

INCREASING THE EFFICIENCY OF MANAGEMENT OF THE INDUSTRY THROUGH ELIMINATING ITS NON-EXISTING PART — THE ILLUSORY PRACTICE OF MANAGEMENT IN CONDITIONS OF COMPLETE DETERMINATION AND COMPLETE UNDETERMINATION

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ABSTRACT

In recent years, significant progress has been made in risk management. Moreover, along with risk management, new concepts have been introduced: risk management, risk economics, risk engineering, risk administration and risk production; a new, basic, general and professional criterion for dividing risks (into economic, engineering, administrative and production) has been established; the interpretation of the elements of risk content has been clarified: certainty and uncertainty, in particular, their minimum and maximum values.

However, most scientists consider the idea of the existence of such two forms of them — complete certainty and complete uncertainty — to be erroneous. Eliminating illusory management practices is necessary to increase the effectiveness of organizational decisions. In conditions of complete certainty, managers may mistakenly believe that all processes are predictable, which leads to excessive bureaucratization. In conditions of complete uncertainty, the illusion of control contributes to making impulsive decisions without relying on analytics and scenarios of events. The elimination of such illusions allows to form adaptive strategies and respond more effectively to changes in the external environment. Therefore, this section has proven the absence of complete certainty and complete uncertainty both outside and inside the risk. For the first time, the widespread idea of the existence of complete certainty and complete uncertainty has been refuted.

The results obtained will deepen our understanding of the essence and content of risk, risk management and risk governance in general, and will increase the efficiency of managing enterprises and organizations in the face of risks by eliminating unnecessary activity in the face of non-existent so-called “complete certainty” and “complete uncertainty”. Such results will allow to concentrate attention and resources on the real subject of risk management — only on risk.

KEYWORDS

Risk, complete certainty, complete uncertainty, management, illusory management practice.

1.1 THEORETICAL PRINCIPLES OF UNDERSTANDING AND PRACTICE OF APPLYING RISK MANAGEMENT

It is known that the activity of mankind in the conditions of risks has always been in the past, is now, and in the future, post-industrial, entrepreneurial era will only grow. It is necessary to state with pleasure

that to date, knowledge about risks and management in their conditions have achieved significant success, including with the participation of the authors of this article. Thus, the following have been newly defined: the stages of their development, methods of management in the conditions of risks, the essence, the content of risk — as the unity of two basic elements (uncertainty and certainty); the concept of “risk management” has been clarified — as a composition of new concepts “risk economics”, “risk engineering”, “risk administration”; a new concept of “risk management” was introduced — as a composition of risk management and risk production and as “management under risk conditions” instead of the erroneous one — “risk management” [1, 2]. The need to increase the effectiveness of risk management was also proven, primarily by establishing a new, basic, general and professional criterion for dividing types of risks into economic, engineering, administrative and production. The interpretation of risk as a unity of two main elements: certainty and uncertainty was also clarified. However, the authors believe that among the types of certainty and uncertainty, the idea of the existence of complete certainty and complete uncertainty (inside the risk) is erroneous? Therefore, the very formulation and solution of this problem becomes an exceptionally relevant problem of risk management.

The authors of this section conducted a scrupulous and capacious analysis of a significant number of literary sources on the basic concepts of risk management [3–6]. It shows that there are various interpretations of the concepts of risk, certainty, uncertainty, complete and incomplete certainty, complete and incomplete uncertainty.

But the main result of the analysis is the conclusion that the literature assumes the existence of three different separate phenomena: risks, complete certainty and complete uncertainty. The authors of the article consider the idea of the existence of complete certainty and complete uncertainty (inside the risk) to be a mistake. Let's give a few quotes that clearly illustrate this mistake.

Thus, in [4] it is stated: “Complete uncertainty is a type of uncertainty characterized by close to zero predictability of events. In conditions of complete uncertainty, economic entities are completely unable to predict in any way both the prospects of their own development and the market as a whole... Complete certainty is characterized by a predictability of an event close to 1 and allows economic entities to predict not only their strategy in the market, but also its development trends with a 100 percent probability”. But an enterprise is a phenomenon created by man, and therefore there can be neither complete certainty, nor the absence of fluctuations in the magnitude of results, nor can there be complete uncertainty (this follows from the risk principle).

A similar point of view is present in [7–9]. Here the author is sure that “... one can talk about the conditions of certainty, risk, and uncertainty in decision-making”. That is, it is also asserted that certainty and uncertainty exist separately, outside of risk. At the same time, it follows from the whole context that here we are also talking about complete certainty and uncertainty.

Analysis of recent research and publications as a whole shows that the most important unresolved component of the problem. In contrast, the authors of this study, based on their personal many years of experience in researching risks as a subject of risk management, or more precisely, as a subject of all risk management as a whole, put forward a hypothesis about the lack of complete certainty and complete uncertainty in general in the phenomena created by mankind.

1.2 RESEARCH METHODOLOGY

To achieve the aim, the following methodological approach will be followed in the study:

- the meaning of the risk principle is revealed;
- the absence of complete certainty and complete uncertainty outside the risk is proven;
- the absence of complete certainty and complete uncertainty within the risk is proven.

When solving the first problem, which was to establish the risk principle, the authors drew attention to the fact that risks are an integral part of any human activity. This is due to the fact that every phenomenon that arises as a result of human activity always carries a certain risk. Risks have accompanied humanity at all times, since the beginning of the development of civilization, and will remain an important component of our existence in the future. Any phenomenon created by humanity cannot exist without risk, and at the same time there is no risk without a phenomenon. In other words, these two concepts are inseparable.

The principle of inseparability of risk and phenomenon emphasizes: if there is a phenomenon, then it is necessarily accompanied by risk. This applies not only to complex technical or innovative processes, but also to everyday actions. For example, the invention of the car brought with it the risks of road accidents, and the development of digital technologies gave rise to the risks of cyber threats. At the same time, if there is no risk, this means that the phenomenon to which this risk is associated also does not exist. This dependence is explained by the fact that risk is not just a random component, but a natural property of any phenomenon that arises as a result of human activity.

Given this inseparability, a logical question arises: how exactly is risk related to the concepts of certainty and uncertainty? It is especially important to explore these relationships in cases of absolute certainty and absolute uncertainty. After all, it is these extremes that are most often used as theoretical concepts for analyzing complex situations. The answer to this question became the basis for solving the second problem.

The second task was to prove that beyond the risk there is neither complete certainty nor complete uncertainty. To do this, the authors relied on the risk principle established during the solution of the first task. According to this principle, if there are risks, then there must be corresponding phenomena. Among these phenomena there may be such extremes as complete certainty and complete uncertainty.

However, let's imagine a situation where there is no risk at all. In this case, there are no corresponding phenomena, since they are always associated with risk. This means that beyond the risk, it is impossible to exist either absolute certainty or absolute uncertainty. This statement is explained by the fact that the phenomena of complete certainty and complete uncertainty are theoretical constructs that exist only in connection with risk. Without risk, these constructs lose their meaning and cannot actually be realized.

This conclusion is important for understanding the nature of risk and its role in shaping human activity. Outside the risk, the world becomes "empty" in terms of certainty or uncertainty, because their presence is possible only in interaction with risk. Therefore, the statement about absolute certainty or absolute uncertainty in a world where there are no risks makes no sense.

Additionally, the authors considered the question of whether phenomena of complete certainty or complete uncertainty can exist in the risk itself. To do this, they turned to the analysis of the content of risk,

which consists of two main elements — certainty and uncertainty. This means that risk by its nature is a simultaneous combination of these two components.

From the content of risk, it follows that if risk exists, then both of its components must necessarily exist: certainty and uncertainty. This conclusion is based on the concept of “content”, which means the set of basic elements of the phenomenon. If even one of these elements disappears, the entire structure of risk collapses. Thus, risk is impossible without the interaction of certainty and uncertainty.

The key point is that none of these elements can completely disappear or become absolute. In other words, certainty cannot be reduced to zero, but it cannot completely replace uncertainty either. Similarly, uncertainty cannot fill the entire risk space, but it cannot be completely absent either. This means that it is impossible to achieve a state of absolute certainty or absolute uncertainty in risk itself.

Risk is a complex phenomenon that is inextricably linked to phenomena created by mankind. Its content is determined by the simultaneous presence of certainty and uncertainty, which cannot exist separately. Outside the risk, neither absolute certainty nor absolute uncertainty is possible, and inside the risk they always coexist in a certain balance. These conclusions emphasize the importance of the risk principle as a key tool for understanding complex processes and phenomena.

1.3 DISCUSSION OF THE RESULTS OF ELIMINATING THE ILLUSORY PRACTICE OF MANAGEMENT UNDER CONDITIONS OF COMPLETE CERTAINTY AND COMPLETE UNCERTAINTY

The principle of inseparability of risk and phenomenon is a fundamental concept that emphasizes that any phenomenon created by man is always accompanied by a certain degree of risk. This dependence is due to the fact that human activity is always associated with uncertainty, and therefore with the potential for adverse or unpredictable consequences. That is why risk cannot be separated from any human project, discovery or process.

For example, the development of transport technologies, such as cars or airplanes, opened up new opportunities for humanity to move quickly, but at the same time brought with it the risks of accidents, technical malfunctions and security problems. A similar situation is observed in the field of information technology: the creation of computer networks has greatly facilitated the exchange of information, but at the same time the threats of cybercrime have arisen. Even such everyday phenomena as housing construction or agricultural activities involve risks — from possible natural disasters to man-made accidents.

Thus, the established principle of the inseparability of risk and phenomenon is of profound importance for understanding the nature of human activity. It emphasizes that no progress or change can be absolutely safe or completely predictable. Humanity is always left to seek a balance between positive development opportunities and managing potential risks that inevitably arise in the process of creating new phenomena.

The proof of the absence of complete certainty and complete uncertainty outside the risk boundary is based on the principle of the inextricable link between phenomena and risks. Outside the risk boundary, where potential threats or opportunities are not considered, it is impossible to speak of absolute

predictability or complete chaos. This is explained by the fact that any phenomenon that is not accompanied by risk actually ceases to exist as a real process or event.

Complete certainty implies the existence of an ideal state in which all factors affecting an event or phenomenon are fully known and controlled. However, in the real world, this is not possible, since there are always unknown variables, even in the simplest situation. For example, even in a stable production process, unforeseen circumstances may arise, such as equipment breakdowns or external economic changes. The absence of risk here becomes a theoretical abstraction that has no practical meaning. Similarly, complete uncertainty means a state of absolute chaos, where there is no predictability or structure. However, in nature and society, there are always certain patterns and regular relationships that exclude complete chaos. Thus, both complete certainty and complete uncertainty outside the limits of risk become absurd concepts.

Within risk, it is also impossible to achieve a state of absolute certainty or absolute uncertainty. This is explained by the nature of risk itself, which includes the simultaneous interaction of two main components – certainty and uncertainty. It follows from the content of risk that these components are its inseparable components.

Certainty within risk means the presence of partial information about the possible outcomes of an event or process, while uncertainty reflects the inability to predict all possible consequences. None of these components can completely disappear or become absolute. If certainty disappears completely, risk as a phenomenon ceases to exist, since any logical basis for forecasts is lost. On the contrary, if uncertainty disappears, risk also disappears, since all outcomes of the event become predictable.

Thus, neither absolute predictability nor complete chaos are possible even within risk. Risk always functions as a balance between a certain share of certainty and a share of uncertainty, which complement each other.

Effective risk management allows to identify, assess and minimize existing risks by developing response strategies and preventing potential losses. An important tool is the construction of risk forecasting models based on data analysis and the implementation of contingency plans to ensure resilience, in particular supply chains.

The financial sustainability of an organization is characterized by the ability to maintain solvency, ensure continuous operations and meet financial obligations even in crisis conditions. In the logistics sector, this includes cost control, inventory optimization, and management of receivables and payables.

Risk management in this context helps to form financial reserves to cover unforeseen costs, maintain flexibility in financial flows and avoid significant losses from logistics failures. For example, the use of insurance mechanisms or hedging currency risks are practices that support the financial sustainability of logistics operations.

The readiness of a logistics system to develop lies in the ability to quickly adapt to market changes, introduce new technologies and management methods. The assessment of such readiness includes an analysis of financial indicators, organizational flexibility and risk management strategy.

Risk management in this context contributes to effective planning of the expansion of logistics capacities, development of scenarios for adaptation to changes and reduction of the probability of failures during

the implementation of innovations. In addition, it allows to avoid overspending of resources and to increase the overall efficiency of management, in particular logistics.

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