Owner’s Risk Management System

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Abstract—Currently, with the development of digital management in companies, negative trends are increasing due to the lack of new tools to identify critical deviations that reduce business efficiency. Overcoming this negative trend in practice is carried out by creating an effective risk management system. The example of owner’s risk management shows their place in the process of creating value, defined the role of participants in this activity. On the example of financial risks, a system of measures to minimize risks for a manufacturing company is described. The key focus of the study is the assessment of the relationships between the financial component of owner’s risks, places of their occurrence, risk factors and the degree of influence on potential losses of the company owner.

Keywords: owner’s risks, risk management system, value chain, financial risk, risk management facility, risk management entity

I. INTRODUCE THE PROBLEM

Currently, the attention of owners is rapidly growing business interest in building risk management systems. This is because Russian companies operate in the ever-changing economic environment, extremely unstable institutional settings, in order to develop and adequately respond to changing conditions, to increase sustainability and adaptive abilities, business owners need to purposefully and systematically carry out its transformation.

At the same time, the activities of a business owner are always associated with special risks, because he constantly has to commit bold, extraordinary actions. Owner's risks mean overcoming uncertainty in an inevitable choice situation, during which it is possible to quantitatively and qualitatively assess the probability of achieving a given result, as well as the reasons for failure and deviation from the goal.

Therefore, the owner must correctly assess the degree of risk and be able to manage risk in order to achieve more effective results in the market. This is only possible if there is a certain risk management system that is an integral part of ownership management.

There are a significant number of studies on risk management systems. Most of them cover the tools inherent in managers. A number of researchers focused on analyzing fundamental approaches to Risk assessment and management. An example is T. Aven’s publication [1]. In this paper, investigated principles and methods, which developed for how to conceptualize, assess and manage risk linked to both the theoretical platform and practical models and procedures.

Another approach is to evaluate management decisions by Risk-Informed Decision-Making (RIDM) methodology [2]. Decision-making considered under the influence by various factors (strategic, technical/technological, economic, organizational, regulatory, safety, markets, etc.). Sound decision-making in AM ought to take into account relevant factors in order to balance risks, opportunities, performance, costs and benefits.

At the company level, Enterprise Risk Management (ERM) accepted as a tool that allows the management to strengthen the positive influence from the drivers and overcome the challenges posed by the significant hindrances. Companies in various countries and fields of activity focus this aspect of risk management on research. For example, Chinese construction firms in Singapore [3], Croatian Companies [4], Malaysian companies [5], petrochemical industry companies [6], French firms [7], Australia, Germany and the USA companies [8], Spanish companies [9].

Analysis of studies revealed that RIDM and ERM goals are to increase the likelihood that an organization will achieve its objectives, meaning that ERM should be created and implemented with the aim to protect and create shareholder value. For example, research of Croatian Companies revealed that the level or risk management system development is dependent only on the size of the company and value of the growth options. At the same time, this does not answer the question of creating a system for managing ownership risks, which require special tools different from those used by managers.

II. EXPLORE IMPORTANCE OF THE PROBLEM

Risk management is the processes associated with identification, risk analysis and decision-making, which include maximizing the positive and minimizing the negative consequences of risk events.

Risk management includes risk management strategy and tactics. Risk analysis allows owners to evaluate decisions and minimize possible losses. A prerequisite for an effective owners’ risk management system is the availability of relevant information for making timely management decisions and optimally aligned business processes in all aspects of its activities.

The key elements of an owner’s risk management system (ORMS) are:

1) the object; 2) the subject; 3) risk management process.
The object of an ORMS is a significant owner’s risk, which to the arising in the process of creating value for the consumer and is a combination of the probability of an event and its consequences. Then the owner’s work with the risk object is to analyze the types of risks of the company, their classification and regulation of the rules for exposure to risks.

The subject of an ORMS is a unit or individual employee who is specially trained to respond to risks and participate in various stages of owner’s risk management (Table 1).

TABLE 1. PARTICIPANTS IN THE OWNER’S RISK MANAGEMENT PROCESS, DEPENDING ON THE STAGE OF THE PROCESS

| Owner’s risk management phase | Subject of management |
|------------------------------|-----------------------|
| Identification               | Owner of company.     |
|                             | Top-management        |
| Description                  | Top-management Risk experts. |
| Rating                       | Company management.   |
| Ranking by importance        | Risk experts.         |
| Information and Communication| Risk experts.         |
|                             | Managers responsible for the formation and maintenance of the risk system (recording activities in the risk register). |
|                             | Managers whose activities involve risks (implementation of measures). |
| Information and communication| Company management (decisions on risk management measures). |
|                             | Managers responsible for the formation and maintenance of the risk system (recording activities in the risk register). |
|                             | Managers whose activities involve risks (implementation of measures). |
| Monitoring and analysis of the effectiveness of the risk management process | Owner of company. |
|                             | Top-management        |

The methodology for building a risk management system is based on the fact that the participation of a business owner in managing an organization is to solve two problems: 1) define a business model (strategic goals and mechanisms for their achievement) and 2) to formulate its participation in the current (operational activity) of the company.

A business model is an idea of how a company makes (or intends to make) money. The business model describes the value that the company offers to various customers, reflects the organization’s abilities, the list of partners required to create, promote and deliver this value to customers, necessary to obtain sustainable revenue streams.

The business model also defines the interaction of elements of the organization as a system - material and intangible resources, equipment, products, technologies, personnel, customers, partners, etc.

III. MATERIALS AND METHODS

The owner’s risk in the business model are the possibility of achieving strategic goals with a certain period and reasonable costs. In this case, the development and subsequent operation of the owner’s risk management system can reduce the time and cost of achieving the strategic goals of the organization, as well as increase the investment attractiveness of projects.

An effective owner’s risk management system allows you to get investment in the business on favorable terms. Thus, it becomes possible to accelerate the development processes of the organization, to reduce the time to achieve strategic goals (Fig 1).

When defining a business model, a set of unique features can be quite wide. At the same time, the key elements of the business model of any company that determine its content are:

-he values for customers that the company offers on the basis of its products and services;
-value creation system, including suppliers and target customers, as well as value chains;
-the assets that the company uses to create value;
-he financial model of the company, which determines both the structure of its costs and the ways of making profit.

Another significant aspect of the definition of a business model is related to the fact that a business model is often confused with a strategy, replacing one concept with another, or including strategy as one of the components in the business model. Sometimes companies go bankrupt, despite the presence of a well-developed model, it happens and vice versa: the company prospers, although its business model is quite “loose”.

Nevertheless, the business model can provide significant benefits to both the entrepreneur himself and other interested parties (his employees, banks, business partners, consultants).

The business model is not something rigid and unchanged until the end of the life of the company - together with the company it lives, develops, adapts to changing environmental conditions. On the contrary, often in conditions of increasing competition or, conversely, seizing clear leadership, companies try to make the transition to more efficient or profitable business models.

In order to create an effective business model, the owner needs to create a quality value chain. When analyzing the value chain, the processes included in them are considered enlarged, for example, the production process, the storage process, the delivery process, etc.

The most important indicator of each link in the chain is the part of value it creates. The risks of a business model are realized with a process approach, the use of which can reorganize the value chain in order to:

- eliminating stages that do not add value;
- elimination of problems at the junction of stages;
- increase the efficiency of individual stages of the chain;
- adding new links or combining existing links with suppliers and consumers to jointly carry out individual processes in the chain.

Analysis and subsequent reorganization of the value chain in terms of ownership risks allow:

- find out the optimality of the business model of the company as a whole, including highlighting those processes that increase or decrease its added value;
- get benefits by reorganizing the chain (selling part of the business that is part of the chain, or outsourcing part of its processes, purchasing another company to gain control over a critical part of the chain, creating strategic partnerships with suppliers to reduce costs in a certain part of the chain or reduce risks, etc.);
- effectively implement the organization’s strategy from the standpoint of using resources for the development of
the company’s business and the implementation of strategically important projects, etc.

![Model of a risk management system for a manufacturing company’s owners (using financial risks as an example)](image)

**IV. RESULTS**

For a business owner, the risks consist in the inefficient use of available financial resources, which is manifested in the discrepancy between the directions of their use and the sources of financing.

In order to identify possible risks, the owner receives from each stage of the value chain information on the directions of using the company’s own working capital invested in settlements with suppliers and customers, stocks of raw materials, materials, finished products, work in progress.

Next comes the moment of assessing the risk factors. They may be decisions of the owner of the company, for example, an incorrect assessment of a business model, lack of resources for funding sources, ineffective actions of managers, for example, poor financial planning and budgeting, or false reporting data.

Clarification of risk factors is a key point of the management system for the owner, as they determine the value of potential losses. There are several components of potential losses of the owner of the company (by significance): loss of company profit, decrease in business capitalization, etc. (Tables 2 and 3).

**TABLE II. ASSESSMENT OF THE RELATIONSHIP BETWEEN THE FINANCIAL COMPONENT OF OWNERSHIP RISKS, PLACES OF THEIR OCCURRENCE, RISK FACTORS, DEGREE OF INFLUENCE ON POTENTIAL LOSSES OF THE COMPANY’S OWNER (TYPE OF RISK – FINANCIAL)**

| Risk identification | Places of origin | Risk Factors | Probability of occurrence of a risk factor, % | Losses, million rubles | Risk assessment on a scale | Decrease in capitalization, million rubles | Risk assessment on a scale |
|---------------------|------------------|--------------|---------------------------------------------|-----------------------|--------------------------|------------------------------------------|--------------------------|
| Inconsistency of sources for financing needs | Accounts receivable and payable (due in settlements) | Delay in payment by clients / day | 80% | 30 | Yellow | 10 | Red |
| | | Delay in payment to suppliers | 50% | 25 | Yellow | 10 | Red |
| | Residues of raw materials | Delivery time | 60% | 10 | Green | 3 | Yellow |
| | | Volume of stocks at the end of the period | 40% | 35 | Yellow | 2 | Green |
| | Work in progress | The production cycle | 10% | 32 | Yellow | 8 | Red |
| | | Volume of stocks at the end of the period | 60% | 40 | Red | 2 | Green |
| | Residues of finished products | Volume of sales | 40% | 56 | Green | 8 | Red |

*Source: prepared by Authors*
The role and importance of the owner’s risks management system consists, ultimately, in the use of management tools that solve the tasks of risk management: risk prevention, minimizing the consequences of risks and risk insurance. Such tools are the following: selection of risk assessment indicators, assessment of indicator boundaries, and development of risk management measures and visualization of the risk state using the “traffic light” indicator values (red, yellow, and green).

Consider the assessment of owner’s risks on the example of the financial component of the company. Take the risk «Inconsistency of sources for financing needs» (he answers to the question - “Where are the funds invested?”).

For each range of indicator values (“red”, “yellow”, “green”), conditions are developed in advance under which the owner and the hired manager are included in risk management, for which typical activities are formed that they should take.

For example, risk «Inconsistency of sources for financing needs» may arise due to the growth of balances in the finished goods warehouse. The risk factor is insufficient sales. The risk probability will be 40% for the ”Losses” indicator, and by its magnitude, the risk will lead to losses of 56 million rubles. (”Red” zone of the risk scale). At the same time, the decrease in the company’s capitalization will amount to 8 million rubles. (”Green” zone of the risk scale). Thus, if there is a “green” zone of the risk scale, the owner should take radical steps to reduce the balance of finished products in the warehouse.

On this basis, in the future, relationships established between the manifestation of the financial component of ownership risks, places of their occurrence, risk factors (causes), and degree of influence on potential losses of the company owner

| Places of origin | Risk Factors | Action plan | Decrease in capitalization |
|------------------|-------------|-------------|---------------------------|
| Accounts receivable and payable (due in settlements) | Delay in payment by clients / days | Monitor suppliers and customers on receivables | Revision of payment terms for customers |
| Reserves of raw materials | Delay in payment to suppliers | Accounts payable control | Revision of contract terms with suppliers |
| | Delivery time | Delivery time monitoring | Change of logistics service providers |
| | | | Supply Chain Diversification |
| | | | Revision of delivery dates |
| Size of stocks at the end of the period | Stock Standards Review | Red | Stock balance monitoring |
| Unfinished production | The production cycle | Product Technology Change | Service outsourcing |
| | Work in progress at the end of the period | Additional investment to complete production | Work in progress size control |
| | | | Product diversification |
| | | | Additional services to customers |

TABLE III. DECISIONS IN THE RISK MANAGEMENT SYSTEM (FRAGMENT), MILLION RUBLES (TYPE OF RISK – FINANCIAL, RISK CONTENT - INCONSISTENCY OF SOURCES FOR FINANCING NEEDS)

Evaluation of these connections requires specific actions by the business owner and hired managers, for which it is necessary to have an action plan that is aimed at quickly responding to the deviations in the company’s activities, potentially leading to losses.

V. CONCLUSION

The implementation of measures may not lead to a reduction in ownership risks due to various reasons, one of which is mainly the inconsistency of measures with risks. To understand the reasons for this situation, the business owner should analyze the relationship between the measures and the correct understanding of the place of occurrence of risks, factors and reasons for the appearance of risks, quantitative and qualitative assessment of the significance of risks, as well as calculations of potential losses due to risks.

Because of the analysis of the decision to change the ownership risk management system, it may concern changes in measures, clarification of the composition of experts who participate in assessing the likelihood of risks, non-performance of staff and insufficient qualifications, etc.

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