ORGANIZATION OF ACCOUNTING AND RISK-MANAGEMENT OF EDUCATIONAL ACTIVITY: DEVELOPMENT DIRECTIONS IN THE CONDITIONS OF IMPLEMENTATION OF THE QUALITY MANAGEMENT SYSTEM

Abstract. The article aims to justify the measures for organizing the formation and provision of information from the accounting system for the risk management process in order to ensure the stability and sustainability of the development of higher education institutions. The goal has been realized on the basis of the application of the methods of observation, comparison, analysis, synthesis, generalization and economic-statistical method. The made analysis allowed to determine the risks of non-fulfilment of information needs regarding the functioning of higher education institutions for each study group (applicants, students, participants, parents of students/applicants, administration, employers, customers of research projects, teachers, government, society, governing bodies), which made it possible to offer an organizational approach to the information support of risk management of educational activities. This approach covers corrective management actions (in terms of accounting functions) on each of the defined processes of the risk management system (admission process for higher education, planning the educational process, organizing the educational process, staffing educational activities), executives, responsible entities and output data. Taking into account the provisions of regulatory documents, scientists' developments and practical experience in risk management has allowed to determine the stages of risk management in educational activities of a higher education institution (risk analysis, risk assessment, direct risk management, risk monitoring, risk management reporting) indicating the role of accounting personnel in each of them. It has been substantiated that the main advantages of the proposed approach to information management of risk management of educational activities of higher educational institutions are the simplicity of use (provided with properly devised documentation), the complexity of the approach (coverage of all quality management system processes), responsiveness to identified risks; accounting structure of higher education institutions. It is proved that the proposals will contribute to the improvement of the accounting display of actions to minimize the risks of educational activities of higher educational institutions, thereby ensuring the strengthening of their competitiveness on the market of educational services.

Keywords: risks of higher educational institutions, risk management, information support,
ОРГАНІЗАЦІЯ БУХГАЛТЕРСЬКОГО ОБЛІКУ ТА РИЗИК-МЕНЕДЖМЕНТ ОСВІТНЬОЇ ДІЯЛЬНОСТІ: НАПРЯМИ РОЗВИТКУ В УМОВАХ ВПРОВАДЖЕННЯ СИСТЕМИ УПРАВЛІННЯ ЯКІСТЮ

Анотація. Поставлено завдання обґрунтувати заходи щодо організації формування та надання інформації, яка продукується в системі бухгалтерського обліку, для процесу управління ризиками в системі бухгалтерського обліку, з метою забезпечення стабільності та стійкості розвитку закладів вищої освіти. Поставлену мету реалізовано на основі застосування методів спостереження, порівняння, аналізу, синтезу, узагальнення та економіко-статистичного методу. Проведений аналіз дозволив визначити ризики невиконання інформаційних потреб щодо функціонування закладів вищої освіти для кожної досліджуваної групи (абітурієнтів, студентів, слухачів, здобувачів, батьків студентів / абітурієнтів, адміністрації, роботодавців, замовників науково-дослідних робіт, викладачів, держави, суспільства, органів управління), що дозволило запропонувати організаційний підхід до інформаційного забезпечення управління ризиками освітньої діяльності. Зазначений підхід охоплює коригувальні управлінські дії (в частині облікових функцій) на кожному з визначених процесів системи управління ризиками (процес прийому на навчання для здобуття вищої освіти; планування освітнього процесу; організація освітнього процесу, кадрове забезпечення освітньої діяльності), виконавців, відповідальних суб’єктів і вихідних даних. Урахування положень нормативних документів, напрацювань науковців і практичний досвід управління ризиками дозволив визначити етапи управління ризиками освітньої діяльності закладів вищої освіти (аналіз ризиків, оцінка ризику, безпосередне управління ризиками, моніторинг ризику, звітування з управління ризиками) із зазначенням ролі облікового персоналу на кожному з них. Обґрунтовано, що основними перевагами запропонованого підходу до інформаційного забезпечення управління ризиками освітньої діяльності закладів вищої освіти є простота застосування (за умови належно розробленого документального забезпечення), комплексність підходу (охоплення всіх процесів системи управління якістю), оперативність реагування на виявлений ризики;
урахування структури закладу вищої освіти. Доведено, що пропозиції сприятимуть удосконаленню облікового відображення дій з мінімізації ризиків освітньої діяльності закладів вищої освіти, тим самим забезпечивши посилення їхньої конкурентоспроможності на ринку освітніх послуг.

Ключові слова: ризики закладів вищої освіти, управління ризиками, інформаційне забезпечення, організація обліку, система управління якістю.

Формул: 1; рис.: 2; табл.: 3; бібл.: 13.

Виговская І. Н.
doцент, кандидат економічних наук,
dоцент кафедри управління, адміністрування,
Господарчий університет «Житомирська політехніка», Україна; e-mail: virina1407@gmail.com; ORCID ID: 0000-0002-4974-5834

Григорівська Є. А.
doцент, кандидат економічних наук,
doцент кафедри управління, адміністрування,
Київський національний університет технологій і дизайну, Україна; e-mail: lenazelenina@ukr.net; ORCID: 0000-0001-8279-3523

Ляхович Г. І.
doцент, доктор економічних наук,
професор кафедри управління, адміністрування,
Івано-Франківський національний університет економіки і менеджменту
Тернопільський національний економічний університет, Україна; e-mail: rokcoljana@ukr.net; ORCID ID: 0000-0002-0077-9128

Хоменко А. Ю.
kандидат економічних наук, доцент кафедри управління, адміністрування,
Господарчий університет «Житомирська політехніка», Україна, e-mail: jakovets.anna@gmail.com; ORCID ID: 0000-0002-6337-3635

ОРГАНИЗАЦІЯ БУХГАЛТЕРСЬКОГО УЧЕТА І РИСК-МЕНЕДЖМЕНТ ОБРАЗОВАТЕЛЬНОЇ ДЕЯЛЬНОСТІ: НАПРАВЛЕННЯ РАЗВИТИЯ В УСЛОВИЯХ ВНЕДРЕНИЯ СИСТЕМЫ УПРАВЛЕНИЯ КАЧЕСТВОМ

Анотація. Поставлена задача обосновать меры по организации формирования и предоставления информации из системы бухгалтерского учета для процесса управления рисками с целью обеспечения стабильности и устойчивости развития высших учебных заведений. Поставленную цель реализовано на основе применения методов наблюдения, сравнения, анализа, синтеза, обобщения и экономико-статистического метода. Проведенный анализ позволил определить риски невыполнения информационных потребностей относительно функционирования высших учебных заведений для каждой исследуемой группы (абитуриентов, студентов, слушателей, соискателей, родителей студентов / абiturientov, администрации, работников, заказчиков научно-исследовательских работ, преподавателей, государства, общества, органов управления), что позволило предложить организационный подход к информационному обеспечению управления рисками образовательной деятельности. Указанный подход охватывает корректирующие управленческие действия (в части учетных функций) на каждом из определенных процессов системы управления рисками (процесс приема на обучение для получения высшего образования, планирование образовательного процесса, организация образовательного процесса, кадровое обеспечение образовательной деятельности), исполнителей, ответственных субъектов и выходных данных. Учет положений нормативных документов, наработок ученых и практический опыт управления рисками позволили определить этапы управления рисками образовательной деятельности учреждения высшего образования.
(analysis of risks, assessment of risk, direct management of risks, monitoring risk, reporting on risk management) with the role of accounting personnel on each of them. It is based on the advantages of the proposed approach to informing on the simplicity of application (in the case of the development of a document in the form of a holistically document for the purpose of achieving the objectives of an approach (coverage of all processes, the complexity of the approach (coverage of all processes, the complexity of the approach), operationality of implementation on the risks of the activity of high education institutions is the simplicity of application (condition for implementation of a document in the form of a holistic document for the purpose of achieving the objectives of an approach (coverage of all processes, the complexity of the approach), operationality of implementation on the risks of the activity of high education institutions is the simplicity of application (condition for implementation of the document in the form of a holistic document for the purpose of achieving the objectives of an approach (coverage of all processes, the complexity of the approach), operationality of implementation on the risks of the activity of high education institutions. In this way, the establishment of the approach will contribute to the improvement of the risk management of high education institutions, and the same improvement in improving the competitive capabilities of high education institutions on the market of educational services.

**Key words:** risks of the activity of high education institutions, management of risks, information security, accounting, organization of accounting, system of management with the quality.

**Formula:** 1; fig.: 2; tables: 3; bibliography: 13.

**Introduction.** The reform of the Ukrainian educational policy, which is implemented within the framework of the European Higher Education Area. The Ukraine is the member of it since 2005, and the reform is carried out in the context of economic and political reforms. It requires ensuring the quality and attractiveness of European higher education, its fundamental role in line with further prospective state needs, enlargement access to higher education, increasing the mobility of students and teachers, as well as ensuring the successful employment of graduates of higher education institutions (hereinafter referred to as the HEA) due to the fact that all academic degrees and other qualifications should be focused on the labor market.

Despite the prospects for the development, the objective reflection of the trends in the functioning of the HEI of Ukraine indicates a number of problematic issues in the field of higher education that produce additional risks. This, in turn, requires an effective risk management mechanism to minimize them. Existing problems include reducing the amount of HEI. Thus, according to the State Statistics Service of Ukraine, at the beginning of the 2018—2019 academic year, there were 282 accredited HSEs in Ukraine, in which 1322,3 thousand of students were enrolled (accordingly; in the 2014—2015 academic year there were 325 accredited HSEs and 1689,3 thousand of students) [1]. The main objective reason for the decrease of the number of HEI is undoubtedly the decrease in the student contingent (it decreased by 22% for the last five years). All this is a consequence of the demographic crisis, the declining standard of living, and the outflow of students abroad. On average, the dynamics of student departure abroad has increased by 41,44% over the last five years. In turn, the dynamics of the number of foreign students enrolled in Ukrainian HEIs increased on average by 49,17%.

In the process of ensuring the effective training of highly qualified specialists, improving the competitiveness of the HEI in the market, an important role is given to its management staff, which in the conditions of implementation of the quality management system (hereinafter referred to as QMS), requires of them the effective risk management.

Thus, the conducted questionnaire among the management staff of the HEI of Kyiv (7 respondents), Zhytomyr (5 respondents) and Uzhgorod (4 respondents) regarding the existing complications of activity attributed the insufficient funding to the major risks, losing in competition with other HEI, lack of positive dynamics in the growth of students. It is under these conditions that the issues of quality assurance and monitoring of higher education are relevant.

The strategy of educational activity in the field of QMS should be based on the reliable and true information that ensures the effectiveness of management decisions regarding the educational process, implementation of educational programs and standards of level training. Such information is formed in different sections: the quality of the results of activities (processes), the quality of the processes themselves; and the quality of the system or organization of the HEI activity. Significant amounts of information are generated in the accounting and analysis system of HEIs, so the issues of organizational support for this area are important, especially when conducting activities under
risk. Thus, the approach to accounting for the risk management of educational activities in terms of
the introduction of QMS is considered to be complex and systematic one. In this regard, the topic of
the research is relevant and timely.

**Research analysis and assignment.** The research of the identification of the risks of HEI,
their classification, development of the sequence of the process of managing them were done by
domestic and foreign scientists: A.A. Yelesina, T.I. Klochkova, L.N. Sergeeva, A.A. Spiridova,
E.G. Khomutova, E. Dakich, L. Ruzych-Dmitrievich, and others. Without reducing their
contribution, it should be noticed that not all conducted researches have taken into account such
factors as the structure of the HEI, the features of the QMS implementation, which are fundamental
in considering the risk management process of the HEI. In addition, most work is devoted to risk
management research, while risk accounting remains poorly understood. Thus, such researches like
P.Y. Atamas, I.M. Vygovskaya, B.A. Zasadny, T.G. Kaminskaya, T.M. Korlyuk, raised some
questions about the role of accounting in risk management, but these studies did not always have a
complex nature and did not take into account the specific features of educational activities.

The purpose of the article is to develop theoretical and organizational foundations of
accounting risk management of educational activities, which will help to avoid at the macro level
poor quality training of students and to optimize the activity of HEI.

The study used the methods of observation, comparison, analysis, synthesis, synthesis and
economic-statistical method.

**Research results.** Not only the updated configuration of the educational environment and
approaches to the continuity of the educational process, but also financial resources, investments for
the implementation of a number of targeted programs and financing of the educational activities of
a specific HEI are required to fulfil the objective of ensuring the competitiveness of the HEI. At the
same time, it is important to maintain a development strategy aimed at the quality of education and
to manage this process on the basis of quality and timely accounting and analytical support.

Risk management is a key component of the strategic planning and management system of
the HEI, and is consistent with the key performance indicators of these institutions [2, p. 6]. Much
of the necessary information for this process (in terms of indicators of the HEI activity) is provided
by the accounting system.

QMS is a complex category characterized by a set of planning, organization, motivation,
accounting, control, analysis, information sharing and document management processes. Risk
management in the QMS means fulfilling the tasks of development of educational activities of the
HEI: the process of enrolment for higher education, planning of the educational process,
organization of the educational process, staffing of educational activities.

The decision to create a risk management system for educational activities of the HEI is due
to the need to overcome the possible risk situations arising from innovative processes and the
development of new technologies in the higher education system [3, p. 31]. We agree with Sergeeva
L.N., Yelesina A.A. that risk management should be based on the specifics of the educational
sector, specific classification of risks and threats of HEI [4, p. 141]. That is why we have identified
the risks of failure to meet the needs of the stakeholders of the HEI for each group: entrants,
students, trainees, applicants, parents of students / entrants, administration, employers, customers of
R&D, teachers.

Visualization of the received information is carried out on the basis of the risk card, which
provides for the identification of risks based on the components of the QMS process (Tabl. 1). It is
analysed annually and supplemented in the event of new risks being identified; corrective and
preventive actions are being developed, depending on the significance of the consequences. When
designing such a card for a specific HEI, it is advisable to identify the risk owner in each process of
the QMS, including the rector, the first vice-rector, the vice-rector for scientific and pedagogical
work, other pro-rectors in accordance with their duties and the staffing of the university.

At first view, accounting data is not used in any of the above QMS processes. Without
properly presenting information on the available indicators of the HEI activity, it is impossible to
calculate the consequences of such risks, and consequently complicate the decision-making process.
<table>
<thead>
<tr>
<th>QMS process</th>
<th>Risks</th>
<th>Risk assessment ($R = F \times WF$)$^2$</th>
<th>Corrective management actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The process of admission to higher education</td>
<td>1. Decrease of the contingent of students by educational level bachelor and master 2. Failure to comply with the license volumes 3. Low level of knowledge of entrants 4. No changes in the volume of foreign students. 5. Reduction of the share of persons in the preparatory department</td>
<td>$1 \times 10^4 R = 100$. Characteristics — catastrophic. Preventive measures: 1. Career guidance. 2. The work of the preparatory department. 3. Advertising campaign 4. Dealing with embassies from over the world</td>
<td>1. Strengthening the career guidance. 2. Activation of work with bachelor's graduates. 3. Conducting free lectures, webinars, meetings with entrants. 4. Checking the level of qualification and teaching methods at the preparatory department. 5. Reinforcement of the advertising campaign. 6. Establishing relations with the foreign directors of foreign countries, concluding agreements</td>
</tr>
<tr>
<td>2. Planning the educational process</td>
<td>1. Late distribution (redistribution) of lecture streams and study groups. 2. Calculation errors in the calculation of training time of the teaching departments. 3. Insufficient number of teaching staff</td>
<td>$2 \times 5^4 R = 50$. Characteristics — middle. Preventive measures: 1. Work on timely and accurate submission of necessary information. 2. Announcement of the vacancy announcement</td>
<td>1. Intermediate control over the correctness of calculating the amount of training time and its recalculation by the teaching and methodological department. 2. Training for employees of the dean's office on filling of lecture streams and groups. 3. Searching personnel who meet the license requirements. 4. Announcement of additional vacancies</td>
</tr>
<tr>
<td>3. Organization of the educational process</td>
<td>1. Low control level over the quality of teaching subjects. 2. Incompatibility of scientific and pedagogical staff with licensing conditions. 3. Inefficiency of the current system of assessment of students' knowledge. 4. Technical errors in the preparation of students' classes</td>
<td>$4 \times 5^4 R = 100$. Characteristics — catastrophic. Preventive measures: 1. Careful preparation of the schedule of classes of students 2. Intermediate control of students' knowledge 3. Teachers report on class attendance</td>
<td>1. Formation of schedules of attendance of classes and control over its performance. 2. Increased work on: publications of scientific articles; passing international and long-term internships; publication of textbooks and manuals, etc.; fulfillment of other license conditions. 3. Implementation of electronic test for the purpose of evaluation. 4. Elimination of technical errors in the schedule</td>
</tr>
<tr>
<td>4. Staffing of educational activities</td>
<td>1. Non-compliance of the teaching staff with the license conditions. 2. Lack of confirmation of foreign language skills at B2 level. 3. Low activity on passing teaching staff's internships 4. Reduction of the share of scientific-pedagogical workers with scientific degrees and academic titles</td>
<td>$2 \times 5^4 R = 50$. Characteristics — middle. Preventive measures: 1. Work to clarify the need for advanced training. 2. Control of department chairs</td>
<td>1. Intermediate certification of postgraduate and doctoral students. 2. Intermediate certification of employees with a scientific degree for compliance with the requirements of the Ministry of Education of Ukraine for the assignment of academic titles. 3. Increased work on: publications of professional articles on the discipline of teaching; international and long-term internships in the HEI of Ukraine; fulfillment of other license conditions. 4. Increasing the level of foreign language skills and certification</td>
</tr>
</tbody>
</table>
Without properly presenting information on the available indicators of the HEI activity, it is impossible to calculate the consequences of such risks, and consequently complicate the decision-making process.

This demonstrates the need for a high level of organization of accounting security. This is the approach followed by M.Y. Zayats. The scientist, characterizing accounting and analytical support for risk management, reveals the essence of risk management «as a process of information management and information support measures to minimize risks (insurance, hedging, diversification, etc.), and direct risk management through the use of accounting methodological tools (professional tools accounting policies, reporting policies, etc.)» [5, p. 141]. To substantiate the application of specific management actions on the relevant processes of the QMS, the procedure for organizing information support for activities to minimize the risks of educational activities, indicating corrective management actions, executors, responsible entities and baseline data (Tabl. 2).

Table 2
Organization of information support for corrective management actions to minimize the risks of educational activities

<table>
<thead>
<tr>
<th>Unit</th>
<th>Detailed management adjustments (in accounting part)</th>
<th>Performers</th>
<th>Responsible entities</th>
<th>Reporting and current information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Admission process</td>
<td>1.1. Expenses for the advertising company (by type of advertising)</td>
<td>Structural divisions</td>
<td>Heads of departments, heads of departments, deans</td>
<td>Application, calculation</td>
</tr>
<tr>
<td></td>
<td>1.2. Expenses for business trips (for the purpose of establishing cooperation)</td>
<td>Structural divisions</td>
<td>Heads of departments, heads of departments, deans</td>
<td>Application, calculation</td>
</tr>
<tr>
<td>Provision*</td>
<td>Consideration of proposals from structural departments</td>
<td>Planning Financial Department (PFD)</td>
<td>Head of Planning and Finance Department</td>
<td>Agreed calculation</td>
</tr>
<tr>
<td></td>
<td>Agreed calculation accordance with the PFD</td>
<td>PFD</td>
<td>Head PFD</td>
<td>Agreed calculation</td>
</tr>
<tr>
<td></td>
<td>Approval of the Expenditure Order</td>
<td>PFD</td>
<td>Rector / Vice-Rector</td>
<td>Order</td>
</tr>
<tr>
<td></td>
<td>Allocation of funds according to the budget and their accounting</td>
<td>Accounting</td>
<td>Rector / Vice-Rector</td>
<td>Accounts paid</td>
</tr>
<tr>
<td></td>
<td>Statement of Current Accounts</td>
<td>Accounting</td>
<td>Chief Accountant</td>
<td>Report</td>
</tr>
<tr>
<td>2. Planning of educational process</td>
<td>2.1 Expenses for announcement of additional vacancies for vacant positions</td>
<td>Accounting</td>
<td>Chief Accountant</td>
<td>Report (by request)</td>
</tr>
<tr>
<td></td>
<td>2.2. Wage Fund</td>
<td>Accounting</td>
<td>Chief Accountant</td>
<td>Report</td>
</tr>
<tr>
<td>Provision</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>3. Organization of the educational process</td>
<td>3.1 Costs of publishing articles in professional journals</td>
<td>Accounting</td>
<td>Chief Accountant</td>
<td>Report (by request)</td>
</tr>
<tr>
<td></td>
<td>3.2. Software acquisition / development costs and depreciation</td>
<td>Accounting</td>
<td>Chief Accountant</td>
<td>Report (by request)</td>
</tr>
<tr>
<td></td>
<td>3.3. Costs for publishing textbooks and manuals</td>
<td>Accounting</td>
<td>Chief Accountant</td>
<td>Report (by request)</td>
</tr>
</tbody>
</table>
The above information is prepared on the basis of the financial statements, and the details of separate indicators are possible according to the analytical accounting. It is not possible to get such detailed information from the financial statements, so the management should give in advance before the accountants the task on developing management reporting with the given indicators.

Please note that these costs can be a component of various HEI activities. Therefore, in order to clearly plan and control cost targeting, it is necessary to determine their optimal need. The management accounting subsystem proposes to develop a system of budgets for this purpose. Organization of management accounting with the use of budgeting can be carried out in stages on the basis of specially formed accounting policy and planning with budgeting (Fig. 1).

Fig. 1. Organization of management accounting using budgets
Given the focus of management accounting for the implementation of education policy on quality of education, special emphasis should be placed on accounting policies in terms of sources of funding and their use.

The need for the development of accounting policies for the HEI is dictated by reforms in the budgetary sphere in general, and regulatory acts on budgetary accounting, in particular. So, our proposed budgets are an important component of management accounting, as such information is the basis for effective risk management decisions, providing them with the flexibility and strategic focus of the HEI.

A clear structuring of the risk management process is required in order to identify the actions of accounting staff in terms of information support. However, there is no unanimity in its consistency in scientific works and in the activities of educational institutions. First of all, it is related to the variety of tools used to make decisions and take measures aimed at minimizing the risk of university activities in the market or avoiding it at all.

Thus, the method developed by A.A. Spiridonova, E.G. Homutova, based on the integration of quality management methods such as FMECA, Isikawa diagrams, envisages the following procedures and actions: the start of risk management process; overall risk assessment; development of operational control impacts on the process; implementation of operational control impacts on the process; determining the effectiveness and / or efficiency of the measures taken [6]. This approach takes into account the particularities of the process of managing the risk of educational activities of the HEI, and also provides for the consistency that is necessary to ensure its effectiveness. However, some stages are not clear concerning the actions that they do, so we consider it appropriate to clarify and take into account the regulatory documents: ISO 9001: 2015 «Quality Management System» [7], ISO 31000: 2009 «Risk Management. Principles and Recommendations» [8], IEC 31010: 2009 «Risk management. Risk Assessment Techniques» [9], ISO / TS 22367: 2008 «Error Reduction through Risk Management and Continuous Improvement» [10]. Taking into account their position, the experience of scientists, as well as practical experience in managing the risks of educational activities of the HEI, the sequence of this process is established and the measures that will be performed by accounting staff (Tabl. 3).

<table>
<thead>
<tr>
<th>№</th>
<th>Stage</th>
<th>The actions performing by the accounting staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Risk analysis</td>
<td>Determining the volumes and sections of accounting information for risk holders according to their access levels</td>
</tr>
<tr>
<td>2.</td>
<td>Risk assessment</td>
<td>Accounting information by key indicators of the HEI activity</td>
</tr>
<tr>
<td>3.</td>
<td>Direct risk management</td>
<td>Reflection in accounting for risk minimization measures</td>
</tr>
<tr>
<td>4.</td>
<td>Risk monitoring</td>
<td>Providing accounting information about key performance indicators of the HEI</td>
</tr>
<tr>
<td>5.</td>
<td>Risk management reporting</td>
<td>Submission of credentials in risk management reporting (in accordance with the Risk Management Regulations and Accounting Policies)</td>
</tr>
</tbody>
</table>

Table 3

Stages of Risk Management of Education with Risk Management Determination of the Role of Accounting Staff

In our opinion, it is advisable to carry out the first stage on the basis of questionnaires developed and approved in the Risk Management Regulations. Forms of questionnaires should be built on the basis of a SWOT analysis, the results of which identify the main risks that have a negative impact on the achievement of strategic goals; risk factors; the possible consequences of each risk; frequency of occurrence of risks.
Determining the risk foresees the identification of its owner, who is provided with the accounting information that is required to further detail the corrective management action. This can be information such as the amount of advertising costs you spend, etc.

Each identified risk should be analyzed separately. For each risk only one decision is made: 1) necessary actions (immediate, short-term, medium-term, long-term), requiring risk reduction. This decision addresses the risks that are likely to have a strong impact; 2) the risk is managed, its level is acceptable. Continuous monitoring is required to keep the risk out of control; 3) negligible risk, they can be neglected. Periodic monitoring is carried out.

Risk assessment should be based on information on process inconsistencies during the reporting period of the QMS analysis. The indicator is the level of risk — the frequency of occurrence of inconsistencies with consideration of consequences (Fig. 2).

<table>
<thead>
<tr>
<th>Risk level: ( R = F \cdot W F^2 ) (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \geq 100 )</td>
</tr>
<tr>
<td>Catastrophic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F - Frequency of risk</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>very often (daily)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>often (every week)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>periodically (monthly)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>sometimes (every six months)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>rarely (once a year)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BK - weight factor of the risk consequence level</th>
<th>Value</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>risk can affect the results of all processes</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>risk can affect the results of two or more processes, but not all</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>risk can affect the results of at least one of the processes</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>the risk is localized in one part of the process, the impact on the process result is excluded</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>the risk does not affect the university's process (s)</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 2. Ranking of probability, degree of influence and significance of risks

To calculate the effects of the risks, information is provided on the main indicators of the HEI activity (based on the financial and management reporting) and the end result of the activity is calculated taking into account the established level of risk.

In the direct management of the risks of the educational activities of the HEI, such methods as refusal of acceptance should be followed; risk avoidance; minimizing the negative impact of the risk; creation of reserve funds; transfer of risk (allocation of probable consequences of risk). Most of these methods have an impact on accounting — either methodically or organizationally. Yes, the creation of reserve funds will require these transactions to be reflected in the accounts, with mandatory prior documentation and verification of the consolidation of such operations in accounting policies. In the absence of disclosure in the accounting policy of HEI, it is necessary to amend the Accounting Policies.

After risk mitigation actions, it is carried out a reassessment of risk acceptability. At this stage, each risk is assessed and a generalized risk assessment is made regarding the outcome of the QMS processes. And the accounting information is provided along the identical sections identified in the second stage, in order to compare and evaluate the effectiveness of minimization actions.

With regard to analyzing the performance of a risk reduction plan and identifying new risks, its effectiveness is considered to be achieved if all risks are managed. The information is provided according to the established reporting form (in accordance with the Accounting Regulations).

To evaluate any implementation in domestic practice, use a metric system that reflects the ratio of costs and results. There are different points of view in the scientific literature regarding the
types of activity effects. So, based on the specifics of the HEI activity, let us stop on: economic, scientific, technological, social one and let us analyze them on the example of the State University «Zhytomyr Polytechnic».

In particular, the scientific and technical effect is based on the increase of public activity of teaching staff, the protected certificates for scientific works, the increase of individual ratings, citation indices, and the number of international internships, individual grants and the perspective of using the scientific developments.

An economic effect that encompasses a system of indices reflects the ratio of results and cost. Thus, since 2016, the volume of providing educational and other services has increased for 1.7 times, while their profitability — almost for 1.8 times. Moreover, the university managed to achieve a reduction in the cost of educational services through the introduction of energy efficiency and energy saving, provided that the cost per student increased by 3—5% annually. In general, for the period 2016—2018 the increase in profit from improving the quality of educational activity was about 25%, and only due to the introduction of QMS in 2018 was formed up to 120 thousand UAH of profit.

The social effect is the increase in the competitiveness of students, which is confirmed by the increase in the number of scholarships, prize winners of competitions and competitions for the period 2016—2018 by 2.7% and an increase in the possibility of employee bonuses by an average of 10% due to the released funds from the reduction of unjustified amounts.

**Conclusions.** The implementation of QMS as one of the factors of competitiveness in the market of educational services requires the implementation of effective risk management of educational activities, which should take into account the structure of such institution, features of the division of responsibilities and authorities, functioning process monitoring subsystems, and must be provided with operational accounting information.

In the conducted research, the risks of failure to meet the needs of the stakeholders of the HEI were identified at the theoretical level. This made it possible to develop a map of risks of HEI with an indication of the corrective management actions for each component of the QMS process, within which organizational accounting measures are substantiated. In particular, the procedure for organizing information support for activities to minimize the risks of educational activities, indicating corrective management actions, performers, responsible entities and baseline data is proposed.

Taking into account the presented sections of information, which provides the requests of management staff at each stage of the QMS, the necessity to use the budgeting system as an effective tool for planning and controlling costs is substantiated. The substantive content of the components of the accounting policy of HEI in terms of sources of financing costs and their use is determined. Properly consolidation of these provisions in the regulatory document are the characteristics of a rational management accounting organization, which is the key to making effective decisions on risk management, ensuring their flexibility and strategic orientation of the HEI. In addition, considerable attention is given to the order in which the necessary information is obtained, with the determination of accounting staff actions at each stage of managing the risk of educational activities of the HEI.

The described approaches to accounting will help to improve the process of risk management of educational activities of HEI, thereby enhancing its competitiveness and securing its proper place in the domestic and world markets.

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