

The Elements of the Crisis Concept

Marie Mikušová, Petr Šnapka, Viktorie Janečková

Abstract—As every system conceptions the concept of crisis is based on the system of interdependent elements. These dialectic elements occur in a majority of definitions even though called differently. For further theoretical searching but also for practical utilization it is necessary to understand these elements. The paper stresses that the concept of crisis is ambiguous. There are identified and explained the elements that are generally found in most crises (disruption, precondition, triggers etc).

Keywords—Concept, crisis, element

I. INTRODUCTION

TO understand a concept of the crisis in a right way, it is necessary to see the organization as a system that can go through crises. The author based the explanation of this concept on the theory of society. Marx's theory of the society combines sociologic, economic, anthropologic, historical, futurological, and ecological perspectives. Marx sees the society as an internally contradictory and dynamic whole in which the basic societal institutions get into conflict with individuals' life process. This approach can be figuratively applied in view of the crisis and its elements.

If the concept of crisis had been limited to the economic sector only then it would have been possible to describe it by some quantification characteristics as e.g. decrease in production, decline in consumption, and growth in unemployment. Measurements results by means of economic indicators is an indispensable tool for efficiency and effectiveness [16]. The search and evaluation of measures which result in the recovery of economic life have an important place if crisis conditions in economic systems exists which need to be addressed. These measures must purposely lead to stabilisation and consequent growth of performance of entrepreneurial entities [17]. Once the concept spread to all areas of societal life and to every theory then its explanation is difficult. Application of that term makes it possible only to express that something is wrong [2]. The fact that the crisis penetrates into all areas of societal life offers approaching the crisis from the position of theory of society. The aim of this article is to introduce the multiple concept of crisis and to explain the elements and factors associated with the concept of crisis. For achievement the stated aim the author used basic research methods. It was necessary to read and analyze a range

of materials. The state of knowledge in the subject area was analysed, a comparison of types of crises was carried out. Using classification analysis the elements of the crises in general were assigned.

II. ELEMENTS OF THE CRISIS

A. System

The author draws on the work by Norbert Wiener [14] who sees the system as a set of elements in mutual interaction.

B. Information and its Transmission

It is cybernetics that deals with general principles of management and transmission of information in machines, living organisms, and communities. The most important principles of cybernetics [14] applied in the study of crises are as follows:

1) Feedback

A principle of feedback was known already in regulating technique and was used in the design of a feedback amplifier for the purpose of communication engineering. Founders of cybernetics, however, recognized that it a very general principle was in question. Thanks to cybernetics that principle became known in general and it allowed explaining a number of events taking place in various dynamic systems.

2) Information

Gradually the exact theory came into existence as a scion of the theory of probability. Information completed a physical picture of the world in the sense that it is equally important entity as mass or energy.

3) Model

Systematic study of various systems led to knowledge that systems of various physical nature might have very similar behavior and that the behavior of one system could be searched through another one easier implemented system in completely different time or spatial scales. Compiling the model is a basic prerequisite when dealing with the various systems parameters and implementation [1]. In the submitted work a simplified description of the system is considered as a model of the system which accumulates important properties of the system. It is desirable that the model also allows a prediction of system behavior in yet unverified conditions. As stated by Janovská, Vozňáková and Švajdová [15] analysis of reality, necessary to construct a model, the analysis of the causes of „failure“ of the model is themselves a source of knowledge for managerial decision-making.

C. Preconditions for the Crisis

Preconditions for the crisis can be developed by the accumulation of the sequence of events whose early

Dr. Marie Mikusova, prof. Petr Snapka and Dr. Viktorie Janeckova are with Technical University of Ostrava, Czech Republic (e-mail: marie.mikusova@vsb.cz).

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identification relates to acceptable assumptions of risk and standards in order to avoid it. Reason [7] called such events 'hidden pathogens' connected with 'asymptomatic' (latent) failure' [12] that can emerge in organizations. Interesting failures are intellectual (rational) ones built on management's assumptions which can contribute to the development of preconditions for the crisis (e.g. 'our employees are so devoted to us that we can absolutely trust them'). Turner and Pidgeon [12] the evolution events in the course of crisis situation emergence as an 'incubation period'.

Turner and Pidgeon [12] identified factors that would initiate the evolution of preconditions for the crisis:

- *Rigidity in thinking and conviction* of the top management (conviction of the organization); this failure of management may influence also the theory of group thinking.

- A problem is perceived, the organization is dealing with it, but *separately* without looking for connections with other problems that may possibly cause other further disasters.

- The organization does not recognize '*voices from outside*' that notify it about potential crisis danger. People from outside may meet with rejection or with arrogant responses. Simply because the organization automatically believes they 'know better' the problem than people outside it.

Another ordinary factor is a problem with the transmission of *information*. In risk situations the nature of information flows is changing. Communication does not work if there are not any sources or if the crisis situation is so serious that necessary information cannot be processed in the existing information network [11].

Inexperienced and ill-informed *people* finding themselves in potentially risk situations are also a factor contributing to many crises. In some cases the existing *regulations* (crisis plans and the like) are not satisfactory, which further contributes to a probability of crisis arising. Inability or unwillingness to *see the imminent risk* or to assess the size of sudden danger are a common factor [7]. Possible risks are usually underestimated [6]. Turner calls those factors 'crisis of neglect' [12].

Shrivastava [10] divides preconditions for the crisis: emerged in the *nominal* state and later latent - a hidden failure arisen during the *incubation* period as the internal failure of the organization in connection with the external limitations (regulators), by the infrastructural failure and by the failure in the period of preparation for the crisis. Smith [10] characterized preconditions as '*crisis of management*'. Smith's argument is that the crisis has its roots in the way of management that overstates the effect of relatively less important hidden flaws allowing them to combine and thus to trigger the crisis.

D. Disruption

This element has two sides. On one hand, it points to a certain event, *external* disruption that provokes a crisis (floods, a military conflict, poor crop and etc.). On the other hand, there are special disruptions that do not cause crises but they emerge at the surface from apparently undisrupted

processes. Those processes will often appear in the form of too big or fast growth of a certain value or the variable in relation to other variables (e.g. excessive increase in supply in relation to demand).

If those processes are considered in the system level it is apparent that quantitative growth creates an *overload* phenomenon; the system loses its ability of solving problems which it solved before exceeding the certain limits. The system should be able to transform itself but it is not able to [4]. More generally speaking, the emergency breakdown can be thought a consequence of overloading; the system is confronted with the problem which it is not able to solve within its rules and standards of operation and within the limits of its normal existence. A crisis therefore appears as *the absence of solution* (the effect of deregulation and disorganization) that can encourage the solution (new regulation, evolutionary transformation) [4].

According to the author more important for the concept of crisis might be the internal disruption caused by the processes that seem not to be divisive. This internal disruption caused by the overload shows itself as a failure of regulation or as deregulation. There is a crisis at the level of organizational rules of the system; it means not only at the level of external events into which the system is firmly settled but also in own organization, in its creative and recovering function. Deregulation of the organization will bring malfunction where there was functionality, a turning point where there was the continuity and a conflict where there was consensus [13].

E. Triggers

This tendency (predisposition) Turner and Pidgeon [12] call a 'precipitating event'. Shrivastava [8] uses the term a 'triggering event', and it represents a hidden (latent) failure originated in the 'incubation period'. Triggering events can be identified by the place, time, and the source of their occurrence.

F. Growth of Disorders and Uncertainties

Every system of living organisms and mainly every social system entail a disorder. Systems operate despite the disorder which means that the disorder is partly stopped, corrected, transformed and integrated.

Crisis, however, always means a decrease of stability in the system. That is why the crisis always means a growth of disorder, instability and risk. This leads to the growth of uncertainties and to the decline of predictability. Of course, a new more general prognosis is under certain circumstances possible.

G. Immobilization and Release

The influx of disorders is connected with paralysis of that what created flexibility of the system, its mechanisms of reaction. On one hand, there is a collapse i.e. a disorder of the basic structural elements and on the other one there is stiffness i.e. a return to mechanistic forms. The aspect of stiffness reflects in immobilization of that what really ensured

permanent reorganization of the system by locking the mechanisms of feedback that removed deviations and faults.

Immobilization of mechanisms of permanent reorganization facilitates potential forces release. Immobilization of the organization actually means a removal of all restrictions applicable to the parts of system and processes taking place there.

The central characteristic of the crisis is then not only the onset of disorders and uncertainty but above all the immobilization affecting the process of organization and reorganization, which is spreading and deregulation. 'Release' of the crisis reflects in various aspects mutually inseparable [4]:

1) Development of Feedbacks

Crisis disruptions set to motion forces which increase the existing fluctuations instead of moderating them. Deviations are becoming continuously more pronounced and they are growing instead of being removed. Creation of this feedback reflects in the excessive or inadequate growth or in the decline of a certain element. From that point of view the time of crisis is the time of accelerating, increasing, spread of infection and morphogenesis (creation and development of new forms having their origin in deviations).

2) Conversion of Complementarity into Antagonism

Hidden (latent) antagonisms in those processes have a tendency to appear while the manifested complementary elements have a tendency to be transformed into a potential form.

3) Formation and Growth of Conflicts

Hidden antagonistic features anchored in every organization clearly appear on the surface. Conflict character has a tendency to grow up to the moment at which it becomes dominant. Conflicts are multiplied not only on the level of individuals or groups but also within control and regulatory mechanisms on one hand and processes of deviation and new tendencies creating on the other. It is obvious that the term of crisis cannot be limited to the term of internal conflict within the system but that it implies a possibility of conflicts' inducement, multiplying and deepening.

H. Measures

Crisis puts into motion disruptive processes which used to be very spontaneous. In those conditions the measures based on prognoses and on the deterministic approach seem to be muted. In other direction, however, the stimulation of measures takes place.

Crisis creates new conditions for negotiations and measures. Due to its uncertain and random nature, due to the mobility of forces and forms entailed and due to the multiplicity of alternatives the crisis situation creates a favorable situation for making bold innovative strategies. It provides a room for decision-making among various ways of behavior and strategies. This element is wider developed in the part of this work dealing with crisis management training.

I. Change: Progressive and Regressive Solutions

Crisis offers a possibility of return to the original state (by absorbing a disruption), a possibility of system disintegration (division), a possibility of the total disintegration (e.g. genocide of nation, liquidation of the organization), but it mainly means variants of development and changes.

Uncertain nature of the crisis causes that also its solution is uncertain. As the crisis brings a sudden and fast spread of disintegration and integration forces (forces of extinction and recovery) it puts into effect certain 'sound processes' (research, strategy creation, innovations) and also pathological processes (myths, magic, rituals), and it can have both regressive and progressive solutions [4].

Here a double face of the crisis can be seen more clearly: danger and the opportunity; danger of regressive development and the opportunity towards progressive development. Crisis activates disorganization and reorganization (while one inevitably causes the other), and every increased disorganization entails a factual danger of extinction but also the opportunity to set up a new organization, to the creation and overcoming.

J. Recovery, Reconstruction

After the immediate shock the organization tries to manage crisis impacts, so that the damage is limited. This is the first step towards recovery. Turner and Pidgeon [12] label it as 'the first stage of settlement'; the immediate after-collapse situation is identified, ad hoc actions are taken and the rescue is started. Smith [9] speaks about the end of the operational crisis in connection with the creation of 'supportive environment', but according to his opinion the prospects of recovery are not optimistic.

Smith [9] considers as the crisis of credibility and legitimacy the situation in which organizations seek for scapegoats and blame them to justify their behavior and the management style before the crisis. Their behavior is often justified by the effort to restore the external confidence in the organization.

Victims may be offered compensations and they may again join organization's social system. There is a chance to normalize relationships with employees and other stakeholders. Organization and its processes can be reorganized, demands for compensation can be met, new products can be introduced as well as a new production program, markets can be changed, and new financial management can be introduced...

What Shrivastava [8] and especially Smith [9] point out to is 'a simple cycle of learning'. Errors are corrected but not the essential policy.

K. Knowledge (Learning)

By the investigation of own crisis or some other form of the crisis, organization's attitude to the surroundings changes and it brings a shift from presumptions to the standards of prevention. This is called Kolb's cycle of learning based on experience. Crisis represents actual experience from which

organizations can draw comments and responses to organization's behavior and its performance by searching and evaluation. Investigation provides a prerequisite that the future behavior will be based on the new concepts (standards of prevention) [3].

This is also a concept supported by Pearson and Mitroff [5] with their contribution of 'appropriate reaction' and 'critical examination' based on the experience from the crisis. What both authors suggest is a need of inducement a power of learning 'double cycle' which includes questions and changing assumptions, standards and behavior. Such learning also depends on unlearning, which is the struggle with errors in managerial leadership.

III. SUMMARY

From the institutional point of view the crisis is anything that threatens the stability of organization. Yet all crises have several common characteristics (Fig. 1):

Crisis is almost always disruptive. As long as it is not solved it blocks organization's activity. Important role of the crisis management is to find out how much negative the impact of the crisis on the organization might be so that it could be possible to ensure a balance between managing the crisis and maintaining the normal operation of the organization.

Crisis is almost always negative. They detract attention from important everyday tasks and undermine concentration on work and its objectives, and they create tense atmosphere between ordinary employees and executives. They cast a shadow of doubts on organization's credibility in the public image.

Crisis divides the organization. Both employees and executives choose a side which they will join on the basis of facts or their interests and/or organization's interests. Management should recognize the signs of polarization in time and take action to the maintenance of organization's consistency.

Crisis can cause distorted or inaccurate perceptions. It can show only one side of the whole situation and encourage negative public feelings against the organization. Impression can be very often taken as a fact. Therefore, management has to be ready forcefully to deal with misguided opinions.

With the exception of situations in which the organization anticipated certain risks, the crisis is usually a surprise. Even a prudent manager need not be always able to predict the crisis but he/she has to be familiar with the elements that create it, and to plan how to deal with it when it will occur.

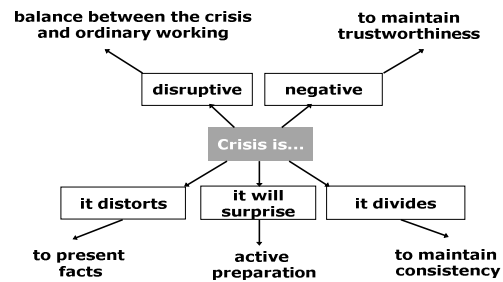


Fig. 1 All crises have several common characteristics

IV. CONCLUSION - DIALECTICS OF ELEMENTS

In the previous text some elements of the crisis are presented. It is obvious that the crisis is not only a summary of those elements but it is created by their interaction, their combinations, and interrelations of elements and phenomena that are at the same time complementary, antagonistic and operate dialectically. Crisis is both incapacitating and releasing power it is a system of feedbacks, antagonisms and compliance, practical and magic seeking and finding solutions at the real and mythic level.

The concept of crisis is thus very extensive, more comprehensive than the concepts of a failure, problem and disorder. Crisis entails failures, disorders, problems, deviations and antagonisms. This concept encompasses forces of origin and destruction which again become here, more than anywhere else, two sides of the same phenomenon [4]. In the course of the crisis, quasi-neurotic processes (magic, ritual, mythological) are simultaneously encouraged as well as the inventive and creative processes. All those processes entangle, enmesh and fight with each other. Development as a result of the crisis is circumstantial not only because of spreading disorder but also because all those forces, processes and extraordinary powerful phenomena influence and destroy each other within that disorder.

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