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RISK ASSESSMENT IN THE DIGITAL ECONOMY

The digital economy is a global trend, thanks to which every sphere of the economy and entrepreneurship remains market-competitive. The concept of digital society and economics was first formulated in 1995 in the USA by Nicholas Negroponte at the Massachusetts Institute of Technology and was developed with the final formulation of the definition of "digital economy" in the writings of Don Tapscott. It is believed that the concept of the digital economy, its model component is a kind of virtual environment, the content of which more organically and in detail complements the existing realities, integrates with them.

Modern development trends have led to the widespread introduction of the digital economy and, in this regard, a rethinking of basic concepts, in particular, the concept of risk. In the field of the digital economy, it makes sense to claim that there is digital risk. Indeed, when it comes to information (digital) technologies, cyber risk is often mentioned. In circles of specialists, both of these concepts are accepted, which in reality mean the same thing. It should be assumed that over time it will be one concept, but cyber risk will remain a component of digital (information) risk.

Digital risk management includes the development and implementation of economically sound recommendations and measures for the enterprise aimed at reducing the input level of risk to an acceptable project level [1-4]. A set of these measures is embedded in the overall system of business improvement and development, making it more predictable and manageable. Risk management policy for an enterprise is the process of developing and implementing programs aimed at achieving a balance between the expected benefits of reducing risk in achieving the desired result of entrepreneurial activity and the necessary costs for this. In this, the expected benefits are the reduction of losses, the stability of the system and the result; costs – expenses of all types of

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implementations of program activities. Principles of formation of economic risk management policy [1, 4]:

- the optimal ratio of benefits and costs;
- maximum result at risk acceptable to the entrepreneur;
- optimal probability of an outcome;
- optimal fluctuation of the result.

The policy includes strategic and tactical decisions to respond to potential risks. For effective risk management in the activities of a manufacturing enterprise, it is important to have complete and reliable information, to be able to correctly analyze and assess all sorts of risks in the activities of the enterprise, and only on the basis of these factors it will be possible to make the right decisions and develop a risk management strategy [2]. Therefore, decision-making is necessary:

- investigate risks;
- determine the purpose of risk response (level of acceptable risk);
- determine restrictions on the choice of response tools (terms, resources, priorities (external and internal));
- evaluate the comparative effectiveness of the program activities.

The significance of risk research lies in the ability to obtain for themselves and the groups interested in this business the necessary data to make decisions about the feasibility and nature of the proposed actions and measures to protect against possible losses. Risk research unconditionally includes two stages:

- a) risk identification – procedures for recognizing external and internal risks for the enterprise's activities;
- b) risk analysis – procedures for identifying risk factors and assessing the level of their significance, analyzing the likelihood that certain risky events will occur and affect the achievement of goals.

Risk analysis can be divided into two mutually complementary types: qualitative and quantitative. Qualitative analysis aims to identify factors, industries and types of risks. Quantitative analysis of risks should make it possible to numerically determine the size of individual risks and risks of the enterprise as a whole [2]. Evaluation by criteria and priorities – a test for the acceptability of situations and risk levels for the organization. We list the most commonly used methods of risk analysis [3]:

- a) building a decision tree – a description of each stage of the project, with an objective assessment of risks, all costs, as well as probable losses and benefits;
- b) analog – development of a new project, taking into account such projects already implemented;

c) simulation methods – expressed in conducting multiple experiments with a layout, in which the search for risk values is projected step by step;

d) expert – such a method is applicable if the initial data is insufficient or not, and then experts are involved in an objective risk assessment;

e) probabilistic – based on statistical data, the probability of losses is determined, statistical data are taken for previous periods in certain risk zones;

f) method of analysis of indicators of the maximum level – aimed at determining the sustainability of the project to various factors that can change the conditions for the implementation of this project;

g) method of analyzing the sensitivity of the project – aimed at an objective assessment of the values of the impact of the initial data used in the calculation of changes in the results of the project;

h) scenario method – consists in the development of several scenarios for the development of events during the implementation of the project and their comparative assessment is proposed.

We formulate a number of criteria for choosing methods and methods for assessing risks in the activities of a small business enterprise:

- the method should be optimal in complexity, understandable to all experts, suitable for regular use;

- it should be possible to adapt risk assessment methods to the characteristics of the enterprise;

- the application of the method should be economically feasible in terms of the cost of conducting analytical procedures;

- for a comprehensive risk assessment, it is necessary to use several methods since most of them contain subjective elements.

In the proposed methodology, an attempt was made to implement these criteria. Risk assessment of a number of industrial enterprises was carried out by the method of expert assessments. However, it should be borne in mind that expert assessment is very subjective, since all risks have a probable nature of occurrence. It is important that risks should be tied to a certain time interval and it is necessary to assess negative events and their consequences. To conduct such an assessment, it is necessary to develop special questionnaires, select highly qualified specialists and conduct a survey individually. After all the specialists are interviewed, it is necessary to rank the results to assess the likelihood and significance of risky situations. Experts participating in the survey must respond based on their experience. Risk assessment consists in determining:

- a) the degree of importance of this risk in terms of the consequences for the business (loss);

b) the probability of manifestation of this type of risk in the activities of this enterprise. Assessing the degree of importance (severity of the consequences) of the onset of a risky situation, the following can be used as a gradation:

- 1 – minimum consequences;
- 2 – low consequences;
- 3 – average severity of consequences;
- 4 – high burden of consequences;
- 5 – catastrophic losses.

To determine the probability of risk, the following gradations were used:

- 1 - a slight likelihood of an event;
- 2 – low probability of an event;
- 3 – average probability of an event;
- 4 – high probability of an event;
- 5 – extremely high probability of an event.

To determine the importance and probability of a risk, 6 managers (experts) were involved who have production and analytical experience, as well as in-depth knowledge in the field of the evaluated activity.

Thus, risk assessment based on scientifically based and practically applicable methods allows you to:

- to form a holistic picture of the risks that impede the implementation of the effective operation of the enterprise;
- rank risks by the level of their impact on the results of the organization's activities and identify the most significant among them;
- justify effective measures to prevent and reduce the level of risks.

It should be noted that the approaches to assessing economic risks considered and analyzed in this study are not intended to compete with existing methods and criteria. Their role is to fill the gap where the toolkit of many techniques is insufficient or in principle does not apply. The results obtained are called upon to fill in the existing gaps.

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