

RISK MANAGEMENT IN THE HIGHER EDUCATION SYSTEM

GESTÃO DE RISCOS NO SISTEMA DE ENSINO SUPERIOR

GESTIÓN DE RIESGOS EN EL SISTEMA DE EDUCACIÓN SUPERIOR

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ABSTRACT: Universities should pay special attention to the issues of risk management in the conditions of increased competition. The article presents the results of the analysis of regulatory documents in the field of risk management. The most significant risks arising in universities have been identified. A model of risk management in a university based on a process approach has been presented. The mechanism of risk management in the framework of one of the main processes of the university "Recruitment of students" has been considered.

KEYWORDS: Higher education system. Risk management. University processes.

RESUMO: *As universidades devem prestar atenção especial às questões de gestão de risco em condições de aumento da concorrência. O artigo apresenta os resultados da análise de documentos normativos na área da gestão de riscos. Os riscos mais significativos que surgem nas universidades foram identificados. Um modelo de gestão de risco em uma universidade baseado em uma abordagem de processo foi apresentado. Foi considerado o mecanismo de gestão de risco no quadro de um dos principais processos da universidade "Recrutamento de alunos".*

PALAVRAS-CHAVE: *Sistema de ensino superior. Gestão de risco. Processos universitários.*

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RESUMEN: Las universidades deben prestar especial atención a las cuestiones de la gestión de riesgos en condiciones de mayor competencia. El artículo presenta los resultados del análisis de documentos regulatorios en el campo de la gestión de riesgos. Se han identificado los riesgos más importantes que surgen en las universidades. Se ha presentado un modelo de gestión de riesgos en una universidad basado en un enfoque de procesos. Se ha considerado el mecanismo de gestión de riesgos en el marco de uno de los principales procesos de la universidad "Reclutamiento de estudiantes".

PALABRAS CLAVE: Sistema de educación superior. Gestión de riesgos. Procesos universitarios.

Introduction

The conditions for the functioning of the educational services market have changed significantly with the socio-economic development of Russia. The most noticeable changes were the increasing uncertainty of the external environment, increased competition, and a reduction in budget funding for state universities. If in the previous period, sufficient and timely resource provision protected state universities from many risks, now their functioning largely depends on competent and competitive management, which should help to increase the efficiency of their activities and reduce the impact of adverse factors.

Modernization and reform of the Russian education system are accompanied by cardinal changes not only in the content of educational programs and teaching methods but also in the management system of an educational organization. At the state level, the need for change in education is legislated in the developed programs and documents, among which the following should be noted: the Federal law of December 29, 2012, No. 273-FL "On education in Russian Federation"; the state program of the Russian Federation "Information society (2011-2020)"; "The Development of science and technology" for 2013-2020; "Development of education" for 2013-2020; the concept of the Federal target program of education development for 2016-2020 (RUSSIA, 2012).

The field of education is a rather specific area, it is characterized by its risks. One of the most important factors determining the specifics of risks in the field of higher education both in the world and in the Russian Federation is the formation of new technological areas of production with a high scientific component, i.e., the so-called knowledge-intensive production, so it is important not only to identify the risks of educational activities but also to assess and analyze them.

It is customary to refer such products to the knowledge-intensive category, in the production of which the level of knowledge-intensiveness is at least 3.5%. If the share of

spending on science is more than 8.5%, then this production is a leading knowledge-intensive technology; the level of knowledge-intensiveness of technologies of the middle level – 2.5%, and the low level – 0.5%. Currently, there are two most authoritative classifications of high-tech industries in the world: the classification of the Organization for Economic Cooperation and Development (OECD) (2021) and the United Nations Industrial Development Organization (UNIDO) (2021).

However, to date, there is no generally recognized theoretical approach to the problem of risk analysis in the training of specialists for knowledge-intensive industries in the field of education. The conceptual framework remains quite contradictory, discrepancies are observed in the approaches to classification and the definition of risk assessment methods. Given the identified problems, the relevance of the research topic is due to the insufficient development of risk management problems of higher educational institutions in a market economy, the practical significance of research related to the use of risk management mechanisms in domestic universities.

Educational organizations in modern society are full participants in economic activity, they also face various "threats" that affect the quality of their work. The consequences of these threats can be of different levels: both insignificant and destructive scales, which can lead institutions to a partial or complete failure of the functioning of the educational system. These risks can be identified both inside the organization and outside it. It is very important to realize that risks can be managed only when they are known, otherwise, it is simply not feasible. To be competitive in the developing field of education, it is necessary to timely identify threats, directly assess them and make any management decisions as a necessary measure to reduce risk. Such systematic risk management will allow the educational organization to provide high-quality training for specialists who will be ready to enter adulthood.

Methods of risk management in the higher education system

Various methods and strategies of risk management that affect the organization's activities can be used in the conditions of functioning of various external and internal risk factors. Management can be carried out by simpler and more complex methods.

Currently, various regulatory documents are regulating the risk management process. As a basis for risk management in the activities of higher educational institutions, standards can be chosen that define general guidelines for risk management, such as GOST R ISO 31000-2019 (2010), ISO 31000:2018 (2019), which specifies the principles and general guidelines for

risk management; GOST R ISO 9001-2015 (2015), which sets requirements for actions related to risks; GOST R 58771-2019 (2020), which contains recommendations for the selection and application of risk assessment methods; GOST R 51897-2011 (2012), which contains definitions of basic terms in the field of risk management.

According to the GOST R ISO 9001-2015 standard, risk-oriented thinking is necessary to achieve the effectiveness of the quality management system.

The GOST R ISO 9001-2015 standard establishes a requirement for an organization to understand its environment (clause 4.1) and identify risks as a basis for planning (clause 6.1). This reflects the use of risk-based thinking for planning and implementing quality management system processes (clause 4.4). The organization must update the risks and opportunities identified during planning, when nonconformities appear, including those related to claims (clause 10.2.1). The organization should analyze and evaluate the effectiveness of actions taken concerning risks and opportunities (9.1.3). Management's analysis should include a review of the effectiveness of actions taken concerning risks and opportunities (9.3.2). The decisions and actions regarding risks should be determined based on the results of the management's analysis (p.6.1, p. 9.3.3, p. 10.2, p. 10.3).

The scheme proposed in the framework of GOST R ISO 31000-2010 can be chosen as a risk management mechanism of the university. The international standards of the ISO 9000 series have made the process approach a generally accepted norm for managing the activities of any organization. The process approach in education can be used to identify risks, as it is based on the identification and consideration of all the processes of the organization.

Results

Risk management concerning education is the administration and governance of the university's activities at various levels of management, providing for the identification, analysis, assessment of risks, and, if necessary, the development of measures to minimize the onset of negative consequences, as well as to maximize the use of external and internal opportunities, while it is advisable to consider the main processes of the university as objects of management.

When conducting daily activities, educational organizations face various types of risks that are closely interrelated with each other, as well as significantly affecting internal processes. The correction of one type of risk leads to a change in many others under these conditions. It is for this reason that it is necessary not only to identify threats but also to group them correctly, only after passing these points, it is possible to begin to analyze the dependencies between risks

and their significance of the impact on the achievements of the primary task of an educational organization – providing education at a high-quality level.

Table 1 shows the classification of risks at the university, consisting of the main internal and external risks at the university, which most often affect the quality of education, training, and graduation of specialists.

Table 1 – University risks

External risks	Internal risks
Refinancing	Not ensuring a high level of quality of educational services provided
Economic crisis	Non-compliance of certain educational services with market requirements
Rivalry between universities	Lack of applicants of the 1st year
Reduction of budget funds allocated for providing education	Unreasonable spending of extra-budgetary funds
Changing the labor market environment	The inefficiency of public relations services
Decrease in the number of applicants to the university	Quotability of the university in the market
Lack of budget funds or delay in funding from the Federal budget	Lack of appropriate encouragement and stimulation of the activities of the personnel
Reducing the number of state-funded research projects	Change of the moral and psychological state in the team
The impact of global trends	University organization system
Reducing the quality of education at the university due to the development of branches	Unfavorable working conditions for employees due to low wages and the provision of a social package
Amendments to the legislation of the Russian Federation in the field of education	Inefficient personnel policy (advanced training of teachers, teacher exchange programs, involvement of third-party specialists, etc.)
Force majeure situations	Underdevelopment of the material base
Reorganization of the University's ownership form	The high cost of training

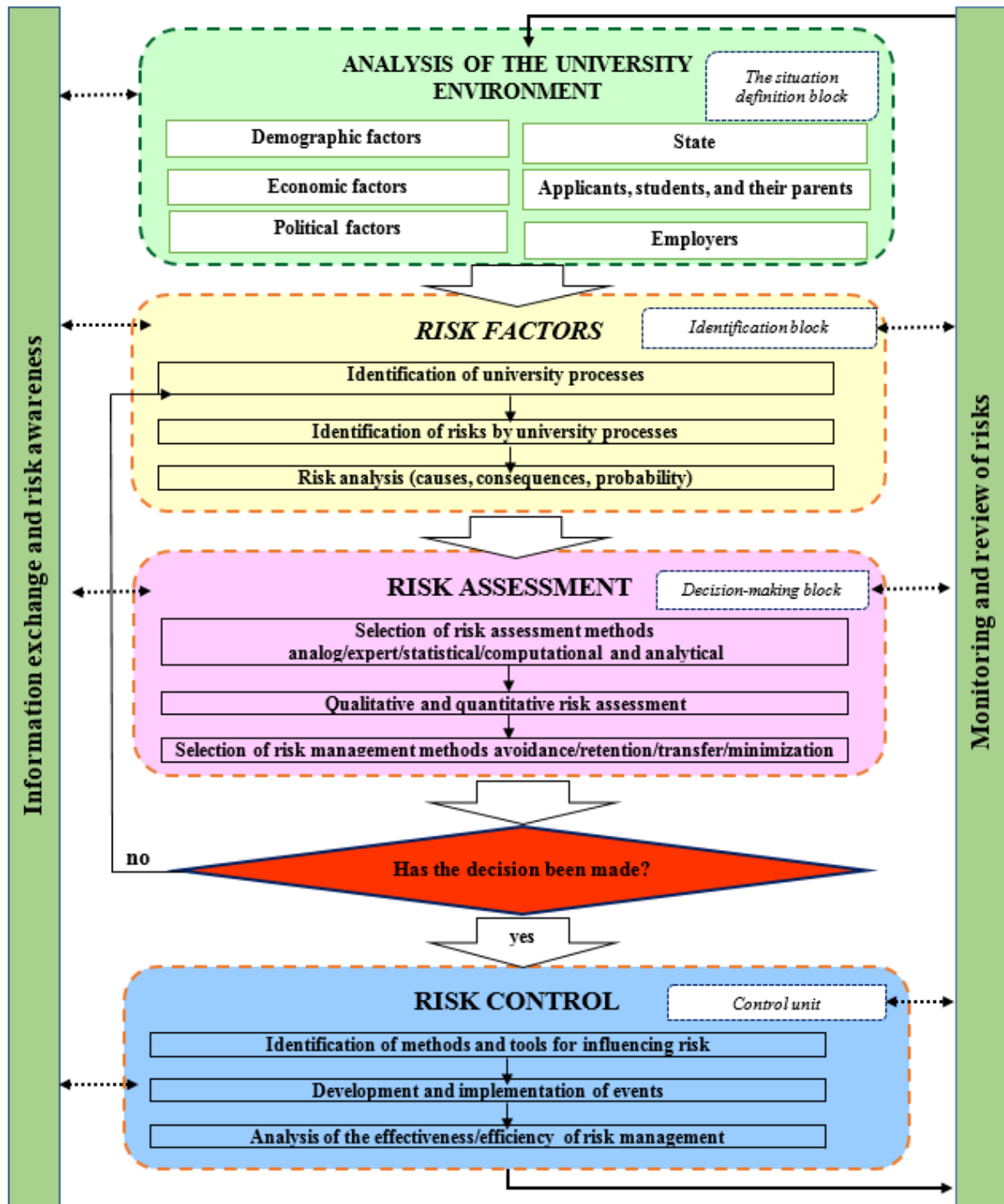
Source: Devised by the authors

Based on the mechanism presented in the standard GOST R ISO 31000-2019, a risk management model of an educational organization is formed (Figure 1), which includes:

- analysis of the organization's environment;
- identification of university processes;
- identification of risks;
- risk analysis;
- qualitative and quantitative risk assessment;

- analysis of critical values;
- deciding on risk management;
- development and implementation of events;
- assessment of the effectiveness of the activities carried out.

Figure 1 – Risk management model at the university



Source: Devised by the authors

The basis of the proposed risk management model at the university is a process approach, which is focused primarily not on the organizational structure of the organization, but on processes, the ultimate goals of which are to create products or services that are of value to external or internal consumers.

The process approach to the management of an educational organization is based on the division of the educational process into performance indicators, which allows dividing the processes into main, auxiliary, contributing to the achievement of strategic goals and development processes.

The basis of the university is the educational process, as a result of which the value of trained specialists increases. To implement this process, it is necessary to allocate subprocesses that are its components. Such subprocesses include recruitment of students, organization of the educational process, transfer, and control, as well as employment and adaptation to the market.

Discussion

Let us consider in more detail the proposed model of risk management in the higher education system on the example of one of the main subprocesses, namely the "Recruitment of students" process.

The purpose of the process: the formation of the adequate level of students with the required level of knowledge, skills, and abilities necessary for admission and study at the university in the conditions of competition in the educational services market.

Process inputs: reports on labor market research, data from the Ministry of Science and Higher Education of the Russian Federation.

Process outputs: minutes of the Academic Council of the University, Faculty councils, meetings of departments.

Criteria for the effectiveness of the process:

- the ratio of the number of applicants following the recruitment plan;
- the ratio of the number of students expelled after the first semester to the number of applicants;
- the number of new training programs and the competition for them;
- the level of awareness of applicants to the university and others.

Risks in the process: the risk of a shortage of students, a possible decrease in the number of students.

Reasons for the risks of the process: the high price of educational services, the personal characteristics of students, the decline in the rating of the university, the deterioration of the financial condition of educational organizations.

Consequences: deterioration of the university's indicators, loss of possible profits, loss of employers' confidence in the university in terms of high-quality training of graduates.

Since in modern conditions, the probability of this risk is significant, and the consequences for the university are essential, it is advisable to develop measures to minimize it, for example, actions related to strengthening career guidance, cooperation with foreign universities, developing programs for adapting and preserving the contingent of students, working with underachieving students, monitoring their academic performance and attendance, organizing electives, individual work with students and others.

Resources for implementing risk response actions: employees' working time required for career guidance, program development, and electives, as well as additional employee incentives.

Indicators for risk monitoring: collection, analysis, and use of information, including information received from consumers and process performers, as well as during internal audits.

Frequency of risk monitoring: according to the results of the admission of applicants (1 time per year), as well as according to the results of the sessions.

Risk management records for the process: maintaining a database (including electronic), an audit report.

Responsible for risk monitoring: the owner of the "Student Recruitment" process.

Conclusion

The modernization of the domestic higher education system is carried out within the framework of integration into the world and European education systems. Actively developing information and communication technologies have determined the vector of movement towards changing the industrial paradigm with the post-industrial paradigm, including in the education system.

To date, a new paradigm of risk-oriented thinking has been formed, which, unlike the old one, is aimed at orienting managers at all levels of management to embedded and continuous risk thinking.

Since the continuous improvement of processes in an educational organization of higher education is an integral part of management in the modern market of educational services, it is

most optimal that risk factors are determined relative to the processes of the university, while thinking based on risk assessment will contribute to improving the manageability of processes.

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