

## PROBLEMS FORMATION OF PERSONNEL POTENTIAL IN THE CONDITIONS INNOVATIVE DEVELOPMENT

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### Abstract

The Russian Federation noted the existence of objective non-uniformity in the distribution of innovative development factors in the regional aspect. Therefore, the innovative development of the country it is necessary to use regional mechanisms of human resource potential of innovative development as the fundamental components of general federal mechanism.

Actual problems of formation and development of personnel potential of innovative development, in-depth analysis of the current experience is not yet widespread in the practice of regional management. In particular, insufficiently elaborated methodologically sound approaches to building effective systems at the regional level, the production of personnel potential of innovative development.

This study revealed the urgent problems of formation of personnel potential in terms of innovative development, the necessity of using a strategic approach in the process of formation and implementation of human resources.

Research shows that the implementation of a regional strategy for the formation of personnel potential of innovative development will be possible to resolve a number of the existing contradictions in this area, which in turn implies an effective and dynamic social and economic development of the region and the country as a whole.

**Keywords:** human resources, innovative development, the problems, the regional economic.

## **1 INTRODUCTION**

The Russian Federation noted the existence of objective non-uniformity in the distribution of innovative development factors in the regional aspect. Therefore, for the innovative development of the country it is necessary to use regional mechanisms of formation of personnel potential of innovative development as the fundamental components of general federal mechanism.

In a number of Russian regions already formed specialized innovation support system, an important structural component of which are the mechanisms of formation and development of human resources. Among the variety of forms used by distinguished technology parks, business incubators, including and higher education institutions, specialized technology transfer centers, etc. Gradually also develop specialized innovative clusters, among which undoubtedly stands out 1 Skolkovo. For example, in the Republic of Mari El functioning of scientific and technological centers, marketing centers, business centers, venture capital funds, etc. The country also has an insurance organization that is able to insure innovative 2 projects, etc. (Tkachenko, 2012)

At the same time the innovation sector is highly uneven regional concentration of innovative production. The vast majority (over 60 - 70%) of innovative products created in the 10 - 15 regions, despite the fact that half of the regions collectively produce only about 5% of the 5 innovative products. (Karacharovsky 2012).

One of the main purposes of any region of Russia, as well as the country as a whole in favor of the creation of conditions to ensure the quality of life of citizens, as well as its continuous improvement as a result of functioning of the regional innovative socio-economic system. Under such a system, the potentials of every individual form the basis for economic growth. (Glazyev, 2013).

The factors that influence the innovative development of regions distinguished: scientific production and educational organizations supporting innovation generators; businesses and organizations, receptive to innovation and have the potential for release of competitive innovation products; individuals and groups of individuals who have innovative 5potensialom. (Holiday 2013).

## **2 OPINIONS AND DISCUSSION**

Personnel potential of the region can be classified as a specific set of education, skills, experience, people in the region, which can be used in the process of innovation in order to achieve individual, collective and general federal purposes. At the same time the above-named set of can have the following main conditions: 1) a set of synergistic when regional human resources exceeds a simple sum of individual human potential (inherent, as a rule, innovative teams and regions); 2) a simple aggregate of (the sum of individual human potential); 3) a set of destructive when a regional human resource capacity is less than the simple sum. In accordance with the human resources development of innovative acts aggregate quantity characterizing the opportunities and motivation to innovate all the subjects of socio-economic activities at the regional level.

Personnel potential of regional innovation operation can be defined as synergistic entity, in which the union of knowledge, abilities and skills of individuals, groups, associations, the entire population, taking into account the projected training, retraining, migration and media innovation, which is the basis of innovative development 6. (Kuznetsov, 2013)

In modern conditions of economic science is not yet fully substantiated and formed an interrelated set of criteria and indicators that are used to assess staff potential of innovative development. At the same time there is an objective at all levels need to develop and use specialized tools of innovation analysis human resource capacity to implement an effective innovation policy.

In the aspect of objectivity implementation of innovative social and economic processes it can be noted that despite all the efforts made in Russia in the last 20 years of conflict that exists in this area, are not permitted, and in some cases are becoming more negative potential and exert their destructive effects on all large areas of the economy and society.

One of the reasons of this situation speaks personnel crisis due to the lack of a strategy formation of personnel potential of innovative development at all levels, ranging from enterprises and further by increasing the municipal, regional and federal levels. This negative situation directly or indirectly affects all aspects of social life, in particular, led to the mismatch of the education system, the deepening problems in the social sphere, etc.

Fetishization purely market mechanisms in the formation of personnel potential, disengagement of the state from implementing active and purposeful regulating participation in these processes, the lack of a strategic

approach has led to a negative mismatch of interests of all actors involved in these processes.

Within the framework of regional socio-economic systems can be distinguished training and retraining system which is an important structural element in the formation and development of regional human resources. This creates a challenging external and internal environment for the development of new types and directions of socio-economic activities, as well as a deep modernization of existing productions on innovative principles. The formation and effective functioning of regional educational systems is possible only on the basis of cooperation between the state, the region and the enterprises (organizations).

Based on current scientific and methodological and practical approaches can state that regional staff capacity training system should represent not just a set of educational institutions (composition and structure of which can be scientifically justified), and certain educational cluster in which the interaction of science, enterprises and educational *7uchrezhdeny*. As a result of the functioning of this cluster in the regions must be the formation and development of innovative human resources. Within the cluster of innovation processes and bringing them to the stage of commercial production can be purchased to create the appropriate conditions are constantly being played the character of the process. (Kuleshov 2012).

In order to achieve the functioning of the regional system of formation and development of personnel potential within it is necessary to achieve the following key objectives: wide parallel use of innovative approaches and technologies in enterprises and educational institutions; State, regional and business support of innovation in the educational system; extension of additional vocational training system that meets the requirements of innovative development; increase the practical relevance of the results of the educational and scientific processes; the development of the state system, regional and business support for the need and importance of education system in the second individually, collective and regional human resources potential of innovative development.

For the implementation of the tasks required to implement the following basic issues incorporated the above: 1) the creation and development of innovative development institutions (specialized business centers and business incubators) on innovative ways of regional specialization; 2) the establishment of educational institutions on the basis of a higher and secondary specialized education of innovative enterprises; 3) the formation of a regional order system for production of innovative companies; 4) coordination of innovation with the needs of the regional economy; 5) The establishment of a system of transfer of innovative human resource capacity in the regional economy; 6) establishment of a system of attracting investment from different sources into innovative projects and companies; 7) forming close cooperative ties between educational and established companies in the region.

In this aspect, it is necessary to strive for the highest degree of adaptability of education to the regional cluster, the collective and individual needs, which will observe a certain balance between short, medium and long-term objectives of the formation and development of human resources.

On the basis of development, we offer the following criteria by which it is possible to objectively evaluate the effectiveness of the implementation of human resource capacity in the region: growth in the proportion of citizens of the region, participating in some form of educational processes; increase the number of innovation actors; implementation of the inter-regional and inter-country cooperation relationships in the implementation of innovation; performance professional development of individuals; interconnection directions, programs and additional professional education and innovation; increased income individuals engaged in innovative activities; development of various forms of financing innovative projects; providing access to information related to innovation in the region, the country, the world, etc.

Improving the mechanism of preparation and implementation of the regional human capacity in terms of innovation development objective involves the transformation of the existing and development of new tools enhance the motivation of the work in the sphere of innovations for all individuals, but especially for young people. This can help broader and more active use of grant mechanisms, subsidies concessional lending, venture financing system, the system of training young professionals in leading innovative centers of Russia and the world, etc.. (Smirnov, 2004)

In connection with the priority of support for innovative regional development the transformation of goals and objectives of the regional and municipal administration, particularly in the field of forecasting and management processes of the formation and development of regional human resources. Providing innovative regional development involves the transformation of existing personnel potential reproductive systems. In many Russian regions is quite an acute problem of reproduction of innovative human resource capacity development. This, in particular, due to the fact that there is an expansion of the spectrum of subjects and objects involved in this process, complicated relationships and requirements, there is an objective need for the

use of the global and Russian experience in the field of technical, economic, psychological, sociological and other sciences, especially in terms of their interdisciplinary interaction.

At the same time, it should be noted that the actual problems of formation and development of personnel potential of innovative development, in-depth analysis of the current experience is not yet widespread in the practice of regional management. In particular, insufficiently elaborated methodologically sound approaches to building effective systems at the regional level, the reproduction of human resources potential of innovative development. (Rybakov, 2001)

We believe that such a system should consist of the following main subsystems: 1) a sub-system of formation of personnel potential of innovative development of the regional and municipal management; 2) sub-system to develop targeted regional and municipal programs of formation and development of personnel potential of innovative development; 3) sub-system of promotion and promotion of innovative activity among residents of the region and economic entities; 4) subsystem forecasting personnel potential of innovative development needs; 5) transformation subsystem of training and additional professional education, based on the requirements of innovative development; 6) subsystem capacity building in regional businesses; 7) participate in sub-federal, interregional and global programs of formation of personnel potential of innovative development.

As the methodological tools of the establishment of effective regional systems of formation of personnel potential in modern conditions can act, in our view, project and target-oriented approaches that can provide the optimal solution of basic problems of innovative regional development. Software-oriented approach enhances the formation of personnel potential target orientation of reproduction processes, creates conditions optimal matching of goals, objectives and resources, based on scientific methods such as forecasting, systems analysis, the optimal goal-setting, coordination and harmonization of activities of all actors involved in these processes.

On the basis of program-target approach the formation of regional programs of development, distribution and use of innovative development of human resource capacity includes interrelated on targets, deadlines and resources routines training and retraining required subjects of the regional socio-economic system.

As part of the practical implementation of this methodological approach are prerequisites for the following urgent problems: 1) the effective functioning of the system of training, retraining and upgrading the skills of workers; 2) analysis consistently trends and training programs for new staff and retraining existing in accordance with the forecasts of innovative regional development; 3) an effective coordination of existing and formed human resource capacity structure and dynamics of job creation; 4) creation of conditions for increasing the innovativeness of human resources; 5) formation of an effective mechanism for stimulating innovation; 6) formation and use of criteria for assessing innovative human resource capacity; 7) The organization and promotion activities of scientific and methodological support of processes of formation of personnel potential of innovative development; 8) the establishment of information system management decision-making in the field of formation of personnel potential.

One of the major subsystems in the mechanism of formation of the regional human resource potential in favor of vocational training system. It provides training to individuals in line with expectations and needs of innovative development of regions. In modern conditions is becoming particularly urgent correspondence curriculum requirements of innovative development. (Smirnov, 2015)

The problem of professional development of employees in the innovation aspect also more relevant This process includes several main components: 1) to obtain the necessary knowledge and skills of the implementation of innovative processes in the labor market; 2) human resource capacity in the distribution according to needs and available expertise; 3) the acquisition, compilation, analysis and dissemination of the experience of practical innovation; 4) assessment of the criterion of innovation activities in accordance with the goals and objectives of the regional socio-economic development.

Professional development in the field of innovation consists of three associated processes: 1) in the aspect of development of direct worker, accumulating experience, skills and knowledge; 2) the development of a collective human resource capacity within the organizations; 3) the development of the components of the regional training systems.

Using a program-oriented approach in the field of formation of innovative development of human resource capacity is the basis for the following required processes: 1) determination of the current and projected requirements at the regional level in preparation, retraining, training on relevant specialties, types and forms of education; 2) through the use of science-based criteria and indicators to assess the effectiveness of the vo-

cational training system functioning.

One of the factors contributing to the growth or reduction of regional staffing potential, serves migration. This highly qualified individuals are often innovative component of human resources. For many Russian regions in this aspect is the issue of the implementation of human resource capacity, which is formed in the region, based on the needs of regional development and then migrate to other regions, thus creating an imbalance. And there, where the migrating human resources, it is not always used effectively. Similar problems exist at the federal level, and not only in the Russian Federation 8. At the same time in a number of Russian regions try to overcome these negative trends. In particular, create the conditions for securing and attracting just individuals who have high potential for innovation. (Gordon, 2013).

In modern conditions there is an objective need for the implementation of the strategy of formation of personnel potential of innovative development, consisting of interconnected systems management levels. The rationale, decision and implementation of this strategy is one of the most pressing problems. In this regard, it should be noted lack consistency and strategic approach in the formation of human capacity is not enough elaborated systems management mechanism of this process at various levels. One of the main objectives should serve improving staff capacity, providing innovative transformation at all levels of socio-economic activities.

In modern conditions for a number of objective reasons for the existing mechanisms of formation personnel potential of innovative development at different levels of functioning fairly independently of each other and are not integral parts of each other, from the standpoint of the need to ensure systemic management processes is a negative factor. Necessary to implement a systematic approach to the implementation of the strategy formation and development of human resource capacity development and strengthening of its innovative orientation in order to provide new, innovative quality of regional development.

Regional strategy for the formation of personnel potential of innovative development, in our opinion, can be defined as a set of methodologies, forms, study of mechanisms of goals and tasks of regulating and affecting the processes of formation and development of personnel potential of innovation development, creation of a competitive regional community of citizens and groups with the knowledge, capacity and motivation to quickly adapt to changes in the external to the region, socio-economic environment, as well as within the region itself.

Regional Strategy of formation of personnel potential of innovative development should be based on the following fundamental principles: cohesion and coherence to all stages of the process of reproduction of human resources; organic unity with integrated programs for regional socio-economic development; widespread use of instruments of medium and long-term forecasting; In fact, instead of the declared recognition of the priority of personnel potential of innovative development to maintain and enhance the competitiveness of the regional economy; the transformation of economic growth in the new socio-economic process; methodological and functional unity of the formation and development processes of human resource capacity at all levels, resulting, ultimately, to improve the standard of living of every individual.

As a result of this strategy it will be possible to resolve a number of existing contradictions in this area to increase the proportion of their qualitatively new NIJ-containing innovative human resource capacity, which is the basis of a qualitatively new content of economic growth.

In every region of Russia, as well as an economic entity, has its own specific level personnel potential of innovative development and a motion vector in this direction. Therefore, the development of a comprehensive regional strategy for the formation and development of human resource capacity must take into account the specific characteristics of each of the levels. In this aspect, it may be noted that there are certain contradictions between the basic objective, formulated as the formation of personnel potential of innovative development and specific mechanisms for its implementation resulting from differences, sometimes significant in areas such as economic, social, scientific and technological, educational, etc.. (Smirnov 2014)

Currently, the following main priority areas of this strategy: the creation of conditions for realization of intensive forms of social and economic development at all levels through the implementation of innovative component of human resources; a significant increase in productivity and quality of work; creation of effective mechanisms for the reproduction of human resources potential of innovation.

Problems of formation and development of innovative human resource capacity development are solved at the level of individual, collective, region that, in turn, presupposes the existence of objective and implementation of the general federal strategy of formation of personnel potential. At the regional level a major focus is the development of higher, secondary and secondary vocational education. At the same time, the basic form

of practical formation and development of human resource capacity realized at the level of individual economic entities with information, normative and legislative support from the regional and federal authorities. In particular, in a number of regions there is a formation of regional and municipal orders for the preparation of the necessary specialists. (Fairuz 2015)

The main indicators to assess innovative human resource capacity can be used as follows: the level of education in the context of sex and age structure of the population; and the level of training; labor productivity across industries; population, carrying out research and scientific and technological development activities; volume produced innovative products. As a reference the resulting indicators may be used such as gross regional product as a whole and per capita. It is also possible to use such indicators as the share of education in the structure of the budgets of different levels of expenditure; the skill level of the working population; the proportion of the number of students, graduate students, doctoral students in the population of the region and in the structure of the working population; migration of highly skilled people; the level of education of the working population; the number of personnel engaged in research and development, the number of inventors and innovators, the number of patents granted, the quantity and quality of produced and sold innovative products. (Fairuz, 2016)

Using data for the analysis of performance can be achieved calculation of integral index of personnel potential of innovative development, consisting of indicators characterizing the quantitative and qualitative aspects of the formation, development and use of human potential. Taking into account the increasing role of science and the scientific and practical activities of the fourth component in determining the human resource capacity in favor of science, which records can be done by such indicators as the number of doctoral students, graduate students, the volume of production and sales of innovative products.

The formation and development through partial sphere of additional vocational education carried out in the framework of regional educational systems. The determining process control data subject must serve a specialized state agency that coordinates the activities of other subjects of the educational process. To this end, the Ministry of Education in a number of regions formed by specialized departments engaged in such activities.

These departments can carry out organizational, coordination, information and advises the activities in the following main areas: the formation and expansion of the scope of the continuing education system; the development of specialized training programs in the field of innovation in education, starting from secondary education; holding of special contests, aimed at finding and promoting citizens are able and willing to realize their own capabilities in innovation activities; specialized training of managerial staff, with expertise in the field of innovation at the level of economic entities, as well as at the municipal, regional and federal level; preparation and implementation of special training in areas of regional specialization programs.

In addition to the regional structures of the Ministry of Education in these processes should be participating on other government agencies, such as ministries, universities, university branches, enterprises and organizations. (Fayruzov, 2016)

Forming processes, human resources development and utilization are carried out on different levels, such as an individual, team, region, sector and country. This innovation in the socio-economic processes should be generated at all levels, where a kind of generator is the state, through the Ministry translates to industry and through regional structures - to the regional level of the main directions of innovative development. At the regional level, there is specification of public policy. Within the framework of socio-economic systems are the prerequisites of harmonization of interests of the main subjects of the processes of formation of personnel potential of innovative development, such as an individual, company, industry. (Smirnov, 2016)

In the aspect of formation of personnel potential of innovative development one of the key is the level of economic entities, where the use and development of human resources. Here, a major role belongs to the regional ministries of economic development, chambers of commerce, various associations and associations of entrepreneurs and other interested entities. All of these entities must be manipulated to create the conditions for creating a positive climate for innovation, improve innovation staff capacity, training and retraining of executives and managers, to create and develop innovative infrastructure, enhance the innovative training of government and commercial organizations.

### **3 CONCLUSION**

Regional ministries and departments to enhance the overall innovation potential of economic actors should use all available instruments, among which are the tax incentives, subsidized concessional interest rates, regional and municipal orders, attracting Russian and foreign innovative companies. It is also necessary to

encourage the expansion of effective interaction between economic entities and educational institutions, governmental agencies, scientific organizations.

For the development of the innovation potential at the level of the individual need to encourage individual and collective training and retraining, greater use of the mechanism of grants and contests to encourage innovation.

Required to ensure the expansion of youth participation in innovative activities as a powerful factor of the first significant increase in long-term innovation potential of 10 personnel. Here a big role to play, such structures as, for example, student scientific societies, associations of young scientists, children's art center, the award of regional leaders and the administration (the government) for young people for achievements in innovation, promotion of achievements, etc. (Valiev, 2012)

The basic documents defining the strategy for socio-economic development of Russia, set the goal of creating a new human resource capacity, which has an innovative character and content. At the same time human resources objectively gets wide interpretation and includes not only the already employed workers and students, students of secondary and secondary special professional institutions, some groups of the unemployed, pensioners, workers and other categories of people who are residents of a particular region. Consequently, the regional human resources innovative development can be defined as a synergistic set of intellectual and physical abilities, as well as a high level of motivation to recommend measures to implement innovation.

The strategy of formation of personnel potential of innovative development must take into account on the one hand the existing human resources and, on the other hand, the available and necessary resources of the educational system at the regional level in the aspect of the transformation of the existing and the formation of a new human resource capacity corresponding to the objectives of the innovation development. (Smirnov, 2014).

Formation of personnel potential of innovative development interconnected with the regional education system, the functioning of which depends on funding and creates the conditions for an educated public, through various forms. The level of preparedness of existing human resource capacities for innovation and production of innovative products and serves a specific criterion implementing innovative human resources.

In the Russian Federation, where the regions are strongly differentiated both in terms of socio-economic and innovation development problems of formation of the innovative development of human potential is becoming increasingly important and a priority in the development and implementation of federal and regional programs of social and economic development.

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