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METHODOLOGY FOR CRISIS SCENARIO AND CRISIS PLAN DEVELOPMENT

Summary: The contribution deals with the issues of crisis and risk management. Its main goal is to design the methodology for crisis scenario and crisis plan development. Partial goals include defining the terms “crisis scenario” and “crisis plan”, identifying the possibilities of crisis scenario and crisis plan application and putting the methodology into practice. The contribution also focuses on determining the relationship between crisis management and risk management. In the context of the methodology, individual phases of risk management are specified. As company crises are currently perceived to be events of societal importance, the significance of crisis management and risk management should not be underestimated.

Key words: Crisis management, crisis scenario, crisis plan, risk management.

1. Introduction

In the 21st century, business entities have to pay attention to business crises more than ever before. Crises, as the crucial moments in the attempt to achieve balance, are quite natural and logical events and in the life of a company they are unavoidable. At the present time, characterised by dynamically developing business environment, it is therefore essential to pay attention to company crises. It is, however, not sufficient just to monitor them. Company leaders also have to set crisis management procedures. Another crucial step consists in developing an efficient early warning system. This system enables the company to identify and evaluate the occurring and already existing variations and shortcomings in its individual functional areas and to send signals to the company management to introduce feedback regulatory measures.

To identify a crisis, companies, within the frame of their control systems, usually use financial indicators that serve as a basic tool of financial analysis. Using financial indicators as the company’s early warning system is not the most appropriate solution. The main drawback of financial indicators lies in the fact that these indicators only detect a crisis when its consequences affect the financial area. If managers concentrate solely on these indicators, it may lead to the overlooking of the primary causes of crisis that trigger a chain of unbalances that gradually impact other functional areas of the given company. In these circumstances, the financial area is

affected only with a considerable time delay, which significantly decreases the company's opportunities to respond to such crisis situations and to eliminate the occurring threats in time. A suitable method of preparing for potential crisis occurrence is the timely development of crisis scenarios and crisis plans.

2. Goal and methodology

The goal of the contribution is to design the methodology for company crisis scenario and crisis plan development. Partial goals include the following: defining "crisis scenario" and "crisis plan", identification of possibilities for their application, putting the methodology into practice as well as the determination of the relationship between crisis management and risk management. For the purpose the primary and secondary sources of data have been used. The primary data resulted from the own survey. The secondary data sources included in particular technical literature on crisis management and risk management as well as in-company standards. The data collected was processed by the methods of induction, deduction, analysis and synthesis.

3. Results and discussion

Terms definition

Crisis management is a set of principles and tools that company management teams and owners exploit in order to deal with crisis situations in a given company, to lead the company out of the crisis and bring it back to normal. Despite the almost unambiguous definition of crisis management, both in management theory and practice there are several different basic approaches to company crisis management. These differences are given by the perception of crisis, i.e. the moment of company crisis occurrence.

Crisis management in the broadest sense has a preventive character and starts already in the phase of preparation of company activities whose performance may be potentially affected. In the narrower sense crisis management may be viewed as a set of principles and tools proactively applied by the company management in order to overcome the crisis situation in the company affected (already in the phase of acute crisis), to lead it out of the crisis and enable its normal development. This is a so-called reactive approach. Crisis management in the narrowest sense concentrates solely on company liquidation. Signals have recently begun to appear emphasising the importance of seeing crisis management in a more complex perspective. It seems that it is essential to continuously prepare for such threats. If the company is sufficiently prepared, it can respond to crisis situations in a better way and reduce the cost associated with the elimination of negative consequences.

A scenario is an outline of events for stage-management purposes, a description of a time sequence of actions, a projected process [Slovník cizích... 1998], a syn-

thetic description of an event or series of actions and events [Wikimedia Foundation 2008]. A scenario is also an account or synopsis of a projected course of action, events or situations. Scenarios are widely used by organizations of all types to understand different ways that future events might unfold. Scenario planning or scenario analysis is a complex business process related to futures studies. Scenarios should not be used to forecast what will happen [Wikimedia Foundation 2008]. According to the Forecasting Dictionary [Armstrong 2001], a scenario is “a story about what happened in the future”. According to the Oxford English Dictionary [Armstrong 2001], it is “a sketch, outline, or description of an imagined situation or sequence of events; esp. a) a synopsis of the development of a hypothetical future world war, and hence an outline of any possible sequence of future events; b) an outline of an intended course of action.

On the basis of realized survey a crisis scenario has been defined by a written document describing potential crisis situations in a company and their course in terms of time and space. Such a crisis scenario is further elaborated into a company crisis plan describing solutions to such situations. The above-mentioned crisis scenario definition shows that a crisis scenario is a written document consisting of descriptions of potential crisis situations in a company. A list of solutions and procedures helping to overcome these crisis situations is contained in a **crisis plan** development based on the relevant crisis scenario. The fundamentals for the crisis scenario and crisis plan development are the analysis of risks of the given business entity. Together with the risk identification and assessment, risk analysis constitutes a part of the process of company’s risk management.

Design methodology for crisis scenario and crisis plan development

On the basis of the survey aimed at the analysis of approaches of Czech executives and experts to the practical use of crisis scenarios and crisis plans, it has been drafted the following methodology for crisis scenario and crisis plan development. The fundamentals for the crisis scenario and crisis plan development are the analysis of risks of the given business entity. Together with the risk identification and assessment, risk analysis constitutes a part of the process of company’s risk management.

Risk management is a proactive approach founded on prevention. On the contrary, crisis management is characterised by a reactive approach, i.e. responding to crisis and attempting to cope with the existing crisis situation. Although the conception of crisis management is currently changing and is more often perceived as management in the broader sense of the word, i.e. emphasis is placed on prevention already in the phase of preparation of company activities whose execution may be potentially endangered; the importance of risk management process for a company may not be overlooked. Crisis management as well as risk management should, together with company strategic management, become a part of activities of any organisation. Interlinking proactive and reactive approaches and the use of decision support systems may significantly improve the process of overcoming crisis situations by companies. For the purpose of company management, the individual phases of the company risk management process it has been also specified.

1) Risk identification and description

This refers to the drafting of a list of risks that an organization may face. Such a list of risks must be systematic and exhaustive. The list will comprise all risks that represent a potential threat to the relevant company. The nature of risk is always dependent on the purpose of activity of a given company. Individual risks differ not only in terms of their nature, but also by frequency (probability) of occurrence and the seriousness of their impacts. Such estimates are made using uncertain and changing data. When assessing the consequences, the degree of seriousness as well as the approach to risk perception are determined. At the same time, requirements for further information are specified. To identify risks, the following methods can be used: brainstorming, group discussions, Delphi method, What – If Analysis and causal techniques, such as ETA (Event Tree Analysis), FTA (Fault Tree Analysis), FMEA (Failure Mode and Effect Analysis), FMECA (Failure Mode, Effects and Criticality Analysis), etc.

2) Risk analysis

Risk analyses focus on the decomposition of risk factors. Hardly any risk operates in an isolated way therefore it is necessary to identify the relationships between individual risk factors. When selecting suitable methods, it is crucial to harmonise scales and scoring. The disadvantages of applying different methods lie in the incompatibility of scales and comparisons and in the high degree of subjectiveness. Furthermore, at this stage risk matrixes describing the degrees of risk acceptance are created too. Risk analyses use, as appropriate, either qualitative or quantitative risk analysis. The typical feature of a qualitative risk analysis is that risks are expressed based on a qualified estimate while a quantitative risk analysis is based on a mathematical calculation of risk and the probability of threat occurrence and seriousness of consequences. The sources of information include, for example, situational analysis, records and descriptions of breakdowns, technical literature, etc. The suitable risk analysis tools include structured interviews, group discussions, individual determination of risks, FTA, and ETA. The main goal of risk analysis is to classify risks according to the probability of occurrence and seriousness of their impacts on individual functional areas of a company.

3) Evaluation and proposed measures

The evaluation and the proposal of measures to be taken are made on the grounds of the assessment of the probability of risk occurrence and seriousness of impacts. In this phase, company goals are detailed and possible preventive measures or methods of mitigation of their effects are proposed. Risks or risk factors are arranged according to their significance for the given organisation. Such significance may be related to the level of acceptability in terms of costs or benefits (Cost-Benefit Analysis).

A residual risk means a risk that continues to exist even after the implementation of all measures. It should be small enough to be acceptable for a business entity without the need for taking further measures to reduce it. This is also the time to

determine the method of risk financing which is dependent on selected measures. Then the selected measures can be implemented into company practice.

Risk management should be integrated into all company activities and should become part of everyday decision-making. Integrated risk management means a continuous, proactive and systematic approach to the management of strategic and operational risks on a company level, the aim of which is to maintain the operational efficiency of the company. Since risk management comprises a decision-making process based on risk analysis, it is necessary to add to the list of identified company risks also the risk of a wrong decision. With respect to the fact that no comprehensive sets of information are available for the majority of implemented decisions and it is impossible to precisely estimate the impact and significance of individual risk factors that affect the company, some decisions are made based on incomplete information. This problem may be eliminated by introducing decision support systems.

Process of crisis scenario and crisis plan development

Identified internal and external company risks are entered into a risk matrix. The risk matrix is described in Fig. 1.

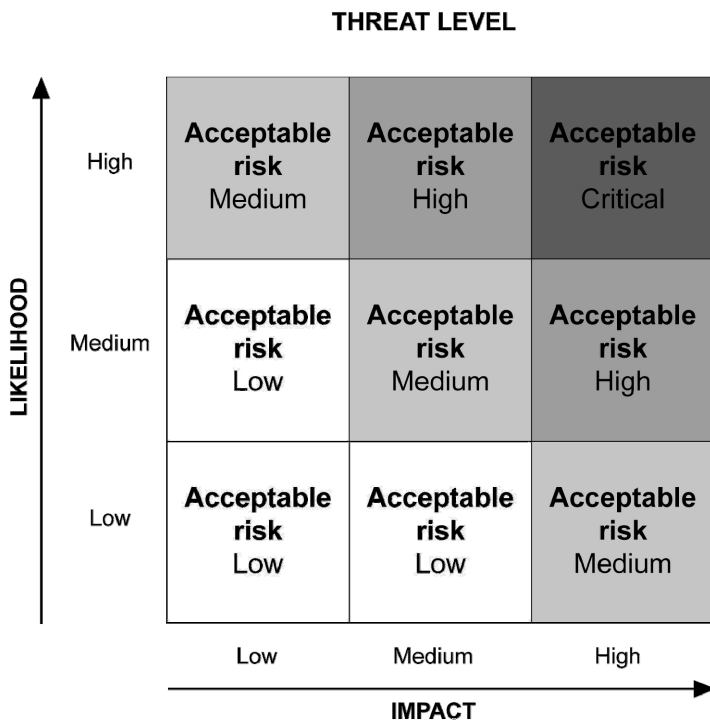


Fig. 1. Risk Matrix

Source: author's work.

For each considered risk, the time period, probability of occurrence and seriousness of consequences (impacts) have to be determined. Consequences affect various segments of company activities. The risks included in the risk matrix may become crisis focal points. Crisis focal points represent company crisis situations. The higher the number of crisis focal points in the right upper part of the matrix, the greater the threat for the company. For each such an identified crisis focal point, i.e. for each such a detected company crisis situation, it is necessary to develop a description of its course in terms of time and space, so-called crisis scenario. To consider individual crisis situations, it is possible to use, for example, experience from the past or group discussions. Group discussions have to be repeated regularly and the list of possible risks has to be updated by the so-called risk communication.

The process of crisis scenario and crisis plan development is described in Fig. 2.

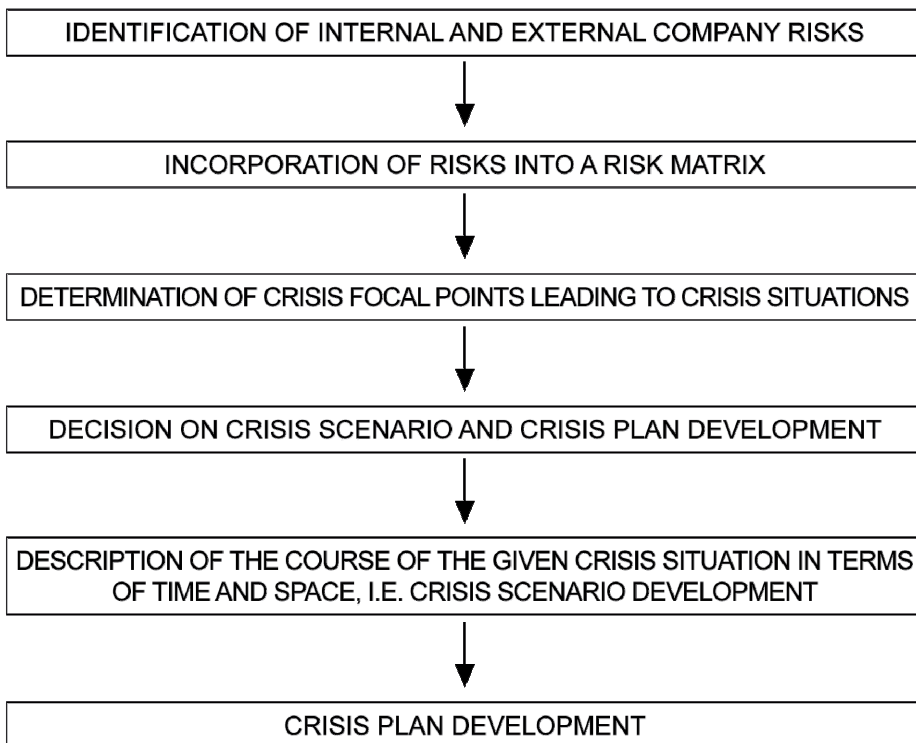


Fig. 2. Process of Crisis Scenario and Crisis Plan Development

Source: author's work.

A crisis scenario is further developed into a crisis plan. The key function of a crisis plan is to solve the existing crisis situation, i.e. to ensure a timely and efficient response. Crisis situations are time-consuming and require a prompt reaction.

A crisis plan therefore has to contain all available information, processes and measures necessary for the overcoming of the crisis situation. At the same time, the document may not be too complex to complicate its practical exploitation. The measures proposed in a crisis plan do not represent an exhaustive list of procedures and do not cover all possible solutions as each crisis situation has its specifics. As a consequence, the proposed procedures should not be perceived as the only possible solution, but as model procedures that can be modified to satisfy the specific requirements of the given crisis situation. A crisis plan, both in printed and electronic forms, should be developed for each crisis situation described in the given crisis scenario. All crisis plans should include a crisis communication plan. Crisis plans should be reviewed and updated according to the needs of the business entity in question, however, at least every six months. The requirement for more frequent reviews and the subsequent updating of crisis plans depends on the character and speed of changes taking place in the company and its environment (both industrial and global).

Identification of possibilities of applying crisis scenarios and crisis plans

Crisis scenarios and crisis plans may apply to all situations that are, based on the process of risk identification, analysis and assessment, evaluated as crisis situations, i.e. the risks incorporated in the risk matrix will, in the opinion of managers and experts (and possible external specialists), represent crisis focal points. Crisis scenarios and crisis plans will not be used for situations the company management decides. The same applies to situations when the company decides to accept the risks arising from as the costs of crisis scenario and plan development would exceed the possible potential losses.

Implementation

The processing of a crisis scenario and a crisis plan is not the management's final step in the crisis management process. On the contrary, to be able to accomplish the demanding goals set by the crisis management, it is necessary to put the crisis scenario and crisis plan smoothly into the management practice. A suitable tool is to design a brief methodology to put crisis scenarios and crisis plans into practice. I recommend using a simple itemised form to enable easier and faster reference. At the same time, managers are not burdened by another complex in-company regulation.

4. Conclusion

As a result of changes in approaches and the modernisation of the media environment, company crises are viewed as the events of societal importance. Company crises test the quality of entrepreneurial plans, company culture and ethical norms. Gradual globalisation of the business environment forces business entities to include crisis management into their common management practice. Crisis management tasks are determined by the stage of crisis the given business entity is going through.

Overcoming crisis is feasible only if the majority of risks have been determined. Risk management is necessary to develop an efficient crisis management system. Risk analyses help to identify risk sources, potential threats and their values in terms of frequency of occurrence and seriousness of impacts. Through an active process of risk management it is possible to determine the tools and procedures to deal with crisis situations and to ensure adequate resources. Risk management represents a proactive approach based on prevention. On the contrary, crisis management is characterised by a reactive approach consisting in responding to crisis and attempting to cope with the existing crisis situation. Although the conception of crisis management is currently changing and it is more often perceived as management in the broader sense of the word, i.e. emphasis is placed on prevention already in the phase of preparation of company activities, the performance of which may be under potential threat, the importance of risk management process for a company may not be overlooked. Together with company strategic management, crisis management and risk management should become part of activities of any organisation. Combining proactive and reactive approaches and the use of decision support systems may significantly contribute to the overcoming of company crisis situations.

Literature

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METODOLOGIA DLA SCENARIUSZA KRYZYSOWEGO I ROZWÓJ PLANU KRYZYSOWEGO

Streszczenie: W opracowaniu zostały poruszone kwestie kryzysu i zarządzania ryzykiem. Głównym celem artykułu jest zaprojektowanie metody stworzenia scenariuszy i planów zarządzania w kryzysie. Celami częściowymi są zdefiniowanie pojęć „plan kryzysowy” i „scenariusz kryzysowy”, zidentyfikowanie możliwości zastosowania takich planów i scenariuszy w praktyce. Artykuł koncentruje się również na ustaleniu relacji między zarządzaniem kryzysowym a zarządzaniem ryzykiem. W kontekście metodologii wyodrębniono pojedyncze fazy zarządzania ryzykiem. Jako że sytuacje kryzysowe przedsiębiorstw są obecnie uznawane za wydarzenia mające znaczenie społeczne, istotność zarządzania kryzysowego i zarządzania ryzykiem jest nie do przecenienia.