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## MANAGING THE RISK FACTOR IN THE STRATEGIC DECISIONS-MAKING PROCESS AT THE ENTERPRISE

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### Kapustnyk S. K. Managing the Risk Factor in the Strategic Decisions-Making Process at the Enterprise

*The aim of the article is to define the essence of the risk management process in the context of formation and implementation of the enterprise strategy and develop an algorithm for strategic decisions-making considering the risk factor. The article reveals the essence of the concept of "risk" in the context of elaborating the enterprise development strategy. As a result of the research a definition of strategic risk has been formulated and the process of its identification has been described. On the basis of current trends in risk management and critical analysis of the Standard of Federation of the European Association of Risk Managers (FERMA), there has been proposed a detailed, phased algorithm for enterprise strategic decision-making considering the risk factor, which allows establishing the interrelation between the processes of risk management and elaborating the enterprise development strategy. The obtained results are intended to be used in the perspective of further scientific research to develop a methodical approach to risk management in the context of strategic decision-making at enterprises of machine-building industry of Ukraine.*

**Keywords:** strategic decisions, enterprise development strategy, strategic risk, risk management, FERMA, enterprise management.

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### Капустник С. К. Урахування фактора ризику при прийнятті стратегічних рішень на підприємстві

*Метою статті є визначення сутності процесу управління ризиками при формуванні та реалізації стратегії підприємства, а також розробка алгоритму прийняття стратегічних рішень з урахуванням фактора ризику. Розкрито сутність поняття «ризик» у контексті розробки стратегії розвитку компанії. У результаті дослідження надано визначення стратегічного ризику і описаний процес його ідентифікації. На основі сучасних тенденцій ризик-менеджменту і критичного аналізу стандарту Федерації європейської асоціації ризик-менеджерів (FERMA) запропоновано детально обґрунтований, поетапний алгоритм прийняття стратегічних рішень на підприємстві з урахуванням фактора ризику, що дозволяє встановити взаємозв'язок між процесами управління ризиками і розробкою стратегії розвитку компанії. Отримані результати, в перспективі подальших наукових досліджень, планується використовувати при розробці методичного підходу до управління ризиками в процесі стратегічного управління на підприємствах машинобудівної галузі України.*

**Ключові слова:** стратегічні рішення, стратегія розвитку підприємства, стратегічний ризик, ризик-менеджмент, управління підприємством.

**Рис.:** 2. **Табл.:** 1. **Бібл.:** 11.

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### Капустник С. К. Учет фактора риска при принятии стратегических решений на предприятии

*Целью статьи является определение сущности процесса управления рисками при формировании и реализации стратегии предприятия, а также разработка алгоритма принятия стратегических решений с учетом фактора риска. Раскрыта сущность понятия «риск» в контексте разработки стратегии развития компании. В результате исследования дано определение стратегического риска и описан процесс его идентификации. На основе современных тенденций риск-менеджмента и критического анализа стандарта Федерации европейской ассоциации риск-менеджеров (FERMA) предложен детально обоснованный, поэтапный алгоритм принятия стратегических решений на предприятии с учетом фактора риска, позволяющий установить взаимосвязь между процессами управления рисками и разработкой стратегии развития компании. Полученные результаты, в перспективе дальнейших научных исследований, планируется использовать при разработке методического подхода к управлению рисками в процессе стратегического управления на предприятиях машиностроительной отрасли Украины.*

**Ключевые слова:** стратегические решения, стратегия развития предприятия, стратегический риск, риск-менеджмент, управление предприятием.

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Under conditions of globalization of economic processes, increasing level of competition and instability in the market environment, enterprise leaders and managers face the problem related to creation of a new strategic development model or improvement of the existing one. Considering the impact of many factors of the internal and external environment the activity of enterprises can't be fully defined and calculated because it is directly connected with risk and uncertainty.

A stochastic nature of the formation and implementation of processes of the enterprise development strategy leads to the fact that the decisions made are inadequate to real situation and eventually causes increased or unplanned costs and losses. In such case, it is necessary to transfer the situations of uncertainty into risk situations, where possible factors of costs and losses are reflected in specific objects and processes of the enterprise activity and can be evaluated and measured in any way [3, p. 607–608].

Thus, managing the risk factor with the purpose of retaining a competitive position in the market, providing competitive advantages and minimizing negative effects during the implementation of the strategic development model is a very important aspect in the process of making strategic decisions at the enterprise.

The problems of studying and managing risk have been investigated by many foreign economists and scientists from CIS countries, such as: I. Balabanov, T. Burton, D. Channon, V. Granaturov, G. Kleiner, J. M. Keynes, F. Knight, A. Marshall, H. Markowitz, A. Petrov, O. Ustenko, E. Utkin, V. Vitlynskiy and others. Their works are devoted to researching the essence of risk, characterization of the methods for assessing the risk level, construction of risk management models. Nevertheless, the study of the process of managing risks, especially strategic ones, is still a relevant problem and requires a constant deepening of the theoretical and practical developments because enterprises functioning under conditions of market economy operate in a constantly changing environment, the impact of which in a view of an inefficient mechanism of risk management can lead to a loss of competitiveness, enterprise bankruptcy, various problems in relationships with counterparties and the state, and other negative consequences.

The *aim* of the article is to define the essence of the risk management process in the context of formation and implementation of the enterprise strategy and to develop an algorithm for strategic decisions-making considering the risk factor.

In the strategic decision-making process for all participants of the enterprise strategy implementation it is necessary to define what is meant by the concept of “risk”.

A British economist D. Shannon gives the following definition of risk in relation to the need of business assessment: “Risk is a level of certainty (or uncertainty) related to the receipt of expected future earnings” [8, p. 107].

N. Vnukova and V. Smolyak define the risk of the enterprise's activity as a phenomenon that occurs at the enterprise and is characterized by a possible level of threat to its production and sales, the consequence of which is expressed in a failure in obtaining a profit or its shortfall [1, p. 26].

According to G. Kleiner, in relation to the strategic decisions-making, risk means a possibility of such consequences of strategic decisions, at which the objectives are partially or completely not achieved [4, p. 114].

It should be noted, that the definition of the term “risk” proposed by G. Kleiner is the most generalized in the context of working out the enterprise development strategy. As a matter of fact, failure in achieving enterprise strategic objectives can be expressed in reduction of product sales and scope of production, certain quantitative losses of resource, including financial ones, and, consequently decrease in the planned revenue.

The author believes that the risks, which emerge in the strategic decision-making process, implementation of the business strategy, automatically become strategic. Thus, a strategic risk is a probability of such events, at which deviation from the strategic objectives or failure to achieve them is possible. In such case, the enterprise can experience losses, lose its competitive advantages and face other negative consequences as a result of administrative decisions on the elaboration and implementation of the development strategy.

Therefore, identifying and forecasting strategic risks is required for a successful enterprise management. Such actions imply the necessity of considering a probability of unexpected events, which reduce the effectiveness of administrative decisions on the strategy elaboration, threaten the possibility of its implementation in accordance with the set objectives in the long-term prospective of the enterprise development.

Initially, the decision makers face uncertainty both in the external and internal environment of the enterprise in the process of elaborating the enterprise strategic plan. By “uncertainty” there meant such a situation, in which the administrative decision-making takes place under conditions of insufficient information about external and internal environment factors. In such situation the persons making a decision on the enterprise development strategy face difficulties in forecasting possible changes. The uncertainty of the situation increases a probability of enterprise strategy failure, makes it difficult to calculate costs and identify risks associated with strategic directions in the enterprise development. Enterprise managers should establish or upgrade the link between the internal and external environment in order to obtain the information flow and use it to identify strategic risks. Thus, the situation of uncertainty will be transferred into a risk situation, which in view of well-established information channels would be more acceptable for strategic decisions-making. The author thinks that the process of identifying strategic risks in general can be presented as follows (Fig. 1).

Thereby, after the identification process a portfolio of strategic risks, which may vary depending on specifics of the industry, features of doing business and the strategic management mechanism, is formed at the enterprise.

The “strategic risk portfolio” implies such set of financial, production, marketing, organizational, legal and other risks that have a direct impact on the enterprise strategic development model.

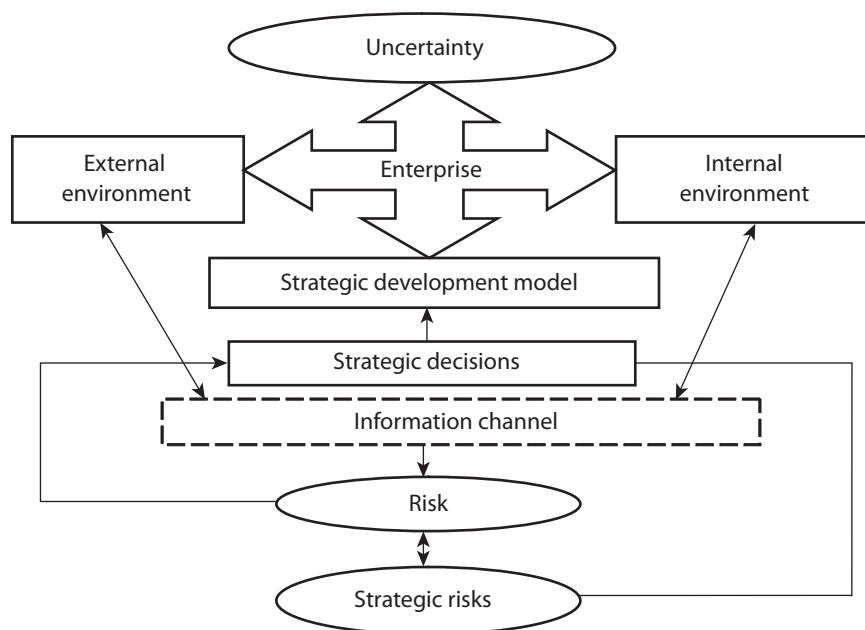


Fig. 1. The process of identifying strategic risks

Source: developed by the author.

In working out and making strategic decisions, it is necessary to determine how to avoid or minimize their potential adverse impacts associated with the risk factor, which may be expressed in the emergence of surplus costs in the course of implementing the enterprise strategic development model; possible losses of material, labor and financial resources; worsening of the enterprise financial status; partial or complete failure to achieve its goals, etc. Solving this problem is possible by using a specific management function – risk management.

The results of a survey conducted by Forbes Insights research company on the request of a well-known auditing company Deloitte Touche Tohmatsu Limited among more than 300 companies from different sectors of the global economy showed that 81% of respondents said that they were purposefully engaged in strategic risk management. Moreover, most of the companies not only assign the process of strategic risk management a high priority but also make changes in their approaches to risk management [9].

I. Lukasevich notes: “nowadays a gradual transition to a new model of risk management is being observed [5, p. 373]. According to I. Lukasevich, a peculiarity of this transition is in the fact that “risk management acquires a totalitarian character and is coordinated within the entire company and its activities with a simultaneous orientation of managers at all levels to integrated risk management [5, p. 374].

When talking about a new paradigm of risk management, T. Barton, W. Shenkir and P. Walker highlight its main features as compared with the traditional approach to risk management at companies. Table 1 presents main features of the traditional and new paradigm of risk management.

On the basis of the proposed in Table 1 characteristics of risk management paradigms, it can be concluded that the risk management approach for some companies changes from fragmented, episodic and limited models to

integrated, continuous and extended ones. Thus, risk management ceases to be a functional duty only of financial services and is carried out continuously under the leadership of top-managers with support of a majority of personnel and structural divisions of the enterprise. Under conditions of the new paradigm, risk management “strengthens its position” as a strategically important process of business structures’ development.

It should be mentioned that under present conditions of the business environment development in Ukraine domestic enterprises generally make changes in their risk management approaches — “tackling issues when they arise”, while international companies focusing on new trends modernize their risk management mechanisms with the aim of preventive impact on possible negative consequences.

NASA project managers are guided by the idea that all processes should be based on a continuous risk management (CRM) during the project implementation. Besides, as a supplementary process for CRM they use information about risk of decision-making (Risk-Informed Decision-Making (RIDM), which is associated with analyzing data on important decisions and/or directions concerning their implementation [10].

According to the Risk Management Standard adopted by the Federation of European Risk Management Association (FERMA), risk management is a central part of enterprise strategic management. This process is described as such one, following which the organization systematically analyzes risks of each type of activity in order to maximize the efficiency of each step and all activities in general. Its main objective is identification, evaluation, analysis and risk management [11, p. 3].

Thus, the enterprise strategic development model is directly connected with the process of risk management. Therefore, it is necessary to identify the most important stages of risk management in the context of strategic decision-making.

Characteristics of risk management paradigms [7, p. 14]

Old (traditional) paradigm *	New paradigm
Fragmented risk management: each structural unit manages risks through its individual efforts (in accordance with its functions)	Integrated (united) risk management: risk management is coordinated by top management, every employee considers risk management as part of his/her functions
Episodic risk management: risk management is carried out when managers consider it necessary	Continuous risk management: risk management process is uninterrupted
Limited risk management: considers primarily hedged and financial risks	Extended Risk Management: considers all risks and opportunities for their reducing

\* The authors [7] define a paradigm as a methodological approach to company risk management.

It should be noted, that the risk management approach proposed in the FERMA Standard, from the author's point of view, requires a certain clarification. So, it is proposed to start with the process of risk management assessment by means of analysis, which includes risk identification, description, measurement and quality assessment.

The author considers that at the first stage it would be appropriate to set the objectives of risk management. Any management decision associated with risk, including the strategic one, should be purpose-oriented, otherwise, the absence of an objective makes the management decision meaningless. Thus, in general, the purpose of risk in the process of strategic decisions-making is in achieving the enterprise strategic objective, in particular, such a result that should be obtained considering the risk factor at implementing the strategic development model.

The enterprise strategic objective can be expressed in different ways: expanding the business, increasing its competitiveness, maximizing the profits, etc.

At the stage of setting risk management objectives the enterprise management should solve the following problems:

- 1) setting an objective of making a particular strategic decision considering the risk factor;
- 2) determining methods for analyzing and forecasting economic conditions;
- 3) performing an analysis of the enterprise capabilities and determine its needs within the framework of the strategy and current development plan;
- 4) identifying the risk threshold.

The top-management should clearly determine the level of the enterprise "readiness" to take risks and on this basis form their risk management approach when elaborating the enterprise development strategy.

The Standard [11] is oriented to organization of risk management at a company, but this article proposes to consider this process in parallel with the strategic decision-making process simultaneously formulating a common decision-making algorithm based on risk factors.

Thus, the first risk management stage is directly associated with diagnostics of the problem stage when making a strategic decision, at which decision-makers determine «problem areas» and identify unused opportunities of the enterprise, analyze the internal and external environment information.

The second stage is characterized by identification and analysis of strategic risks, the information about which

is obtained by managers from the enterprise external and internal environment. At this stage it is necessary to perform a qualitative and quantitative analysis of strategic risk.

The FERMA Standard prescribes the following: "Risk estimation can be quantitative, semi-quantitative or qualitative. Different organizations will find that different measures of consequence and probability will suit their needs best" [11, p. 10].

In this regard, it is appropriate to define the essence of qualitative and quantitative risk estimation.

The purpose of the qualitative analysis is to define the risk impact area (financial strategy, marketing strategy, manufacturing strategy, etc.), external and internal factors affecting the level of the identified strategic risks. The qualitative risk estimation involves setting a target in terms of quality. For example, «minimal risk», «moderate risk», «ultimate risk», «unacceptable risk». The quantitative analysis involves calculating numerical parameters of the impact level of risks and probability of their occurrence [2, p. 147].

We can observe the interrelation of this stage with the strategic decision formulation stage, at which decision-makers having identified and analyzed strategic risks, have a possibility for making decisions related to choosing alternative strategic ways of company development.

After conducting the risk estimation, the Standard proposes to provide internal reporting about the risk to various levels of the organization management (Board of Directors, a structural unit, an individual employee), on the basis of which the decisions are made, and external reporting – to contractors. Measures to reduce the risk are implemented after decision-making with a subsequent formation of risk reporting in order to make possible changes [11, p. 11].

The author believes that one stage of risk estimation is missing for strategic decisions-making. Thus, at the third stage of the enterprise risk management it is suggested choosing risk impact methods, namely: rejection of a risk situation, reduction of the risk level, risk acceptance.

Rejection of a risk situation could be understood as refusal from strategic decision-making. This risk impact method is the most simple and radical, which in today's business environment is ineffective. On the one hand, it avoids possible negative consequences but at the same time it also means rejection of profit, inability to strengthen the market competitive position and implement the enterprise strategic development project. In such situation there is a

probability of enterprise stagnation as a result of losses from unused opportunities for business development.

Reducing the risk level involves decreasing the probability and scope of losses, deviation from the enterprise strategic objective.

In economic literature scholars emphasize the following four types of methods to reduce risks [3]:

- ✦ method of risk aversion;
- ✦ risk localization method;
- ✦ risk dispersion method;
- ✦ method of risk remedy.

The first method actually is identified with the rejection of a risk situation and seems almost ineffective within the framework of strategic management. Companies that use such risk impact method refuse from innovative and other projects, feasibility or effectiveness of which is even of the slightest doubt.

Management on the basis of risk localization involves formation of special structures implementing risky projects within an enterprise. This method is appropriate to be applied in a situation when sources of a strategic risk have already been identified. Such risk can be considered as a controlled one, which will enable reducing its level.

The localization method should be used while developing new markets, implementing innovative projects. These strategic decisions will be administered by a special unit, which will be in charge of managing risky projects. There is also a possibility of registering a subsidiary, at which there will be carried out (be localized) the most risky stages of implementing parent enterprise projects. In a situation of so-called “weak signals” related to the strategic risk, we consider it to be inappropriate to make the restructuring and reorganization of the enterprise.

The dispersion method implies enterprise activities diversification and consists of allocation of risk among other participants in the business. In this case, to reduce the level of its own risk, the enterprise attracts to solving common problems other businesses as partners.

Thus, while diversifying the activities, the strategic risks that existed initially are allocated considering the time and different business sectors. Depending on the industry features and particular strategic development models the risk can be significantly reduced or completely eliminated. The involvement of other companies while developing a common approach to risk management will have a positive impact both in terms of managing the overall strategic risks and in the context of establishing additional business contacts in various industries including foreign markets. Application of this method is more preferable for large businesses and transnational corporations.

In today’s business environment using the risk dispersion method for small and medium-sized enterprises is hardly probable in view of inaccessibility of sources of financing for alternative directions of business development. For such enterprises this method may be applied only partially within the framework of the principal activity, with participation of companies operating in the same market segment.

The risk remedy method implies designing the enterprise development strategy, which minimizes the risk factor.

It involves creation of a mechanism for preventing dangers by a thorough analysis and creation of system of reserves, by which it is possible to get partial or total coverage of enterprise losses during the implementation of a particular strategic model. The author admits that this method should certainly be used in enterprise strategic risk management considering features of the industry and the strategic planning mechanism of a particular enterprise.

While taking the risk, managers consider it acceptable for the enterprise, i.e. such one that fulfills the quality criteria – «minimal», «moderate» and «ultimate». In this case, the enterprise carries all responsibility for possible losses and failure of the strategic plan. Of course, there is a possibility of transferring a part of risk to the 3rd person, for example – insurance companies, but considering difficulties in forecasting strategic risks, most of them remains for the enterprise, at which decision-makers carry responsibility for probability of negative consequences.

Thus, based on the selected strategic risk impact method, decision-makers implement a strategic decision, which was formulated at a preceding step or, in the case of selecting the risk aversion method – refuse to implement it.

At the final stage of risk management when making strategic decisions at the enterprise, there implied continuous monitoring considering correction of the objectives of managing strategic risks depending on the current situation.

It should be noted, that the stage of controlling the execution of strategic decisions is directly associated with the monitoring of strategic risks, under the influence of which the correction of the enterprise strategic development objectives is possible.

Thus, the analysis of sources [2; 3; 7; 11] allowed the author to formulate his own point of view concerning the risk management process in enterprise strategic decision-making. The proposed algorithm, in the author’s opinion, corresponds to the new paradigm of risk management because it involves management of the strategic risks portfolio, that is – extended risk management in the enterprise strategic management framework. Monitoring, making possible changes, including correction of the enterprise strategic development objective, characterize this process as a continuous one.

When developing and implementing the strategic plan, orientation to fragmented risk management is inappropriate. Such process is characterized by integrated risk management, which involves most of structural units and personnel of the enterprise – from top-managers (solving the key and most difficult issues, coordinating the process) to the middle management and other employees (under the delegated authority), who manage strategic risks, develop recommendations on its minimization with the aim of achieving the enterprise strategic development objective.

The scheme of the enterprise strategic decisions-making process considering the risk factor is presented in Fig. 2.

## CONCLUSIONS

New trends in risk management determine the transition to integrated, continuous and extended risk management processes, as evidenced by the practice of their application in different industries of the world economy, international companies and organizations.

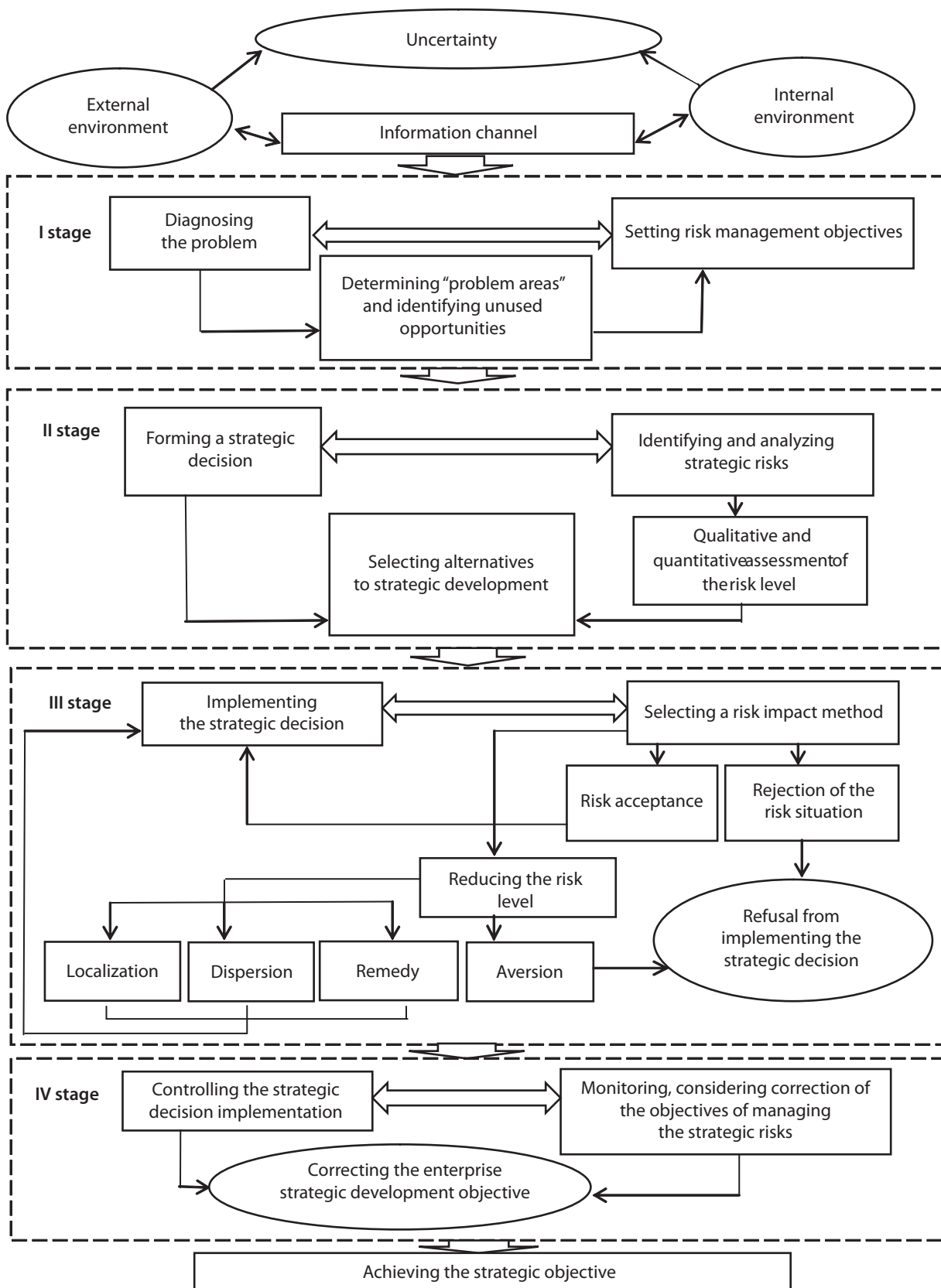


Fig. 2. The scheme of the enterprise strategic decisions-making process considering the risk factor

Source: developed by the author on the basis of the sources [2; 3; 7; 11].

This article describes the process of strategic risks identification, which implies such risks that emerge in strategic decision-making, business strategy implementation.

During the study there has been identified the need to clarify the risk management approach, which is proposed in the Standard of Federation of European Risk Managers Association (FERMA). Based on the results of the research there has been proposed a methodical approach to enterprise strategic decision-making considering the risk factor, which allows determining the interrelation between processes of risk management and elaborating the enterprise development strategy.

Further scientific researches should be aimed at development of a methodical approach to risk management in the context of strategic decision-making at enterprises of the machine-building complex of Ukraine. ■

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