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*Organizational support of the crisis management mechanism of  
industrial enterprise activity on the basis of the reflexive approach*

**Keywords:** crisis management; human resources; organizational support; industrial enterprises; reflexive approach

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### Abstract

**Theoretical background:** In today's circumstances of volatility and uncertainty in the activities of industrial enterprises, there are always risks of emerging crisis phenomena. In such a situation, top management should realize that only a well-established system of crisis management will enable the timely detection of "weaknesses" and prevent the threat of bankruptcy of enterprises in the future. The establishment of this system can be ensured through the proper organizational support of the mechanism of crisis management, which, besides traditional tools, should take into account non-traditional, namely reflexive management tools. Ultimately, taking into account psychological factors of behaviour as well as rational ones is an important factor in the adoption of quality managerial decisions. The implementation of reflexive methods of influence on such subjects enables them to be inclined towards actions that are beneficial to the enterprise and contribute to its improvement, with a small financial expense, in order to constructively resolve conflict situations – the factors of occurrence of crisis phenomena.

**Purpose of the article:** The purpose of the article is to substantiate the theoretical and applied principles of the organizational provision of the mechanism of crisis management regarding the activity of industrial enterprises, on the basis of the reflexive approach.

**Research methods:** In the process of solving the tasks, general scientific and special methods of research were used. The dialectical method allowed for the exploration of the components of the mechanism of crisis management of the activities of industrial enterprises and the stages of its organizational support in terms of their interconnection and interdependence. Analysis and synthesis were used to assess the activities of industrial enterprises with foreign investments in Ukraine and define the tasks of organizational support for their crisis management. Grouping, comparison and scientific synthesis were used in the development of recommendations for the use of a modern low-cost reflexive approach in the interaction of personnel of industrial enterprises with key stakeholders.

**Main findings:** The development of organizational support for the mechanism of crisis management of industrial enterprises should include a sequence of stages: the analysis of the organizational structure of the enterprise; the analysis of job descriptions of personnel related to the implementation of the functions of crisis management of the enterprise; the allocation of new functions and the justification of the need to create additional structural units, as well as the regulation of their interaction; and the management of personnel resistance by innovation. The use of the reflexive approach in implementing the mechanism of crisis management regarding the activity of the industrial enterprise is a low-cost way of reforming the existing system in terms of its functioning and the impact of the company's staff on stakeholders, in order to incline them to make the decisions necessary for the company to achieve the goals set out in the crisis programme.

### Introduction

In conditions of uncertainty of surroundings, military conflicts, and the globalization of economic processes in the activities of industrial enterprises, there are always risks of emerging crisis phenomena. Modifying operating conditions requires new knowledge in the management of enterprises for the application of crisis measures and new approaches in the management of its activities. Top management should realize that only a well-established crisis management system will allow for the timely detection of "weaknesses" and prevent the threat of bankruptcy of enterprises in the future. The proper operation of this system can only be ensured through the proper organizational support of the mechanism of crisis management which, besides traditional tools, should take into account non-traditional ones, namely reflexive tools in the management of personnel. Ultimately, the effectiveness of the crisis management of the activities of

industrial enterprises depends on the establishment of rational connections and inter-connections between the links and levels of management. These conditions can be achieved only with the proper unification, redistribution and consolidation of certain links and positions of new managerial functions, depending on the objectives of crisis management and with the use of a reflexive approach in an industrial enterprise.

The aim of this article is the substantiation of theoretical, methodological and applied principles of organizational provision regarding the mechanism of crisis management in the activity of industrial enterprises.

### **Review of literature on crisis management**

The number of publications on the issue of crisis management grows every year and is accompanied by the evolutionary integration of certain areas (preventive, reactive, arbitration) in the systemic understanding of crisis management. The expansion of the content of the crisis management mechanism is done by methods from expanding the range of actions from crisis and minimizing its consequences (Dovhan, 2013), to identification and preventing crisis manifestations (Lihonenko, 2016; Uitdewilligen & Waller, 2018).

The problems of crisis management in general are considered by Lihonenko (2016) who developed the theoretical and methodological principles of the mechanism of crisis management and identified innovative technologies for managing the crisis conditions of enterprises (pp. 163–166). Sapriel (2003) developed a conceptual approach to crisis management, offering corporate tools that accelerate the response of organizations to crisis manifestations (p. 348), while Fener and Cevik (2015) considered the importance and corporate tools of quality management in crisis situations (pp. 696–700). Meanwhile, Bundy et al. (2016) conducted an in-depth analysis of the theoretical and methodological foundations of the enterprise's crisis management and proposed an integrated crisis management structure based on research strategy, theory of organizational behaviour, public relations and corporate communications (pp. 1663–1691). Kesavan (2016) proposed the tactics and methodology of project management during the crisis, models of crisis management projects and how to increase productivity in organizations; and other domestic and foreign scientists. Less attention has been paid to the organizational support of crisis management. In particular, it is worth noting the work of Yankovska (2013) in which the algorithm of the coordination of the main principles of crisis management and the human factor is developed, and, therefore, the features of crisis management personnel in the context of organizational changes are grounded (pp. 11–12). Mitsakis and Aravopoulou (2016) researched approaches to personnel management in the conditions of crisis; crisis management principles of personnel are formulated taking into account the behavioural characteristics of employees (pp. 70–80), while Uitdewilligen and Waller (2018) substantiated the organizational and methodical approach to the formation of professional multidisciplinary teams on

crisis management (pp. 732–744) and Parnell and Crandall (2017) investigated the behavioural aspects of crisis management, as well as approaches to decision-making by actors in crisis situations. In addition, work by Vardarlier (2016) is worthy of attention, as he substantiated the necessary changes in the practice of human resources management during the crisis (pp. 467–468). Finally, Athamneh (2018) investigated the peculiarities of personnel management in crisis, etc.

However, there has still been a lack of thorough research on the organizational provision of a mechanism for crisis management of the activity of industrial enterprises with the use of modern low-cost approaches, one of which is a reflexive approach. Therefore, this article is devoted to the study of this aspect of the problem of the crisis management of enterprises.

### **Research methodology**

The theoretical and methodological basis of the research is the scientific developments of the leading Ukrainian and foreign authors on the issues of crisis management and organizational support for the management of the activity of industrial enterprises, taking into account the reflexive approach.

In the process of solving the tasks, general scientific and special methods of research were used. The dialectical method allowed for the exploration of the components of the mechanism of crisis management regarding the activities of industrial enterprises and the stages of its organizational support in their interconnection and interdependence. Analysis and synthesis were used to assess the activities of industrial enterprises with foreign investments in Ukraine and define the tasks of organizational support for their crisis management. Grouping, comparison and scientific synthesis were used in the development of recommendations for the use of a modern low-cost reflexive approach in the interaction of personnel of industrial enterprises with key stakeholders.

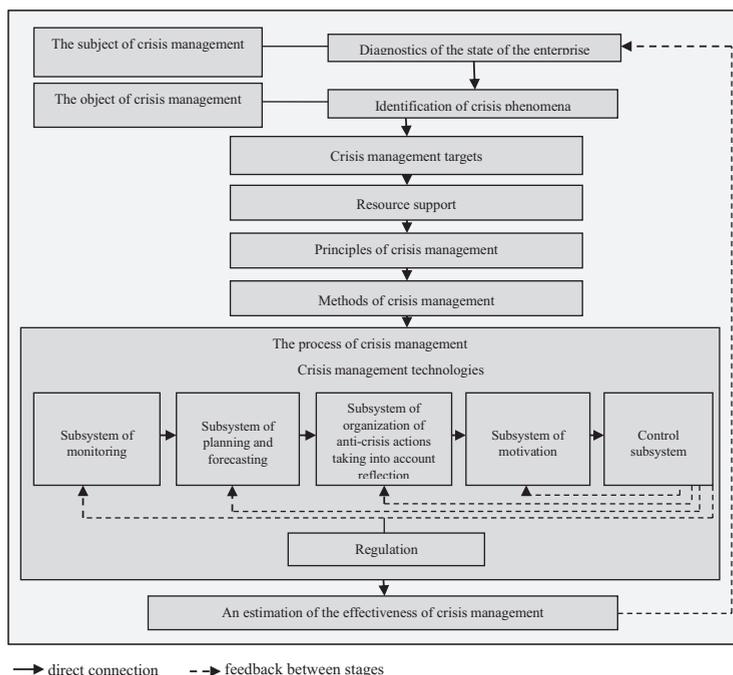
This article suggests that in order to ensure the maximum effectiveness of the mechanism of crisis management regarding the activity of industrial enterprises it is necessary to also consider the rational factors of the actions of the subjects, and pay attention to the irrational component of their behaviour. This will allow for a reflexive impact on such subjects in the direction the company needs to achieve the objectives of crisis management.

### **Results**

Modern conditions of activity of industrial enterprises are reflected in the fact that too high standardization of managerial thinking, the uncertainty of the external environment, the surface level of processing of information flows and their transformation into knowledge can “provoke” a crisis in enterprises, in many cases faster

and more extensively than under the influence of other factors. At the same time, such a threat expands exponentially in a hierarchical order as in an individual and a group or an organizational one. That is why in the process of crisis management it is expedient to apply a reflexive approach which involves optimizing internal connections and reducing the uncertainty of the external environment through the purposeful organization of reflexive influences on the subjects, which leads to more predictable behaviour. Ultimately, through knowing how the subject thinks, what information it has at its disposal, how it is decided, etc., through reflexive influences, one can persuade such an entity to act and make such decisions as is necessary for an enterprise to achieve the goals of crisis management.

The mechanism of crisis management of the activity of industrial enterprises implies the presence of the following: an object (crisis phenomena that arise under the influence of a changing internal and external environment and are manifested in the deviation of the actual performance indicators of the enterprise from the planned, normative) and the subject of management (responsible authorities of crisis management, depending on the specifics of the organizational structure of the enterprise), the formation of target management processes, its resource support (material, labour, financial, informational resources, etc.), the choice of methods and technology management establishing a clear system of correction and feedback (Figure 1).



**Figure 1.** The mechanism of crisis management of the industrial enterprise

Source: Authors' own study.

The objectives of crisis management are to exit the crisis or prevent or mitigate the effects of crisis. The management process includes the subsystem of monitoring, planning and forecasting (namely, the definition of the stage, parameters, volume and extent of the crisis phenomenon), the subsystem of the organization of crisis actions, and the subsystem of motivation and control. The specificity of the proposed mechanism of crisis management is to take into account the organization of reflexive influences on key stakeholders of the enterprise.

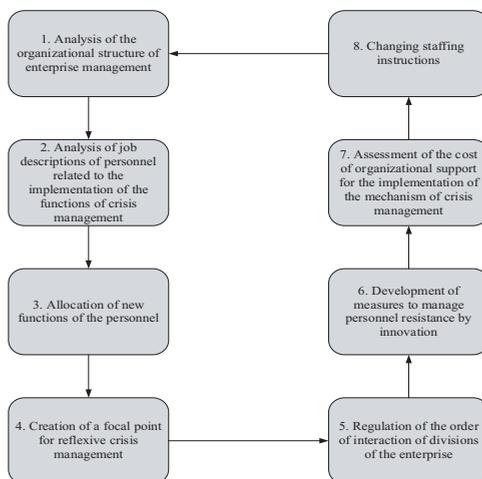
Crisis management of the activities of industrial enterprises should be carried out in the presence of its appropriate organizational support. The latter involves optimizing the structure of the personnel by redistributing new functions, regulating the interaction of personnel of new units in the existing management structure, organizing the selection of the most competent personnel for the implementation of crisis management functions and minimizing staff resistance to the necessary changes. The above information serves as an argument for the development of organizational support for the mechanism of crisis management of the activities of industrial enterprises.

As the basis for testing the proposed approach to crisis management of industrial enterprises, the enterprise of the cement industry of Ukraine Volyn-Cement was selected – the branch of PJSC “Dyckerhoff Cement Ukraine”. Indeed, the cement industry is considered by the United Nations as one of the most important components that characterizes the level of development of the country (CEMBUREAU, 2018). In addition, most of the enterprises in the cement sector of Ukraine are owned by foreign capital. At the same time, the share of the cement industry in Ukraine’s GDP in 2017 amounted to only 2.3% and was one of the lowest among European countries, whereas in neighbouring Poland the share was 9%, in Germany and France – 7.8% and in the USA it was 5.6% (Statista, 2018). During 2008 to 2015, the dynamics of cement production in Ukraine declined, except in 2011 when a positive growth rate of 13.88% was observed. Cement production increased by 10.03% in 2017 compared to 5.43% in 2016 but in 2018 it decreased by 2% compared with 2017 (Ukrstat, 2018). Another negative trend in the activity of the enterprises of the cement industry in Ukraine is the large share of unprofitable enterprises (in 2017 this totalled 52% of the total number of industry enterprises). This highlights the need for the creation (improvement) of the mechanism of crisis management and its proper organizational support for the purpose of effective implementation.

When implementing the mechanism of crisis management, organizational support should be aimed at solving such important tasks as:

- the introduction of new management methods, depending on the objectives of crisis management;
- the organization of work and interaction of personnel (redistribution and allocation of new functional responsibilities);
- management analysis and control;
- the development of regulations on the improvement of the organizational structure of management.

The development of organizational support for the mechanism of crisis management of industrial enterprises should include a sequence of stages (Figure 2).



**Figure 2.** Scheme of development of organizational support for the mechanism of crisis management of the enterprise

Source: Authors' own study.

The structure of the branch of PJSC “Dyckerhoff Cement Ukraine” Volyn-Cement is presented by the plant management, as well as by leading divisions (Figure 3). An analysis of the functions of the operating units at the Volyn-Cement enterprise related to the implementation of the mechanism of crisis management shows the need to establish a focal point for crisis reflexive management. At the same time, there is no need to create additional departments for the implementation of crisis management; instead it is necessary to redistribute new functions within the framework of the current structure, as well as to improve the competencies of the personnel regarding measures in crisis conditions. The Center for Crisis Reflexive Management provides for the organization of reflexive interaction between the CFO, the planning and production analysis department, logistics service, product sales department and personnel department at their work, as well as cooperation with key stakeholders.

The work of the centre and the reflexive actions of its participants in the context of the deployment of crisis processes should be aimed at implementing the crisis strategy and crisis programme of enterprise development. At the same time, it is advisable for the CFO to coordinate and monitor the effectiveness of the implementation of the crisis programme and the reflexive effects on competitors, suppliers, consumers, investors, etc. within its implementation. The director in the aspect of reflexive processes must use certain reflective control tools such as cognitive, affective (emotional), conative and flexible ones in the context of information constraints, and adequately and resolutely respond in terms of risk. It must give its subordinates sufficient autonomy but

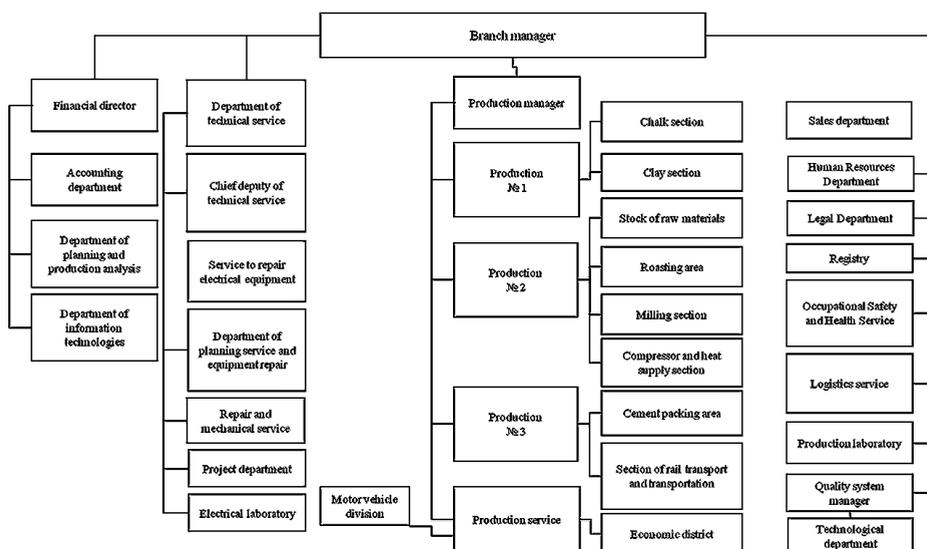


Figure 3. Organizational structure of the industrial enterprise Volyn-Cement

Source: (Dickerhoff Ukraine, 2018).

at the same time control their actions, not only to plan and organize the activities of the centre of crisis reflexive management, but also to direct employees so that they aspire to work even more effectively. In the division of product sales it is expedient to provide functions inherent in the services of competitive intelligence, information and reflexive security. In particular, the employees of this department need to constantly collect information about changes in the external environment, as well as the behaviour of competitors and consumers, and reflexively affect them on competitors, covering information that is beneficial to the company, or, conversely, creating “information boundaries”, thus, changing the perceptions of competitors about the external environment. Regarding consumers, it must carry out informational influence aimed at acceptance by the consumer of the decision on the purchase required by the enterprise. Furthermore, employees of this department should expose the reflexive influences on the part of competitors together with the IT department to design and implement means of information protection, by means of marketing actions to form competitors, suppliers and consumers of a profitable image of the manufacturer; to form competitors in the distorted image of the consumer; to change the perceptions of consumers about competitors, etc. The logistics service should maintain the reliability of the relationship with suppliers through reflexive influence and the creation of an image of a “reliable” partner. This forms more advantageous contractual relationships through such informational influence on suppliers, which is beneficial to the company. The Planning and Production Analysis Department should participate in modelling the effectiveness of the implementation of reflective influences in the crisis management system. The effectiveness of the interaction of structural units in the system of crisis management

of the activities of the industrial enterprise directly depends on the desire of the staff to perform new functional responsibilities. A natural phenomenon in the behaviour of staff may be their resistance to innovation, which is explained by the psychological characteristics of people and their behaviour. It is especially important to prevent the resistance of staff in implementing the mechanism of the crisis management position regarding the issue of the financial director. A successful manager must combine four managerial roles: the manufacturer, the administrator, the entrepreneur and the integrator. This means that he not only needs to focus on production and on quantitative indicators, and adhere to rules, norms, and a strictly established schedule, but also needs to generate new ideas, smooth out conflict situations, and adopt a position of cooperation with personnel. After all, when predicting and approving personal decisions in a situation with incomplete information, people tend to focus on the personal views of their authorities. Therefore, when evaluating a manager, the following quality is at the forefront: the presence of leadership features.

## Conclusions

The application of the reflexive approach in the implementation of the mechanism of crisis management of the activity of the industrial enterprise is a low-cost way of reforming the functioning of the existing system. Indeed, taking into account the psychological factors of the behaviour of subjects in addition to the rational ones is an important factor in the adoption of quality managerial decisions. The implementation of reflexive methods of influencing such subjects allows decisions to be made that are profitable for the enterprise and contribute to the improvement of its position, with insignificant financial expenses. It also allows for the constructive resolution of conflict situations that are factors of the occurrence of crisis phenomena, and promotes awareness of the subjects of management, of the object of management and their own actions, and the consequences of such actions in relation to it.

Possibilities for further research are the discovery of new reflexive mechanisms of crisis management for enterprises, and the development of a system for diagnosing and monitoring the behaviour change of stakeholders of enterprises in order to prevent and resolve crises by organizing reflexive influences on them.

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