

# Risk Management Culture as a Systematic Method for Ensuring Safety Development

Olha Prokopenko, Borys Kholod, Valentyna Pavlova, Viktoriia Niziaieva, Olena Shtepa, Victoria Orlova

**Abstract:** *Issues of developing a culture of risk management, today is perhaps one of the most significant in risk management. The lack of a well-built risk management culture is for many companies, one of the main barriers to building an effective risk management system.*

*It should be understood that all methods that are used to manage risk are as effective as the culture of risk management in the organisation. It depends on the culture of risk management how secure the organisation can feel as part of its development strategy.*

*The development of a risk management culture, in contrast to increasing the costs of expanding the risk management department, is an intensive way to increase the effectiveness of the risk management system and, as a result, provide the possibility of safe development under any market conditions and challenges. By cultivating a risk management culture for the entire hierarchy of employees, you can achieve much better results than simply hiring expensive risk managers.*

**Keywords :** *Risk Management, Risk Management Culture, Safety Development, Systematic Method.*

## I. INTRODUCTION

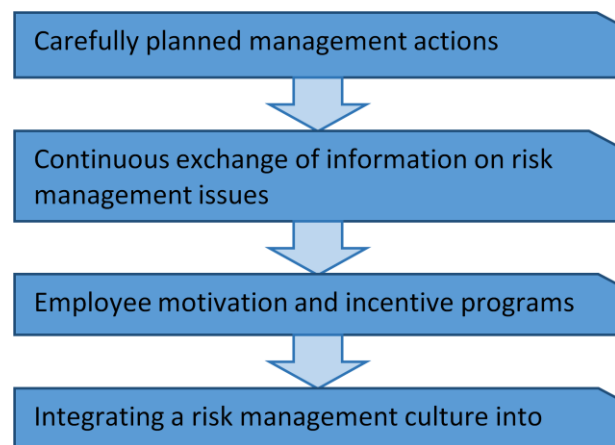
For any organised structure of any form of ownership, the desire to provide for existence and development is characteristic, and on the other hand, the question arises that any activity other than permanent stagnation will be exposed to various risks in one way or another.

The experience of many companies has made it possible to clearly understand that in the rapidly changing economic and political conditions, attempts to stop in development and fix a stable existence can lead even any most successful company to stagnation and collapse. Very well, this process can be illustrated by a quote from Lewis Carroll: "you need to run as fast just to stay in place, but to get somewhere, you must run at least twice as fast".

Naturally, in conditions of constantly changing internal and external factors of the environment in which the

organisation exists, the threat of potential risks increases many times, which is why the leadership of most companies does not spare the costs of maintaining and developing risk management units.

This policy seems quite reasonable, because who can better manage risk management than a team of qualified specialists, but there are pitfalls here, and to understand where they are hiding, let's pay attention to the general risk management scheme Fig.1 [1-5].



**Fig. 1. Risk management system diagram**

Analysing the risk management system, it becomes clear that specialists and managers of various areas will be involved in the risk management process, which begs the logical question - why not involve the maximum number of people in the management process? At first glance, this seems absurd, because the principle has long been known that an increase in the number of specialists working on a project does not always contribute to improving the quality and speed of its implementation, and nevertheless, such logic in the risk management process deserves a closer look [6-7]. A key element of the risk management system is a specialist specialising in their identification, analysis and decision-making to manage them; such a specialist ensures the performance of his functions due to the existing knowledge and experience. At this point, it is worth remarking that often the final decision on the managerial impact on risk can be made not by a specialist in this profile, but by a person vested with authority while relying on the expert opinion of the specialist [8-10]. It is logical to assume that with intensive development and an increase in the scope of possible situations at risk, the most effective management method will be to increase the number of risk management specialists. Following this logic leads to increased costs for the risk

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management department, staff growth, hiring an increasing number of experts, each of whom is a high-class and highly paid specialist in their field of risk management, but there is no qualitative improvement in the risk management system itself, and the management of the company has a question - what is the problem, why does the increase in costs for improving risk management not lead to an improvement in the situation? The problem is that, despite the wide experience and knowledge, as well as the fact that risk experts are involved at all stages of risk management, their effectiveness decreases right at the stage of initial risk identification, simply because the risk manager despite in my experience is not omnipresent [11-14]. Thus, it is logical to assume that the risk management problem is solved in another way, namely, to extend the risk management culture to the entire hierarchy of the company. What are the advantages here? It is trite to assume that an ordinary employee carrying out his daily activities is familiar with the undoubtedly narrow area of the overall picture of the company's economic activity, but he is better acquainted with this area than a risk manager or the head of any department. So who is better than the average employee able to identify possible risks regarding his immediate responsibilities? Naturally, this issue becomes rhetorical, and the company's management, developing a culture of risk management, provides an opportunity for safe development.

5% risk management is a process, 95% is a culture [1]. The development of a risk management culture is a gradual process that requires management to take consistent actions in Fig. 2. A simple scheme makes it clear what actions the company management should take to implement and develop a risk management culture. The goal of developing a risk management culture is to instill in each employee of the company the awareness that he is a key element of the risk manager. Indeed, much more depends on his consciousness, on his action or inaction in some cases than on experts from a specialised department.

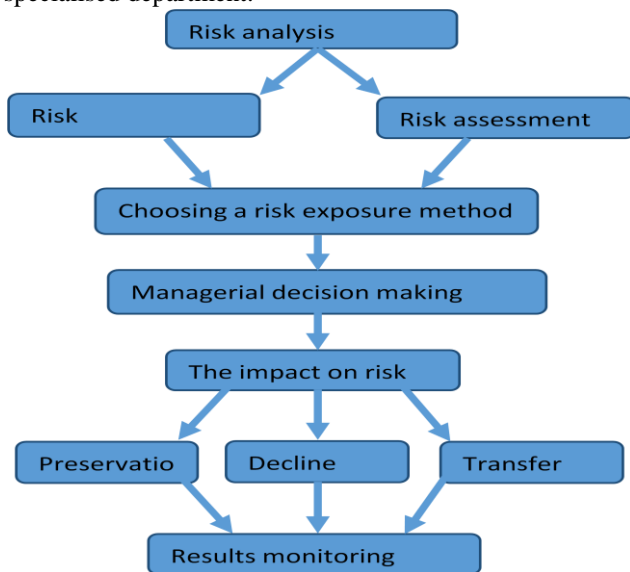


Fig. 2. Management action scheme for the development of a risk management culture

## II. METHODOLOGY

Considering the culture of risk management as a key element of the safe development of the company, we will

consider a methodology that can be called "Three lines of defence".

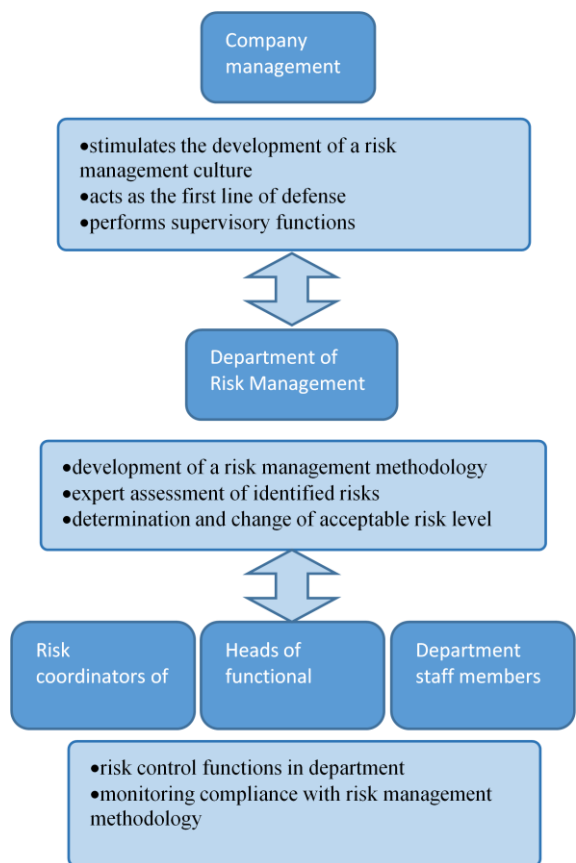
The technique itself is as simple as successful, but when implementing it, you should remember the key principles:

- the risk management system should be perceived by the company's management as a catalyst for growth, and not as a constraining factor.
- the management itself, acting as the first line of defence, plays a fundamental role in risk management, as it sets the rules of the game.
- business units must have the necessary authority, resources, and management support to manage risk effectively.
- the risk management function should be a support for business units, and not a function of intimidation and should provide the necessary tools and methodological support.
- there is a formulated concept of risk acceptability, communicated to all departments and used in decision-making, while the task of creating and maintaining this concept lies with the risk management department.

The "Three lines of defence" scheme is presented in fig. 3, consists of various elements (leadership, risk management, personnel) having various kinds of powers, responsibilities and functionality, but at the same time interacting as a single partner alliance focused on achieving strategic goals, and It is effective risk management and ensuring safe development.

Risk management is carried out at all levels of the organisation and involves the involvement of all company employees. At the same time, for the smooth functioning of the management system, the roles of participants should be demarcated and at the same time should complement each other, which is clearly demonstrated by the scheme. With this method to risk management, part of the functionality that has traditionally been assigned to the risk management department is evenly distributed among all participants.

Moreover, it is important that each of the participants receives not only new responsibilities but also leverage, as part of the overall development strategy. It is important to understand that this scheme cannot simply be implemented in any company and try to make it work without a developed risk management culture; all these attempts will certainly be doomed to failure.



**Fig. 3. Scheme of implementation and functional "Three lines of defence"**

The development of risk culture as a systematic method is an important, complex and long process, it must be built on the "three pillars":

- training of personnel in risk management (within the framework of the necessary functionality);
- introducing risk management tools into the everyday practice of each company specialist;
- building a motivation system that ensures that each employee is involved in the risk management process using risk management tools;

The leading role in risk management is assigned to the first line of defence - senior management and business units that face daily risks in their core business.

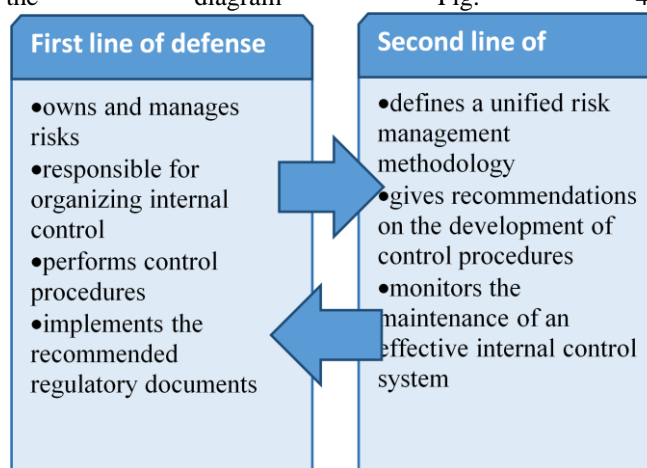
The first line of defence makes decisions on risks, identifies business risks, integrates the risk management system in the implementation of strategic and tactical goals, and ensures the application of appropriate risk management methods. Structural units are the owners of risks and are responsible for identifying, managing, mitigating risks, analysing and reporting on key risks. The heads of departments are required to develop, implement and ensure the functioning of control procedures in supervised business processes.

The second line of defence (risk management and compliance functions assigned to the risk management department) works in conjunction with the first line, acting as the coordinator and business partner of the risk management process, ensuring the maintenance and optimisation of effective risk management practices. Besides, the risk management department develops and implements methodological approaches to risk management, defines

standards and coordinates the company's actions in the field of risk management, including the relevant processes, technologies and culture. It is very important to understand that the competence of this unit should not include responsibility for the timely identification and assessment of risks. This is done by units of the first line of defence.

In turn, the third line of defence (audit function) performs an independent assessment of the effectiveness of the risk management system to confirm the reliability and adequacy of risk measures carried out by the first and second lines of protection.

The key point of this scheme is the separation of the traditional risk manager functionality between the first and second lines of defence, this can be clearly demonstrated in the diagram Fig. 4.



**Fig. 4. The scheme of dividing the traditional risk management functionality between two lines of defence**

What was previously entrusted exclusively to a separate risk management department is now carried out by a significantly larger number of personnel, and we should not forget that this personnel, as part of its functionality, is as efficient and competent as a risk management expert.

At the same time, one should pay attention to Fig.3, where it is indicated that in the structural divisions of the company there are specialized risk managers acting as accumulators of knowledge, and local experts, which eliminates the need for unreasonable and unnecessary requests to the central risk management department.

### III. EXPERIMENT

How effective will this technique be when implemented in real market conditions? What are the "pitfalls" that can come to light during its implementation?

As an experiment, we consider the procedure for creating and developing a risk management culture in one of the companies in the financial sector. As in any company that deals with business consulting and financial services, the company had a risk management department in charge of the full range of risk management issues for many years.

The intensive economic development of the company has led to a rapid increase in the department's risk management staff, as well as to complicate the structure of the department itself. The dynamics of such a change can be seen in Table.1

**Table- I: Name of the Table**

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that justifies the values

Indicator	2009	2010	2011	2012	2013	2014
Total staff	573	592	631	754	776	822
Employees of the risk management department	23	29	48	63	69	84
Number of structural units of the risk management department	2	3	5	5	7	9
Salary of risk management department, USD	93.000	118.000	198.000	272.000	298.000	375.000
Total Risk Management Department Costs, USD	210.000	253.000	367.000	450.000	514.000	654.000

It is noticeable that risk management was built according to an intensive development scheme, but at the same time, it was the leadership of this department that was aware of the growing problems in the field of risk management.

Schematically, in Fig. 5, problems were described that were aggravated with the development of the company and the solution of which could not be implemented by further following the accepted business model in the field of risk management.

In 2015, after consultations and an external audit of activities, it was decided to change the key method for conducting activities in the field of risk management. A phased transition from quantitative to qualitative risk management was planned, and the basis of this method should have been a risk management culture developed at all levels of the company.

The method to the formation and development of a new system, built on three lines of defence, involves providing employees with all the necessary tools for competent interaction with risks. The period for the transition from the old structure to the new one despite all the difficulties led to the fact that the company employees, applying risk management methods in their activities, faced a reduction in the number of problems and began to receive tangible benefits from the introduction of such practices. As a result, realising the importance of the risk management process, employees began to form a paradigm of "risk-behaviour". Thus, a positive cycle is formed - competent interaction with

risk began to generate a strong culture, which then generated effective behaviour of employees concerning risk.

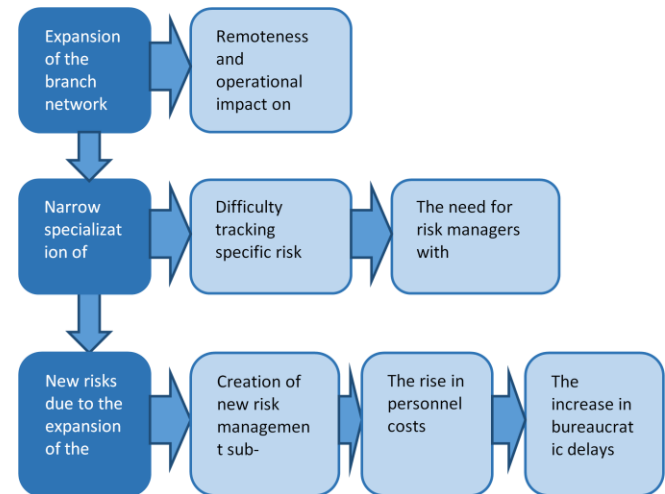


Fig. 5. Development issues and reasons for worsening risk control

As a basis for the emerging culture, 9 key points were adopted that guided the company's managers:

1. Clear adherence to established methodologies specified by risk management regarding risk management issues.
2. Commitment to ethical principles in decision making.
3. Understanding the importance of risk management as an ongoing process, as well as a clear separation of the areas of risk ownership and the clarity of their quantitative assessment.
4. Transparency and regularity of communications, the rapid dissemination of bad news without any fear.
5. Encouragement of reports of risk events to eliminate similar errors in the future.
6. Promoting proper risk management and sanctions for misconduct.
7. The development of knowledge and skills of risk management, subject to the smooth functioning of special risk management units.
8. Maintaining the values of employees, their confidence in the future, providing various growth prospects.
9. Social support for employees while focusing on tasks.

The formation of principles and new methods, with the aim of developing a culture of risk management, also led to the transformation of the structure of the company, which is clearly demonstrated in Fig. 6.



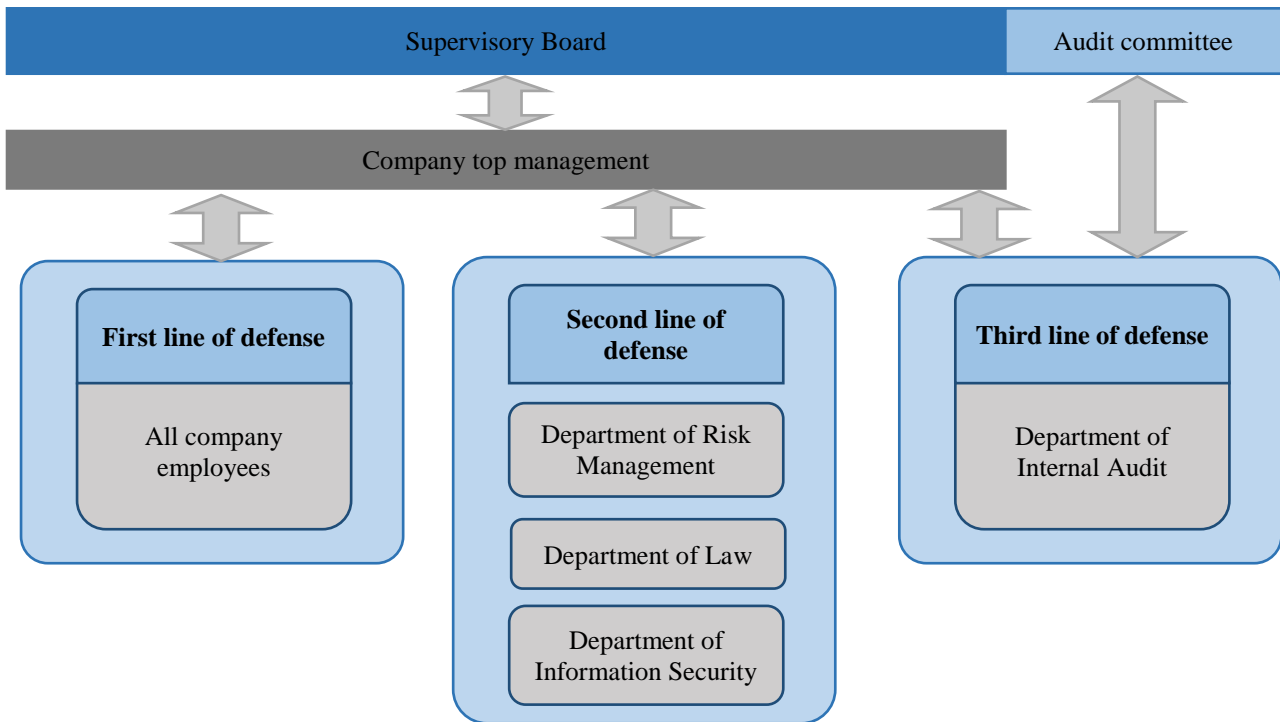


Fig. 6. The structure of the company's risk management implementing the Three Lines methodology

IV. RESULT AND DISCUSSION

To analyze the effectiveness of the results of introducing a new method, the company's management introduced two ways - an annual independent external audit of activities, as well as anonymous questioning of employees conducted at the same time from external resources.

Questioning of employees was carried out to comprehensively check how new methods will justify themselves; questioning was carried out twice a year, the results of which (general) are summarized in Table 2.

Table- II: External survey results (by years)

Questions	2015		2016		2017	
Total level of staff satisfaction	54%	64%	79%	78%	82%	86%
Following the principles of risk culture in daily activities	63%	58%	65%	76%	84%	92%
Making decisions on risk issues based on the company code	52%	57%	62%	74%	65%	73%
The proportion of requests sent to the risk management department	94%	87%	75%	64%	51%	43%

It is clear that the process of introducing a culture of risk management overcame natural human resistance. Reluctance to change the existing scheme of work reflects the numbers of general staff satisfaction (54%) and the number of requests sent to the risk management department (94%) in the first year of the beginning of the transformation. Nevertheless, it is visible that already in the third year significant changes in the work of the entire staff are noticeable, the level of

independence of structural units in matters of risk management has significantly increased.

Similarly, you can analyse the results of the company based on the external audit, the results of which are summarized in Table 3.

Table- III: Table- II: External survey results (by years)

Indicators	2013	2014	2015	2016	2017
Number of staff (total)	776	822	854	783	786
Employees of the risk management department (including new units)	69	84	65	59	63
Total risk management department costs, USD	514000	654000	395000	398000	375000
Percentage of managed risks controlled by the company (external audit assessment)	69%	59%	54%	79%	85%

The key point is primarily to increase risk manageability; this moment is especially important since, until the change of method, the results of the external audit made clear the problems of reducing the control of the risk management department over the risk management process. A positive side factor can be noted the positive dynamics of reducing costs for risk management while maintaining the proper level of risk appetite.

The negative aspects include the reduction of several highly qualified specialists in the field of risk management, but this cannot be attributed to extremely negative factors since, with a developed risk management

culture, their further work did not allow developing and using their experience.

## V. CONCLUSION

The right method for the risk management process has always been considered extremely important for any company. Undoubtedly, the development of a culture of risk management gives tangible results, provided that the general principles and methods to its development and maintenance are maintained.

It is possible that in some less risky or less dynamically developing companies, a minimal managerial impact in the field of risk management is quite enough. However, it is undeniable that safe development without a developed risk management culture is like driving a car without brakes - they do not seem to be needed for movement, but when you have to stop, a catastrophe can happen.

It should be borne in mind that the process of creating and developing a risk management culture is not an instantaneous activity, but a complex and complex process requiring both effective management and worthy motivation for implementation.

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