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# A PROBLEM OF RISKS OF INNOVATIVE DEVELOPMENT OF HIGHER EDUCATION INSTITUTIONS IN MODERN RUSSIA

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#### **Abstract**

This paper deals with the risks of the development of higher education institutions in the context of changes occurring in Russian society. We believe that one of the attractors able to stabilize the process of the innovative socio-cultural development can be the higher education institution of a modern sample, which represents an integrated university system that combines the features of a classical university and the characteristics of modern higher education institution, i.e. educational institution technologically incorporated into the economy through the industrial associations, companies and its management structures established within its framework.

**Keywords**: risks; innovative development; bifurcation; complex system; higher education institution; paradigm; attractor; functions; contradiction.

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## ПРОБЛЕМА РИСКОВ В ИННОВАЦИОННОМ РАЗВИТИИ ВУЗОВ СОВРЕМЕННОЙ РОССИИ

Modern Russian society is a dynamically developing system. Its fundamental socio-economic and socio-cultural changes are aimed at complication of the internal and external relationships, the ambiguity of phenomena and processes. This adds uncertainty and instability to the routine lives of people, provokes a sense of uncertainty in and insecurity from the present, that according to a figurative expression by E. Giddens, rushes like an uncontrollable truck at high speed in an unpredictable direction [5, p. 213]. Occurrence of instability, uncertainty among the main characteristics of the society was the result of changes in the traditional, well-established foundations of the existence of modern societies. Modernism, as Giddens notes, sweeps away in unprecedented manner all the traditional types of social order.

To describe the state of modern societies, which have entered into the stage of high late modernity, German sociologist U. Beck [1] introduced a concept of «risk society».

In Russian society risk, instability, and uncertainty become a societal problem. «The economic, political, financial, technological position of Russia allowed the domestic sociologists to conclude about the country slipping into a state of risk by the end of the last century. Moreover, as recent studies show, its origin is not a consequence of modernization, but rather a result of diametrically opposed demodernization processes accompanying the destructive phenomena in the economy. It was not

a wealth production process, as in other modern risk societies, but the deepening of the crisis that became a prerequisite for Russia's transition to this state» [14, p. 5-6].

Of course, there has been some stabilization of social and cultural space of the Russian Federation in recent years. However, the economy, social sphere, culture and international relations are still under the great influence of the various «uncertainties», which in some cases are provoked by the federal government, and in other situations are the result of internal factors of regional development, including mistakes of the administrating authorities of the constituents of the Russian Federation.

A phase of instability, uncertainty is a bifurcation, or a state of selection of options for the system development resulting from its internal strain. If the strain the system has in such moments is higher than the allowable limit, the system switches from one set of attractors, i.e., forces that guide its development in certain directions, to the other, which make it behave differently, i.e., it starts a new dynamic mode [12, p. 132]. This statement is crucial for the analysis of risks of an innovative higher education institution in an unstable socio-cultural space of Russia.

A new paradigm of social systems, which develops in the framework of post-non-classical sociology and, in particular, synergistic approach, incorporates uncertainty and bifurcation as one of the factors of development. Belgian physicist



I. Prigogine considers the transition from determinism to instability, i.e. disequilibrium as a new paradigm of development of modern social systems. He stated that the instability leads not only to both the order and disorder, but it also opens the possibility for the occurrence of unique events [9, p. 50].

Social life itself contains the latent alternative scenarios of the future. Its development proceeds in a constant struggle between them and, in principle, is always aimed at achieving maximum stability in the natural and social environments. However, due to the large influence of random attractors it is only possible to predict with a certain probability, which one of the scenarios can be an empirical reality at the bifurcation point. If the deterministic development of social systems is based on the regular interaction between the so-called trans-historic structures (for example, traditional social institutions), then, in the bifurcation period, stochastic factors come to the forefront, including conscious and unconscious actions of various factors or attracting structures. «At the turning point of the system life - Prigogine continued, - it is impossible to predict its future, because any event or action, minor in normal circumstances, can change the system and the entire course of its history under the influence of instability and disequilibrium» [10, p. 125].

In the case where destabilizing attractors prevail naturally or accidentally, and the restructuring of the system leads to the isolation of energy of social disintegration rather than stabilization, the system will also shift to the new development trajectory and, possibly, to its new level, but its main characteristics will be deconstructive chaos and disintegration. The attractors in terms of synergy shall be understood as real structures in space and time, to which the processes of self-organization shift in open non-linear areas, and which attract an aggregate of the system «trajectories» determined by different initial conditions [7, p. 39-40].

We believe that one of the attractors able to stabilize the process of the innovative socio-cultural development can be the higher education institution of a modern sample. It in particular way integrates the main spheres of life such as education, science, and service. In this case, it is not about any higher education institution functioning in the region, but about an integrated university system that combines the features of a classical university and the characteristics of modern higher education institution, i.e. educational institution technologically incorporated into the economy through the industrial associations, companies and its management

structures established within its framework. It attracts the economic sectors, the social sphere, and the sphere of state management, which allows reducing the level of instability due to the disappearing uncertainty and the choice by the system of one, most effective, bifurcation situation from the set of possible ones.

However, the role of the potential attractor is not performed automatically. It involves rethinking of the status of university and its social roles. Revaluation of these roles is one of the major challenges facing the leaderships of both the universities and the region.

Commonly, the traditional universities were set the following objectives:

1) creation of conditions for development of the personality, 2) preservation and transfer of scientific and cultural heritage, 3) expansion of the scope of knowledge, 4) dissemination of knowledge for the purpose of the material and social development, and 5) training of competitive specialists.

These goals were achieved during the implementation by universities of a number of functions: 1) educational, involving specialists training and retraining; 2) research, providing for the production of new and redefining of existing knowledge; 3) pedagogic function; 4) professional function; and 5) the function of preservation and transmission of accumulated scientific knowledge and cultural heritage.

Currently, in addition to the traditional functions, the university systems are faced with fundamentally new ones. First of all, it is an innovative function that requires the active influence of universities on the social life of people through their innovative active [3, p. 37-38].

In this regard, there occurs a new model of university as a scientific and educational-industrial system, which operates on the basis of a combination of academic science with multiple net, innovative, high-tech structures and small businesses. The innovative mission of the university is most evident in executing orders of local authorities, industries, business, and in the field of regional development programming.

The innovative potential of the university is able to manifest itself in various fields of socio-cultural space:

- firstly, and naturally, in the economy as a result of the university's participation in the development of new facilities and reconstruction of the traditional ones:



- secondly, in the social environment through participation in the development and implementation of social programs and its provision with experts;
- thirdly, in the management environment by training a new generation of managers; and
- fourthly, in the field of culture through the development of cultural projects, and preservation and development of spiritual culture of the region.

Another new function of the modern university is an entrepreneurial function. World Declaration on Higher Education for the XXI century orients the universities also on the formation of entrepreneurial skills and the promotion of initiatives [13].

The entrepreneurial function is a fundamentally new to the domestic universities. Their denationalization, as it is known, started after the adoption of the law «On education». Attraction of considerable extra-budgetary resources at the expense of fee-based education and the involvement of the property of state universities in the business turnover (rent, etc.); have made most of them the real agents of market relations.

Entrepreneurial activity has allowed universities to finance at their own funds the most promising areas of research in the field of education and science.

Both traditional and new academic functions are implemented primarily through the production, distribution and use of knowledge and information. At the same time, the increase in functions leads to the emergence of new risks.

Foreign researchers [4] concluded based on historical analysis of the evolution of higher education institutions during the XX century that a variety of roles performed by universities and an increase in the number of subjects lead to an increase in the complexity of the external environment of higher education institution.

On the other hand, the reduction in funding, rapid technological development and the increasing complexity of coordination of academic activity lead to the increased uncertainty and the dynamism of the external environment of higher education institution. After applying this to the university management, they analyzed the evolution of the academic environment starting from the classical high school in a simple and stable external environment to the modern one in the complex and dynamic environment.

This analysis shows that the university management in the region should be adapted to the more complex and dynamic external environment. Considering the decreasing effectiveness of the subject-based division as a coordinating mechanism,

the universities should seek new ways of integration and coordination of their activity.

At the same time, we think, be aware that a variety of environmental factors have different effects on the behavior of a university. Therefore, we further consider separately those factors that, in our opinion, have the greatest influence and act in the direction of the transformation of strategy and structure of universities.

In Russia, the independence level of higher education institutions was and remains much lower than in western Europe, its character of the external environment is more bureaucratic and overregulated, the main education and research activities are determined by the state represented by the Ministry of Education and Science of the Russian Federation, and in some respects by the regional authorities. The internal autonomy is also much less: the principal powers in the process of making prompt decisions are reserved to the university management. Hence the specifics of external and internal environment of the Russian universities, leaving its mark on its activities.

The degree of autonomy with respect to Russian universities increased during the second half of the 80's – early 90's of the XX century, when they were made able, more than before, to develop their curriculum and plans, course contents and to choose textbooks. Universities received the right to carry out provide extra-budgetary activities, to educational services and spend money for their own needs. The right to choose rectors and develop the university's charters has allowed to some extent consolidating these principles of independence. Nongovernmental, commercial colleges have been established, with their number increasing year by year. According to some academic employees, these processes of decentralization and deregulation of public administration allowed Russian universities to survive during crisis.

However, the return to the process of strengthening the state regulation of the academic activity (in particular, the establishment of the state educational standards and curricula according to the professions, quite strictly regulating the autonomy of each university in students' training) that started in middle 90's has led to the development of bureaucratic principles in the activity of Russian universities.

Changes in the general state legislation have also served thereto. The Civil Code, for example, prohibits a single legal entity to include any other legal entities, and limits the range of legal forms (which does not allow universities to legally include research institutes, actually existing on their basis,



and limits their interaction with other constituents such as enterprises and innovative firms) [2].

The Budget Code strictly regulates all incomes and expenses of a particular institution, and such a measure fully justified in terms of stable transparent economy, greatly complicates the activity of all budgetary organizations in terms of low budgetary funding and unstable external environment, not allowing to maneuver flexibly with funds for their own survival. The Tax Code deprives universities of all the tax benefits in the provision of paid educational services and implementation of contractual researches [11].

In the light of the new requirements of the Ministry of Education and Science, the rectors of universities now shall be again appointed rather than elected by the workforce.

All of these changes poorly increase the stability of the external environment of universities, but increase its complexity and consolidate strong hierarchical structures as the main organizational form of activity of Russian higher education institution, within which it is difficult to respond flexibly to the varying needs of society, introduce new educational technologies, and combine education and research activities.

These measures lead to the increased linearity of higher education system and, in fact, create barriers to innovation development, which, in turn, leads to an increase in innovative development risks.

Problems of reduced funding strengthened bureaucratization of management, with which Russian universities are faced in their activity, are the internal problems of the scientific and educational sphere implementing certain activities. However, in addition to these problems, the functioning of the Russian universities is also affected by other negative factors being external thereto and also encouraging the educational institutions to transformation. Some of these problems today are common to the whole European civilization, for example, the reduction of budgetary financing of higher education, and demographic problems. Others are unique to Russia, or have considerable specificity due to the Russian context. For instance, the economic crisis in Russia has significant differences as compared to the same in the developed market economies. If the latter stimulate the renewal of fixed capital and, consequently, the growth of innovative activity, the economic crisis in the post-socialist economy combines with the crisis of systemic transformation, when the former incentives to innovations are no longer in operation, and the new ones have not yet

developed. Therefore, innovative activity is very low, which aggravates and extends the economic crisis.

Updating of production capacities can be carried out both by means of own new technologies, and by the use of import ones. Both of these ways generate incentives for industry to collaborate with universities, and opportunities for the universities to do it: in the first case, the new technology must be developed, and in the second — the import technologies must be adapted to the Russian environment, while deep crisis (mainly financial) of the academic and industrial sectors of the Russian science increases the risks of innovative development of higher educational institutions.

Another problem that clearly came out in the last 10-15 years was unresolved contradiction between globalization and regionalization of public life, which has spread to the sphere of education and science. There arose a need to reformulate the concept of labor division between the regional, national and supranational levels. On the one hand, educational institutions, geographically attached to certain regions, train specialists primarily for local industries (this is especially evident in the foreign «regional universities», as well as in modern Russia, where the mobility of human resources, for various reasons, primarily financial, is currently limited). This contradiction is typical for the Belgorod region too. Belgorod universities concentrate primarily on training of experts for the regional needs such as teachers. doctors, agriculture engineers, civil engineers, economists, lawyers, etc. Nevertheless, there is an urgent necessity to establish the specialties of the future, which are already in demand among the major Russian and foreign research centers, but still have low popularity in the Belgorod region. These are professions, which have been actively established in recent years in the Belgorod region: «Foreign Area «International Relations»: Studies». in other universities: «Innovation Studies». «Innovation of Management». Development the modern university is impossible without this look into the future.

On the other hand, as Western scientists and teachers note, «as a result of the globalization of markets, reduced shelf-life of the products and technologies, and increasing requirements for knowhow, a country's economy is more and more based on international standards of training necessary to ensure the established requirements for quality and reliability. Foreign education and research system allows thereby businesses to use trained personnel that meet these standards. Therefore, education and research system of a particular country should assist



in the activities of its companies abroad or in a different cultural environment» [8, p. 46-54].

Finally, due to the rapid acceleration of social development processes at the turn of the millennium indicating the forthcoming global crisis of civilization, a question arises in a new fashion about the formation in the people of a new world-view and a role of education in this process. The education system in its content is a reflection of the current and rooted state of science and production, which selects practically proven hypotheses and theories. However, in terms of globalization, this conservatism may reduce the speed and efficiency of response to changes in the external environment. Therefore, the concepts of «advanced education» win a growing recognition, which set before the educational institutions the task to both respond to the demands of the economy, society and the state, and offer innovative training and continuing education programs.

These changes lead to the fact that the modern university becomes indeed a complex, self-developing open system. But there is a contradiction, which can be quite logically explained in terms of the principles of a synergistic approach: implementation of innovations in universities leads inevitably to an increase in the complexity of the system, which results in a contradiction between the system's tendency to maintain equilibrium (conservative development path) and the constant increase in disequilibrium due to innovations, which cannot be implemented in a fully equilibrium environment.

Thus, the innovative development of higher education institutions is impossible without risks that give rise to a non-equilibrium, unstable state of the environment. Considering the inconsistency of the innovation process and its risk-bearing character, we may conclude that in order to become a real attractor of socio-cultural space, modern higher education institutions have to minimize the risks and timely resolve any contradictions in their innovative development.

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