

# *Digital Mechanisms of Development of Possessory Risk Management Systems under New Economic Conditions*

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**Abstract:** Under the dynamically changing current conditions characterized with a significant number of possibilities and risks, occurrence of new variants of business process modifications and continuous transformations of state regulation mechanisms, the key task of the organization management systems development must be increased flexibility of the decisions developed thereby in the course of accounting and constant tracking new risk forms and types in general, and possessory risks in particular. Despite constantly growing volumes of owners' and other stakeholders' contributions in possessory risk management tools, possessory risk management processes and processes supporting the whole system of management of regulatory requirements under current conditions mainly do not take into account the rate of changes in the external environment and remain unsusceptible to processes taking place in other sub-systems of the organization management, and information about risks accumulated within them, are fragmental in nature. We believe that improved efficiency of possessory risk management systems may be achieved through implementation of digital mechanisms and risk management tools in their structure. This article represents the vision of authors on how the digitization process runs in the organization's possessory risk management systems.

## 1. Introduction

It is obvious that despite increasing volume of documents containing recommendations of international and national organizations and professional associations related to the risk management issues, significant number of scientific research in this sphere and growth of investments by owners and other stakeholders in the development of the risk management systems

in general and possessory risk management systems, in particular, in practice possessory risk management in most Russian and foreign companies is characterized mainly by application of methods and mechanisms of manual management by a direct owner and absence of accounting factors and specific features of development of both external environment of the organization, and allied departments and business units of the same organization. At the same time, the current business environment has becoming more and more multi-aspect:

- digital modifications of management systems performed in many Russian and international organizations have led to accelerated development of IT environment and operational models integrated in the structure of these systems [1, 2, 3, 4];

- the key component of the efficiency of an owner acting as a key stakeholder has been formation of mechanisms of its influence on processes of the analysis of the organization's tendency to the risk and management of this tendency under the system of organization's possessory risk management system [5];

- in the process of a change of technological structure, the regulatory framework has been developed and becoming more complicated, that, which regulates the organization's activity in general and risk management activities, along with the increase of cost and value of implementation of compliance assurance systems within the organization's management systems;

We believe that under this context there is a possibility for owners acting as main stakeholders, top managers and risk managers to make their contribution to increase of systems flexibility by means of higher-quality decision making process for management of main types of possessory risks and strengthening public trust in their companies.

## 2. Concept Development

Under the current conditions, integration of digital mechanisms of possessory risk management in corporate chains of value creation is underway in two key directions.

The first direction is formation of the integrated flow of operations under the organization's protection lines formed by managers with participation of an owner.

At the first protection line, risk managers guided and controlled by the organization's owner and top managers furnish the organization's management system with the mechanisms aimed at identification, analysis, assessment of main types of possessory risks, accompanying organization's activity, as well as means of control and management of these risks.

At the second protection line, the task of the organization's owners and top managers is increased transparency and efficiency of the function of management of possessory risks by means of implementation of management decisions based on measures and methods, developed under the first protection line. Another important task of the second protection line is creation of mechanisms of analysis and control of compliance of main and auxiliary business processes of the management system with regulatory requirements, set to the organization by state regulation authorities.

At the third protection line, assurance of the continuous functioning of the possessory audit mechanism takes the central place in activities of top managers and the owner.

It is important to note that most analytical activities related to implementation of the internal control and audit are currently implemented by special structural subdivisions of the management system under activities for security assurance. This results in obtaining by the owner and management of the organization of the information on implementation of risk events fait accompli, i.e. when the event has been implemented already and, therefore, responding to its implementation consequences. We believe that implementation of the possessory audit mechanism under the third protection line will allow formation a set of measures aimed at prior identification and prevention of

most significant types of possessory risks, for constant control of all business processes of the organization.

Formation of the possessory risk management system mechanism above mentioned as the digital complex of continuous monitoring and control, will allow increasing involvement of the owner as a main stakeholder in management processes realized under the stakeholder model of corporate management, and increasing efficiency of activities of top managers and risk managers related to timely identification, analysis, assessment and management of main types of possessory risks, and, therefore, improving managers' performance and the organization's ability to create added cost for the owner.

The second direction is integration of digital mechanisms in sub-systems of strategic, tactic and operational risk management based on the use of the scenario approach to risk management, as well as the use of statistical risk data analysis methods.

There is a great gap between operational and strategic risk management under the stakeholder model of corporate management in most Russian and international organizations. Business processes of the risk management system are often represented with an isolated process, which is significantly segregated from corresponding business processes under solution of operational issues. Here, maximum allowed indicators of organization's susceptibility to a risk determined by the owner, even if formally documented, are not embodied in daily operations of the management system.

It is obvious that possessory risk management at any organization based on the owner's vision, on any digital complex of continuous monitoring and control specified above, may lead to critical understanding for making decisions at each level of the management system, as well as guarantee that deficient resources are used in the most efficient manner at most perspective areas and spheres of the activity.

To form integrated mechanisms of operational, tactic and strategic risk management within the digital complex of continuous monitoring and control, a consistent risk hierarchy should be built and mathematically correct aggregation and detailing of characteristics of these risks should be performed based on complex risk scenarios. In the structure of business processes of continuous monitoring and control, risks must be represented from the point of view of influencing the organization's operation, and potential commercial losses must be determined quantitatively to provide a basis for analysis and management of corporate risks at various spheres of the organization's activity.

### **3. Research Methods**

It is important to note that under current conditions only a small part of types of business processes for management of possessory risks may be improved using the mechanism described in the previous section. One more problem with implementation of the suggested digital complex of continuous monitoring and control is that this process will require expensive transformations of both software and resource procurement of the organization's management systems, which during their integration may have a significant negative effect on the efficiency and stability of processes aimed at developing and implementing these management decisions. These circumstances of technological non-preparedness significantly hinder the process of implementation of digital mechanisms in possessory risk management systems both in Russian and international companies.

Here, considering inevitability of digitalization of key business processes and the growing number of new associated possessory risks types, we offer our own method to solve these problems.

#### 4. Results of the Research

Under the current conditions, it is not enough to ensure formation of a new technological platform alone to solve development issues regarding risk management organizations face. The key task is structuring of this platform in such a way that organizations could use it without serious adaptation to the existing structure of the management system. To do this, we deem it necessary to suggest the following decisions [6, 7].

The key component of the offered digital complex of continuous possessory risk monitoring and control is the mechanism of so called expanded control requests aimed at the study of the condition of all factors of the internal and external environment of an organization in order to reveal potential types of possessory risks. Here, implementation of these expanded control requests under the continuous monitoring and control will require from organization management systems minimal expenses for resources.

Another important component of the offered digital complex of continuous possessory risk monitoring and control is formation of the mechanism of processing and implementation of key tasks of the management system development, which application within the complex will allow the owner and management of the organization understanding that efforts generated under the stakeholder model of corporate management are aimed at achievement of maximum value for all stakeholders. Of the great importance is also understanding of the way implementation of the offered digital complex of continuous possessory risk monitoring and control should be reflected in possessory control and possessory audit mechanisms of an organization.

To manage new risk types associated with formation of digital economy under the offered digital complex of continuous possessory risk monitoring and control, the quantitative model developed by KPMG together with Douglas Hubbard may be used [1]. The model is formalized in such a way that the knowledge about a certain company required to launch the analysis process is minimized. This model advantage is in that it may be easily transformed based on indicators changes with time.

The next important component of the offered digital complex of continuous possessory risk monitoring and control may become the risk assessment method, which has been also developed by KPMG and facilitates the process of collecting and calculating data on consequences of interrelated possessory risks.

Another component of the offered digital complex of continuous possessory risk monitoring and control, which is no less important, is creation on its basis of conditions for simplifying processes of possessory control and possessory audit and comparing their results with the organization's business process efficiency indicators. This is important from the view of that under current situation, organizations may have several business processes leading to duplication of management actions, but in most cases to excessive efforts of control and supervisory functions of the management system, which decreases the organization's management system efficiency and increases associated costs for compliance with rules and regulations.

In this regard, we believe it is necessary to point out that the prerequisite of implementation of the offered digital complex of continuous possessory risk monitoring and control should be simplification and arrangement of business process of the organization's management system, since otherwise control means, which are in fact unnecessary and low-efficient, may be automated.

The final component of the offered digital complex of continuous possessory risk monitoring and control must be the mechanism to structure risk reports, whether conclusions, risk indicators, mitigation progress, qualitative risk characteristics, progress reports, management decisions taken or benchmarking information. This mechanism shall penetrate the whole management system of the organization. We believe that, with this mechanism implemented, the organization's owner and

management will be able to perform its possessory risk management duties covering complex risk management areas such as digital economy risks.

## 5. Conclusions

Under the current conditions, the value of the existing risk management methods may be increased through their integration and automation at organizations by several aspects. Digitalization of risk management ensures better transparency, management decisions quality in risk management, with less efforts and costs associated with such decisions.

This article analyzed the key digital modification trends in possessory risk management systems, which allow formation of the mechanisms to manage business process and control the risks associated with these business processes, and which are best to identify, assess and manage possessory risks.

## References

- [1] Christensen, C (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business School Press.
- [2] Sakharchuk Natalia S., Moseykin Yury N. (2018) *Conceptual Approaches to the Role of Education in the Formation of a Modern Business Community in Russia. Proceedings of the 4th EER International Conference on Social Sciences and Interdisciplinary Studies (EER-SSIS 2018) Palermo, Sicily, Italy August 18-20. P. 130-135*
- [3] Koryagina I.A., Khachatryan M.V., Klicheva E.V. (2018). *Development of mechanisms of value creation and risk management organization in the conditions of transformation of the economy of Russia. International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering. T. 12. № 1. C. 44-48.*
- [4] Goncharenko L.P., Sybachin S. A., Khachatryan M. V. *Peculiarities of Organizational Economic Mechanism Development in correspondence with State Strategic Management in Russia. Proceedings of Conference Trends of Technologies and Innovations in Economic and Social Studies (TTIESS 2017). Advances in Economics, Business and Management Research, volume 38, 2017. Atlantis Press, 2017*
- [5] Denisov I.V., Khachatryan M.V., Umnova M.G. (2018) *Corporate Social Responsibility in Russian Companies: Introduction of Social Audit as Assurance of Quality. Quality - Access to Success. T. 19. Vol. 164. C. 63-73*
- [6] Khachatryan M.V., Klicheva E.V. (2018) *The features of the relationship of developing the possessory risk management systems and ensuring the economic stability of the organization. Proceedings of the 4th EER International Conference on Social Sciences and Interdisciplinary Studies (EER-SSIS 2018) Palermo, Sicily, Italy August 18-20. P. 35-47*
- [7] Badvan Nemer Loay, Blazhenkova Natalia M., Klicheva Evgeniia V., Karaev Alan K., Yarullin Raul R. (2017) *Increasing the efficiency of the state fiscal and budgetary policy in modern conditions. International Journal of Applied Business and Economic Research Vol. 15, Issue 23 pp. 125-138*