to an active search for the sphere of employment, to an active desire to gain multilateral knowledge and mastery as conditions for survival, competitiveness, and stability in life.

This requires a general market orientation of the entire education system, as well as the formation of a ramified system of market infrastructure that would respond to changes in the supply and demand market in the labor market and provide the necessary additional training for competitive employees.

In the context of digitalization, the system of training, retraining and advanced training of people of older age groups is of particular importance, which will help to increase their competitiveness in the labor market in the context of digitalization.

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