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**INTEGRATION OF THE INTERNAL CONTROL SYSTEM FOR
FINANCIAL STABILITY OF THE ORGANIZATION**

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Abstract

The article investigates the issues of functioning and improvement of internal control systems in research organizations. The analysis of the relevant issues reveals a low rate of readiness of these organizations for the formation of effective systems of internal control and risk management. This is due to the lack of methodological and regulatory framework, weak scientific and practical development of issues of adaptation of modern control systems to the specifics of research structures. Resource and financial constraints of the research sector organizations make them relevant issues, as a narrow application of internal control instruments, and their closer integration into the management system to address and support a wide range of management tasks. In accordance with this, the article proposes an approach that justifies the possibility and feasibility of practical use of elements of the internal control system to improve the efficiency of the financial policy of the organization. The main elements of this technique are the tools of the internal control system to assess the risks and threats of the organization, followed by an assessment of their impact on the financial stability of the research organization. The implementation of the proposed method provides for an expert assessment of the most important factors of sustainable development of the organization, which allows to assess the complex impact of opportunities and threats on the development of strengths and weaknesses of the economic entity.

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Keywords: Internal control, internal control system, financial stability, research organizations.



1. Introduction

The internal control system has become an integral component of corporate governance. According to the Lima declaration of control guidelines, internal control is part of the system of regulation of the company's processes in order to detect deviations from the accepted standards of their functioning (Lima Declaration of control guidelines, 1977).

In the modern economic literature, there are many works devoted to the analysis of topical issues of financial interrelations, controlling and financial control - these are primarily the work of Almajali, Mansour, & Maqableh (2016), Al-Sarayrah, Al-Salti, & Kattoua (2016), Elahi (2013), Eldridge, Waarden, Van Der Wiele, & Williams (2013), El-Masri, Orozco, Tarhini, & Tarhini (2015), Hajir, Obeidat, & Al-dalahmeh (2015), Jiang & Liu (2015), Masa'deh, Obeidat, & Tarhini (2016) and Schroeder (2014).

In management practice, currently there are three main models of internal control, (Lukin, 2012) reflecting the evolution of approaches to its implementation:

- confirming model of internal control: primarily focused on the assessment of compliance of the audited objects to the requirements of the legislation and internal documents of the company;
- process-oriented model of internal control, where the company is considered as a sequence of processes, and its functional units are considered as stages of these processes;
- risk-oriented model that defines the process of risk management as part of the internal control system of the enterprise.

The most popular in the management practice of international and Russian companies is the risk-oriented model of internal control. The risk-oriented approach at the heart of internal control processes determines the risk management system, where risks are analyzed and assessed taking into account the probability of their occurrence by studying the causes, consequences and ensuring systematic control over each type of risk.

The implementation of the risk-based model ensures that the management of the organization is confident that in this case the risks of activities are identified, analyzed, managed and correspond to a certain final risk of the company and the strategic goals of the company. This model is considered as an effective tool that provides significant advantages of the organization in current conditions. Especially its application is relevant for organizations that operate independently in the risk zone. In particular, it is the organization of the research sector.

For Russian research organizations, the formation of effective internal control systems is an important methodological task. At the same time, scientific and practical interest is not only the narrow application of control systems and models, but also their closer integration into the management system to solve and support a wider range of important management tasks. Therefore, there is now a need to explain the problems associated with the organization of control systems, their effective functioning and coordination with the general management system of the organization.

There is no doubt that the organization of the internal control system in any organization guarantees sustainable and successful development by countering negative factors affecting the organization. On the other hand, the creation and organization of the internal control system gives a lot of difficulties and problems during the long-term period (Tourischeva, 2017). The formation of an internal control system cannot be considered as the task of only one functional service. It has a cross-cutting

character, which is included in all levels of enterprise management. Its solution requires special attention and a separate place in the formulation and development of the general management system of research area (Eliseev, Ivanov, & Khristolyubova, 2018).

2. Problem Statement

The functioning of the internal control system is implemented in conditions of increasing competition and increasing dynamism of the business environment of economic entities. In the context of the digital economy, approaches to the organization of control and risk management for different companies should be differentiated. From one side, these are companies that are more inherent in the material component of their activities. From another side, these are organizations that will make full use of digital technologies. For this reason, different rates of development of these sectors are predicted. If the first sector demonstrates high dynamism of development, the second sector shows exponential development and it requires qualitatively different directions of development of risk management tools.

Organizations of the research sector, characterized by a high level of intellectual component, intangible assets and a high specific weight of software and information products are rapidly shifting to the second sector. For such organizations, there is a wider and unique risks area, the effect of may violate the financial stability of organizations of this type. Financial sustainability is crucial for research organizations. This is due to the issues of financing their activities from external sources (including government), which, as a rule, constitute a significant share in the amount of funding. The expectations and concerns of investors are determined primarily by the financial position of the organization.

In identifying the features of risk control in research organizations, it is necessary to note the aspect of state participation in their capital. In addition to the characteristics that are associated with the specifics of intellectual products and research areas, the participation of the state imposes certain obligations on the research organization. Obligations include: tighter accountability, openness of business operations and processes, criteria requirements for indicators of financial condition. Experts emphasize that the effective functioning of the internal control system in research organizations with government involvement reduces the volume and complexity of external governmental control over these economic entities (Ivanov, 2015).

There is some strong analytical evidence provided by expert auditors (PWC), indicating that ineffective internal control in enterprises with government involvement leads to economic crimes. Outcomes from the research sector should be supplemented in the area of cybercrime. Today it is the most dangerous type for the enterprises making intellectual production. In this case, it requires internal control tools that would allow to neutralize the existing threat: serious protection of software and servers, differentiated storage of information on the most important developments, restrictions in access to information for employees at different levels, etc. (Kondrashov, 2017).

Internal control is based on corporate standards, which provide for the use of control procedures at all stages of business processes. Russian research organizations are characterized by a low level of corporate culture, underestimation of the practical value of well-built systems of corporate governance. The consequence of this is that internal control is carried out formally and does not have additional value for the organization, does not increase the efficiency of its work.

The situation is complicated by the fact that the formation of the internal control system is regulated by the most common set of regulatory documents that do not take into account the specifics of organizations engaged in the development and implementation of intellectual products. But such organizations differ significantly in a whole range of characteristics, it is almost impossible for them to develop common approaches to building control and management systems. The complexity of this issue is confirmed by the fact that in the process of research and study of a large amount of sources on the topic of the article, we have not identified a description of the fundamental features of the construction, implementation and improvement of internal control systems for research enterprises. In our opinion, this fact can be explained by the sufficient closeness of organizations of this type, and for Russian organizations – even a little experience in the functioning of internal control systems in market conditions (Ivanov, 2015).

Along with other functions, the internal control system should be linked to the criterion of a certain economic efficiency, that is, the ratio of the result to the cost of achieving this result. In this context, an internal control system is considered reliable if it has two characteristics. First, it is flexible in constantly changing conditions of internal and external environment. Secondly, it ensures the achievement of the goal at the minimum allowable cost (Yudina, 2016). For research organizations in conditions of limited financial support of their activities, it is attractive that the internal control system not only performs its functions, but also supports a wider range of management decisions (Kuznetsova, 2014).

Individual research organizations revealed the lack of development of the considered aspects. The most relevant direction of the research is the study related to the expansion of the capabilities of the internal control system for the purpose of strengthening the financial condition and improving the financial stability of the research organization. This approach can be considering the dual: on the one hand – the implementation of the internal control system of its inherent functions, on the other hand – its integration into a single management system in order to achieve the key development goals of the organization. The solution to this problem is to fully meet the needs of scientific research organizations in the field of management and counter the risks, give the impetus and expands the subject of scientific research in this area, and harmonizes the adaptation of scientific developments into practice of control activities of the organizations of the scientific research sphere.

3. Research Questions

Focusing on the need for further scientific and practical development of issues on the identified issues, the main areas of research in this article are the following items:

- the researching of the possibility of using the internal control system to improve the efficiency of the financial policy of the organization;

the researching of the integration of the internal control system in the processes of ensuring the financial stability of the organization research sphere.

4. Purpose of the Study

The objectives of the study were determined in accordance with the specially allocated area of problems. Purpose of the study:

- to substantiate the possibility of practical using of elements of the internal control system to improve the efficiency of the organization's policy in the financial stability area;
- to propose a methodology for the integration of the internal control system in the processes of ensuring the financial stability of the organization of the research sphere.

The object of the study is a Russian research organization (further in the article - the Organization) with state participation, dealing with the issues of precise mechanics for the needs of the military - industrial complex of the country.

5. Research Methods

In accordance with the set goals, we offer a practically oriented approach to the integration of the internal control system in the processes of ensuring the financial stability of the Organization. The methodological basis of this approach is the key principles and generally accepted provisions of the internal control system. To implement the methodology of integration of the internal control system into the processes of ensuring the financial stability of the organization of the research sphere, we monitored four main blocks of strategic indicators that reflect the activities of the Organization, and are the most significant in order to ensure financial stability.

Table 01. Purpose and performance measure of the Organization

Purpose	Indicator	Specific weight	Calculation
<i>FINANCIAL RESULT</i>			
To improve the financial stability of the Organization	Amount of dividends	0,15	Size (value) of the dividends for the years
	Return on equity (ROE - Return on equity)	0,15	ROE = Net profit/ Average annual share capital * 100%
	Profit per share	0,05	Earnings per share (thousand rubles / share)
	Dynamics of EBITDA to the previous year	0,05	Profit before taxes, interest and depreciation (EBITDA)
	Dynamics of specific revenue (net of irregular components) per year per employee (growth compared to the previous year)	0,05	Revenue for the year / number of employees
	Compliance with the ratio of Own capital / Borrowed capital	0,05	Own capital / Borrowed capital
<i>DEVELOPMENT POTENTIAL</i>			
To enhance the development potential of the Organization	Scientific potential of the staffing	0,1	Employees with an academic degree / total number of employees * 100%
	Compliance with the modernization and innovation development plan	0,1	Planned activities carried out on due time / total number of activity * 100%
<i>PROCESSES AND MANAGEMENT SYSTEM</i>			

Purpose	Indicator	Specific weight	Calculation
Ensure the effectiveness of the Organization	Implementation of the action plan to improve competitiveness and efficiency	0,05	Planned activities carried out on due time / total number of activity * 100%
	Compliance of the management system with the requirements of state military standards	0,05	No deviation from the requirements of state military standards
<i>EXTERNAL ENVIRONMENT</i>			
Communicate effectively with external environment	The index of satisfaction with the work or the services of the Institute	0,1	Absence of claims and complaints / total number of contracts* 100%
	Revenue dynamics in the section of main Customers by key works or services	0,1	The ratio of earnings according to years

Source: Authors.

To assess the effectiveness of the use of control system tools, we conducted an analysis of the Organization. On this basis, the matrix SWOT is formed (Figure 01).

The list of characteristics presented in figure 1 is far from exhaustive. It can also include: the outflow of young professionals (including highly qualified) in business and to work abroad (threats), the lack of a open system of management of many processes (weaknesses), high reputation of the Organization (strengths), etc.

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Market leadership in terms of production volumes; 2. Availability of unique innovative products; 3. High technological level of development or products; 4. Availability of highly qualified specialists; 5. IT-infrastructure of the Institute comply with the high modern requirements 	<ol style="list-style-type: none"> 1. Insufficient resource base (low level of own funds); 2. The information environment of the organization is not sufficiently developed. For example, low level of communication and information exchange; bad quality of management information for the internal control system, etc.; 3. The marketing system is not sufficiently developed (for most part of the products); 4. Inefficient financial planning system; 5. Unavailability of expensive scientific equipment
Opportunities	Threats
<ol style="list-style-type: none"> 1. The opportunity to attract investments (grants, etc.) taking into account the long-term development program and focus on obtaining the Russian internal rating; 2. System development of internal information base (monitoring of losses, competitors, etc.); 3. The use of new approaches taking into account the technologies of public administration and improvement of the legislative basis; 4. The emphasis of the state on increasing the integration communication between science and practice; 5. Modernization of the country's military-industrial complex and potential growth of orders for the Institute 	<ol style="list-style-type: none"> 1. Reduced ability to attract Bank loans (to replenish working capital); 2. Lack of an effective system of internal control (conflicts of interest and high threats of internal errors and crimes); 3. Growing competition for certain types of products with international companies present or seeking to enter the Russian market; 4. Development of financial and economic crisis; 5. Poorly diversified customer base

Figure 01. SWOT - analysis of the Organization

Source: Authors.

Based on the analysis of the SWOT matrix information (Figure 01), with the help of expert assessments it is possible to identify the most significant characteristics that affect the development of the Organization. We present a rating scale to assess the level of influence of the organization's strengths on its market position (Table 02).

Table 02. Scale of assessment of strengths of the Organization, points

№	Assessment	Explanation
1	5	A distinct advantage
2	3-4	The advantage potential is higher than that of the nearest competitors
3	1-2	There is a high probability that the potential for the development of a strong side is higher than that of competitors

Source: Authors

According to the scale (Table 02) it is possible to assess the strengths of the Organization presented in Figure 01. (Table 03).

Table 03. Expert assessment of the organization's strengths, points

№	Strengths of the Organization	Points
1.	S1 - leadership in the market for the most part of the products;	5
2.	S2 - availability of unique innovative products;	5
3.	S3- availability of highly qualified personnel;	4
4.	S4- high technological level of development (products);	3
5.	S5- IT-infrastructure of the Institute comply with the high modern requirements	2

Source: Authors

In this situation, the key strengths of the Organization are the leading market position and the availability of unique products.

By analogy with the strengths, we present data on the weaknesses of the Organization in two tables (table 4, 5), and W_i - the degree of influence of the Organization's weaknesses on its market position. Table 4 presents the rating scale for the evaluation of indicators W_i .

Source: Authors

Table 04. Rating scale to assess the impact of weaknesses of the Organization on its position in the market

№	Score, points	Explanation
1.	-2-1	There is a high probability that the position of the weak side is lower than that of competitors
2.	-4-3	The position of the weak side is lower than that of the nearest competitors
3.	-5	A distinct advantage of competitors

Source: Authors

Poor resource base (the Organization is a commercial organization and can not always count on budget financing and financing under contracts), including due to limited access to bank loans and their high cost, is a significant obstacle to the active development of the product line of the Organization.

Table 05. Expert assessment of weaknesses of the Organization, points

№	Weaknesses of the Organization	Points
1.	W ₅ - Insufficient resource base (low level of own funds);	-5
2.	W ₄ - The information environment of the organization is not sufficiently developed. For example, low level of communication and information exchange; bad quality of management information for the internal control system, etc.;	-4
3.	W ₃ - Inefficient financial planning system;	-3
4.	W ₂ - The marketing system is not sufficiently developed (for most part of the products);	-3
5.	W ₁ - Unavailability of expensive scientific equipment	-1

Source: Authors

In addition, insufficient planning policy and marketing promotion strategy together do not allow to organize the sales system in the most effective way (taking into account available resources).

Table 06 and Table 07 provide an opportunities assessment and threat assessment.

Table 06. Scale of assessment of the impact of opportunities and threats to the Organization on its market position

№	Score	Impact
1.	0,71- 1,0	The strong degree of impact
2.	0,36 -0,70	The average degree of impact
3.	0,00 -0,35	The weak degree of impact

Source: Authors

Create a matrix to assess the complex impact of opportunities and threats on the development of strengths and weaknesses of the Organization, by multiplying the corresponding values of S_i , W_i , O_i , T_i and adjusting them to the merger rate (d_{ij}) (Table 7).

Table 07. Assessment of the impact of opportunities (O_i) and threats (T_i) on the Organization

Opportunities / Threats	Score
O ₁ - The opportunity to attract investments (grants, etc.) taking into account the long-term development program and focus on obtaining the Russian internal rating;	0,9
O ₂ - The use of new approaches taking into account the technologies of public administration and improvement of the legislative basis;	0,8
O ₃ - System development of internal information base (monitoring of losses, competitors, etc.);	0,7
O ₄ - Modernization of the country's military-industrial complex and potential growth of orders for the Institute	0,6
O ₅ - The emphasis of the state on increasing the integration communication between science and practice;	0,6
T ₁ - Reduced ability to attract Bank loans (to replenish working capital);	0,9
T ₂ - Poorly diversified customer base	0,9
T ₃ - Growing competition for certain types of products with international companies present or seeking to enter the Russian market;	0,7
T ₄ - Lack of an effective system of internal control (conflicts of interest and high threats of internal errors and crimes);	0,5
T ₅ - Development of financial and economic crisis;	0,3

Source: Authors

Table 08 presents an estimate of the d_{ij} , the degree of impact (0 - is the weak degree of impact; 0,5 - is the average degree of impact; 1,0 - is the strong degree of impact).

Table 08. Assessment of external opportunities and threats impact factors on the strengths and weaknesses of the Organization

* d_{ij}	O_1	O_2	O_3	O_4	O_5	T_1	T_2	T_3	T_4	T_5
S_1	1	0,5	0	0,5	0,5	1	1	1	1	0,5
S_2	1	1	0,5	0,5	0,5	0,5	0	0,5	0,5	0
S_3	0,5	0	0	0,5	0	0,5	0	1	0	0
S_4	1	0	1	1	0,5	0,5	0	1	0	0,5
S_5	0,5	0,5	0,5	0,5	0	1	0	1	0	0,5
W_1	1	0	0	0,5	0	1	0	0	0	1
W_2	0,5	1	1	0	0	1	1	0,5	0,5	0,5
W_3	0	0,5	1	0	0	0,5	1	0,5	0,5	0
W_4	0	0,5	1	0,5	0,5	0	0	0,5	1	0
W_5	1	0,5	0	0,5	0,5	1	0	1	1	1

Source: Authors

Table 09 shows the complex system of interrelations of all four quadrants of the SWOT matrix. In a few selected squares-the most important assessment of the impact of external and internal factors on the position of the Organization.

Table 09. Assessment of the complex impact of opportunities and threats on the development of strengths and weaknesses of the Organization

	O, T	O_1	O_2	O_3	O_4	O_5	T_1	T_2	T_3	T_4	T_5
S, W	* d_{ij}	0,9	0,8	0,7	0,6	0,6	0,9	0,9	0,7	0,5	0,3
S_1	5	4,5	2	0	1,5	1,5	4,5	4,5	3,5	2,5	0,75
S_2	5	4,5	4	1,75	1,5	1,5	2,25	0	1,75	1,25	0
S_3	4	1,8	0	0	1,2	0	1,8	0	2,8	0	0,18
S_4	3	2,7	0	2,1	1,8	0,9	1,35	0	2,1	0	0,45
S_5	2	0,9	0,8	0,7	0,6	0	1,8	0	1,4	0	0,3
W_1	-1	-0,9	0	0	-0,3	0	-0,9	0	0	0	-0,3
W_2	-3	-1,35	-2,4	-2,1	0	0	-2,7	-2,7	-1,05	-0,75	-0,45
W_3	-3	0	-1,2	-2,1	0	0	-1,35	-2,7	-1,05	-0,75	0
W_4	-4	0	-1,6	-2,8	-1,2	-1,2	0	0	-1,4	-2	0
W_5	-5	-4,5	-2	0	-1,5	-1,5	-4,5	0	-3,5	-2,5	-1,5

Source: Authors

These factors include: market leadership in a significant list of products; high technological level of development (products); the ability to attract investment (grants, budget financing, targeted financing), taking into account the long-term development program and focus on obtaining the Russian internal rating system development of internal information base (monitoring of losses, competitors, etc.); weak resource base (insufficient level of own funds); insufficiently developed information environment within the organization: low level of communication and information exchange; low quality of management information for the internal control system, etc.; insufficient marketing system for a significant number

of products; weak financial planning system; reduced ability to attract bank loans (to replenish working capital); lack of an effective system of internal control (conflicts of interest and high threats of internal errors and crimes); growing competition for some products with international companies present or seeking to the Russian market; poorly diversified customer base.

The integration use of elements of the internal control system involves the development and formalization of the organization's methodology for assessing risks, threats and opportunities of processes. Assessment and reduction of risks (threats) is carried out as follows:

- the identification of risks (threats);
- the establishment of indicators of risks (threats) {O, D, S: O - indicator for assessing the probability of occurrence of this type of risk (threat); D - indicator of the possibility of detection using the existing method of this type of risk (threat); S - indicator for assessing the significance of the consequences of this type of risk (threat)};
- determination the priority number of risks (further - PNR);
- making the necessary decisions based on the magnitude of the PNR.

Identification of risks (threats) is carried out by the expert group before or during the implementation of the relevant activity (stage of work). Here is an example of determining the main risks and threats to the planning process:

- risks: late preparation of documents for the conclusion of contracts; poor-quality preparation of contracts;
- threats: sequestration of the Federal target program of financing concerning the Organization; impossibility of implementation of the received results of researches.

Establishment of indicators of risks and threats (O, D, S) on a ten-point scale is carried out by the expert group. The established agreed and averaged expert values of indicators O, D, S are recorded in the relevant tables. For the examples presented for the planning process, the table is as follows (Table 10):

Table 10. Example of types of risks and results of their analysis for the planning process (in the part of research and development, R&D)

Risk	O	D	S	PNR
Late preparation of documents for the conclusion (agreement) of the contract	5	5	10	250
Poor-quality preparation of the agreement (contract)	3	3	8	72

Source: Authors

Determination of the priority number of risk by the expert group is made by the formula:

$$PNR = O \times D \times S, \quad (1)$$

the PNR - priority number of risks.

Based on the value of the PNR for each risk, the expert group takes the appropriate decision:

- the PNR is less than 40 means a low level of this type of risk / threat in which case no additional measures are required;

- the PNR is more than 40, but less than 100 means an acceptable level of risk, in this case it is possible to start working out preventive actions to reduce the risk;
- the PNR is more than 100 means a high level of this type of risk / threat - in this case it is required immediate development and adoption of measures to reduce the risk.

In the event that the risk / threat of PNR exceeds 100, the expert group determines the potential causes of such a high level of risk. These causes are considered by the expert group as undesirable situations and the level of possibility of these causes is assessed by means of indicators O, D, S and the calculation of the PNR. If the PNR for any of the reasons exceeds 100, the expert group formulates preventive actions and then assesses the level of risk of non-compliance in the same way. It is necessary to continue work on such a scheme further. In this case, the level of risk should be at an acceptable level, and preventive actions should yield results.

6. Findings

The proposed approach confirms the practical possibility of integrating elements of the internal control system into the processes of implementation of the financial policy of the organization, in particular, in order to strengthen financial stability. Step-by-step implementation of the proposed method allowed to obtain results.

In accordance with the objectives of the Organization in the areas of "Finance", "Development Potential", "Processes and management system", "External environment" indicators were proposed and their weight values were determined in accordance with the expert assessment of the impact on the achievement of financial stability.

The SWOT matrix was formed based on the results of effective use of internal control system tools. This matrix reflects the strengths and weaknesses of the Organization, opportunities and threats to its development. We have conducted an expert assessment of the most significant characteristics of the matrix that affect the development of the Organization. Expert evaluation is presented in this article. This study allowed us to assess the complex impact of opportunities and threats on the development of strengths and weaknesses of the object. Thus, monitoring and improvement will best ensure the Organization's financial sustainability in the current and long term.

The selected factors allowed to rank the internal management processes in relation to the organization under study and to identify those internal processes for which the impact of these factors is very critical. These are the processes of planning, promotion and marketing of intellectual products, resource support, technological support in terms of design and production; information support. This article proposes an expert method of assessing the risks, threats and opportunities of processes. Its implementation makes it possible to give a quantitative assessment (points), which facilitates the process of monitoring the level of risk and assessing the impact of preventive actions to reduce the level of risk to an acceptable value.

7. Conclusion

The technique presented in the article demonstrated the practical viability and effectiveness of the integration of elements of the internal control and risk management system in the processes of ensuring the financial stability of economic entities. The proposed method is based on the general view and traditional views on the functioning of internal control systems. At the same time, the methodology demonstrates the possibility of not only narrowly targeted use of internal control tools, but also their closer integration into the management system to solve and support a wider range of important management tasks. It is important not only to understand how the tools of the internal control system are used, but also in which processes of economic entities their application is most effective.

The approach presented in the article is a response to the current need to highlight issues related not only to the organization of control systems and increase their efficiency, but also to the coordination of their functioning with the overall management system of the organization. In this regard, it is important to further develop the conceptual approach, which consists in improving the goals and objectives of the internal control system and the use of this improved system for the implementation of long-term development programs of organizations.

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References

- Almajali, D., Mansour, K., & Maqableh, M. (2016). The impact of electronic supply chain management usage on firm's performance. *International Journal of Communications, Network and System Sciences*, 9(6), 280-293. <https://dx.doi.org/10.4236/ijcns.2016.96025>.
- Al-Sarayrah, S., Al-Salti, Z., & Kattoua, T. (2016). The effect of culture on strategic human resource management practices: A theoretical perspective. *International Journal of Business Management and Economic Research*, 7(4), 704-716.
- Elahi, E. (2013). Risk management: The next source of competitive advantage. *Foresight*, 15(2), 117-131. <https://dx.doi.org/10.1108/14636681311321121>.
- Eldridge, S., Waarden, J., Van Der Wiele, T., & Williams, R. (2013). Management control systems for business processes in uncertain environments. *International Journal of Quality & Reliability Management*, 31(1), 66-81. <https://dx.doi.org/10.1108/IJQRM-03-2012-0040>.
- Eliseev, A., Ivanov E., & Khristolyubova V. (2018). The system of internal control in terms of the process approach of company management. *Vestnik of Russian University of Cooperation*, 2(32), 26-29. [in Rus.].
- El-Masri, M., Orozco, J., Tarhini, A., & Tarhini, T. (2015). The impact of IS-business alignment practices on organizational choice of IS-business alignment strategies. Paper presented at the *Pacific Asia Conference on Information Systems, PACIS 2015 – Proceedings*. URL: <https://aisel.aisnet.org/pacis2015/215/>.
- Hajir, J., Obeidat, B., & Al-dalameh, M. (2015). The role of knowledge management infrastructure in enhancing innovation at mobile telecommunication companies in Jordan. *European Journal of Social Sciences*, 50(3), 313-330. URL: <https://www.scirp.org/reference/ReferencesPapers.aspx?ReferenceID=1896959>.

- Ivanov, O. (2015). Designing risk-oriented system of internal control and audit in large corporation (illustrated by the public company Russian Railways). *Vestnik of the Plekhanov Russian University of Economics*, 6, 26-39. <https://dx.doi.org/10.21686/2413-2829-2015-6-26-39>. [in Rus.].
- Jiang, J., & Liu, C. (2015). High performance work systems and organizational effectiveness: The mediating role of social capital. *Human Resource Management Review*, 25(1), 126-137. <https://dx.doi.org/10.1016/j.hrmr.2014.09.001>
- Kondrashov, D. (2017). Trends in the development of internal control systems. *Innovative Development of the Economy*, 6(42), 292-300. [in Rus.].
- Kuznetsova, O. (2014). Methodological aspects of internal control. *Actual Issues of Economic Sciences*, 14, 1-6. [in Rus.].
- Lima Declaration of control guidelines (1977). *IX Congress Of the international organization of Supreme audit institutions (INTOSAI)*, Lima (Peru), 17.10.1977. URL: <http://base.garant.ru/2570738/>. Accessed: 3.06.2018. [in Rus.].
- Lukin, A. (2012). Basic characteristics of the essence of financial control. *Fundamentals of Economics, Management and Law: Periodical All-Russian Scientific Journal*, 3, 43-46. [in Rus.].
- Masa'deh, R., Obeidat, B., & Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modeling approach. *Journal of Management Development*, 35(5), 681-705. <https://dx.doi.org/10.1108/JMD-09-2015-0134>.
- Russian review of economic crimes for 2016*: PWC. URL: <http://www.pwc.ru/ru/press-releases/2016/economic-crimes-2016.html>. Accessed: 3.06.2018. [in Rus.].
- Schroeder, H. (2014). An art and science approach to strategic risk management. *Strategic Direction*, 30(4), 28-30. <https://dx.doi.org/10.1108/SD-04-2014-0056>.
- Tourischeva, T. (2017). The Formation of the internal control system (ICS) in the Russian context. *The Azimuth of Scientific Research: Economics and Management*, 3(20), 351-354. [in Rus.].
- Yudina, L. (2016) Economic reliability and risks. *Bulletin of the South Ural State University. Economics and Management*, 10(3), 51-53. <https://dx.doi.org/10.14529/em160306>. [in Rus.].