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# ECONOMIC CRISES IN BUSINESS MANAGEMENT AND POSSIBILITIES OF THEIR SOLVING 

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#### Abstract

ABSTRAKT V příspěvku jsou uvedeny výsledky výzkumu MSM 6215648904 (Brno,2012, 2013) se zaměřením na krizový management. Jsou analyzovány hlavní příčiny vedoucí ke vzniku krizových situací a formulovány strategie řešení krizových situací. Příspěvek navazuje na výsledky výzkumu, který byly zveřejněny ve vědeckých časopisech a na mezinárodních vědeckých konferencích, zejména IAES (Rome, 1998) (Viena, 1999), (Charleston, 2000), (Paris, 2002), (Berlin, 2006), (Praha, 2010), FŠI ŽU v Žilině (2003,2004,2005,2009,2010,2011), FEM ČZU in Prague (2002, 2003, 2004,2005,2006,2010,2011,2012), SPU FEM Nitra (2002), Zemědělská ekonomika IV / 2001 and V/2003, VII/2009 aj.


## Klíčová slova:

Krizový management, informační technologie, algoritmus, životní cyklus podniku, krizový management, krizová matice.


#### Abstract

The paper presents the results of the MSM 6215648904 (Brno,2012, 2013) research focusing on crisis management. The main causes leading to crisis situations and methods of their analysis are presented. Further, the strategies for dealing with crisis situations are expounded. The paper develops the results of the author's research published in scientific journals and presented at conferences, in particular IAES (Rome, 1998) (Vienna, 1999), (Charleston, 2000), (Paris, 2002), (Berlin, 2006), (Prague, 2010), FSE of the University of Žilina (2003,2004,2005,2009,2010,2011), FEM CULS Prague 2002, 2003, 2004,2005,2006,2010,2011), FEM of the Slovak University of Agriculture in Nitra (2002), Agriculture Economics IV / 2001 and V/2003, VII/2009, etc.


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## Key words:

crisis management, information technologies, algorithm, company's life cycle, crisis management, crisis matrix.

## 1 INTRODUCTION

The current period in Europe, but also in other parts of the world, can be characterized by the search for the possibilities of further successful development of the economy as a whole and its individual components, both in particular countries and the whole European Union. This search has continued throughout the period of the global economic crisis experienced all over the world, which has a completely different character from earlier crises. Significant changes can be observed both at the enterprise level and the macro level. The conclusions of this research focused on specific companies.

As stated by Drucker (1998), no other century in human history has experienced as many radical changes as the twentieth century. In his publication "Managing in a Time of Great Change", the above-mentioned author has published practical experience of companies and specific approaches on how to deal with the respective situations and use them in practice. Integration processes characterizing the current state and prospects for changes in Europe and all over the world influence the behavior of all economies to a large extent, including the economy of the Czech Republic as a part of the EU. Other important factors include globalization of the market environment that pervades virtually all spheres of the society.

Hron (2001) states that the fundamental constant in managing the development of business entities is change, and coping with it is the basic criterion for the assessment of managerial skills of all corporate managers.

In addition, the economic situation that has gradually taken shape, and is characterized by continuing crisis that occurred in the developed economies of the world beginning in 2000, fully confirms this opinion.

Švejnar stated at the International Economic Forum (Prague, 2008) that the United States were the first initiator of this crisis, particularly by loosening its monetary policy in 2000; the other contributors include a boom in the real estate market, complicated financial instruments, panic and other problems, banks and insurance companies going bankrupt, the price of crude oil and food, etc.

The conduct of business enterprises is considerably influenced by the development of new information technologies. As Gates (1999) notes, the digital information flow enables all types and forms of information to be transferred into a single digital format, and then saved in any computer, processed in it, and resent.

## 2 OBJECTIVE AND METHODOLOGY

The objective of this paper is to publish the results of the MSM 6215648904 research carried out by the author (Brno, 2012, 2013), in which the subject of the analysis is the area of managerial decision-making in selected companies during their
life cycle, considering some important aspects that may lead to crisis situations in corporate management. One of the objectives of the performed analyses is a timely response of the corporate management, which allows the management to significantly reduce the impacts of possible crises, or prevent emerging crises. The published results have methodological implications, and present a formulation of an algorithm for monitoring the causes of a crisis, devising strategies for the corporate management to deal with them. The analysis is carried out based on the approach formulated by Svoboda (2002 and 2006), the application of which virtually relates to all phases of the life cycle of an enterprise in which crises may occur. The paper presents the main causes of crisis situations in the analyzed business entities in the area of economic, financial and accounting activities, providing strategies for their resolution applying the principles of crisis management together with the principles of knowledge management.

Methods of strategic decision making, guided interview, methods of analysis of managerial environment, economic and financial analyses and, in particular, the method of application of crisis management were applied, focusing both on the Czech and EU markets as well as on international markets. The analyzed enterprises are medium-sized companies with an extensive scope of business, equipped with modern technical means of control and information technologies that allow for effective implementation of the various types of financial and economic analyses, in connection with analyses of management and marketing. The subject of a detailed analysis is Bioveta, a.s., Ivanovice na Hané. The research employed the following analyses: PEST analysis, EFE (External Factor Evaluation Matrix) and IFE (Internal Factor Evaluation Matrix) analyses, and BCG and SPACE analyses, the results of which are used as the basis for crisis management. An analysis by the Boston Consulting Group and an associated SPACE analysis, which examined the position of the company in different markets, were carried out from 1998 to 2012.

In this paper we will state the factors that determine the identity of Bioveta, as well as an evaluation of products sold by Bioveta in terms of 2013 using a correlation table, and conclusions of the results ascertained using the Miles - Snow typology in business relations in individual markets. The outcomes of individual analyses are incorporated into a "crisis matrix", which is a synthesis of the above-mentioned analyses.

## 3 RESULTS AND DISCUSSION

Managerial work in corporate management is based on a number of important assumptions, and relies on the art of good information processing. Other important assumptions for successful managerial work include high demands on both personal and professional level, but also on other specific knowledge and skills that result from its interdisciplinary character. Demands on managerial work are constantly increasing, due to the influence of worldwide globalization processes, development of modern information technologies and other factors. Managerial work is done by individual officers in the corporate management within the performance of their managerial functions, i.e. planning, organizing, leadership, operational management and control,
and when performing their managerial roles that include performance of their ongoing management responsibilities in the information, decision-making, shaping and controlling processes.

The Framework of successful managerial work is identified by the factors that determine the identity of the company. These include several synthetic indicators (Svoboda et al., 2006), in particular the following:

- Corporate design, which consists of visually, or aurally, matching attributes of corporate symbols;
- Corporate culture, i.e. a set of standards of manners, customs and rules that are determinant for the behaviour of all personnel in the company;
- Behaviour of the company, i.e. company's response to all stimuli from its environment, to external stakeholders and individuals, as well as impulses the company emits in its environment, of informational (marketing aspects), materially energetic (e.g. product quality), and mixed character;
- Corporate communication, i.e. disclosure of corporate information to external parties, classified in two basic groups. The first group consists of information provided to all entities; the second group consists of information provided to their selected users, such as suppliers, etc.
- Company products, which are characterized by their quality, structure, pricing, distribution, form of communication, product design, etc.
All of the above components are involved in creating and maintaining a corporate image that is often the decisive factor for the acquisition of customers, suppliers and cooperating entities, and, therefore, not only all company managers, but also all company employees should constantly strive for a good company image.

If we evaluate products sold by Bioveta, a.s. in the correlation table according to their economic benefit for the company in descending order, from the most profitable to the least profitable in relation to meeting the current customers' requirements, classified starting with those that meet the current demands of customers the best and ending with those that meet them the least. We will obtain four variants of combinations of both views. By analyzing these combinations the corporate management can establish the basic trends of the causes of success and failure in trading specific products.
This arrangement will result in four quadrants as follows:
I. showing profitable products that fully meet current customers' requirements,
II. showing profitable products that do not meet current customers' requirements in full;
III. showing products with lower profitability, but with a good management's response to customers' requirements;
IV. showing products with low profitability that meet customers' requirements in an insufficient manner.
According to the above analysis of the Bioveta's products traded in 2012, 59.2 percent were included in the first quadrant, and 14.5 percent in the second quadrant. The return on cost ratio for products in quadrants I and II exceeded 14.1 percent, i.e. their economic benefit was very good.

The return on cost ratio for products in quadrants III and IV was up to 11.0 percent. 23.5 percent of products are included in quadrant III, and 2.8 percent in quadrant IV.

The analysis shows that the products in the first quadrant follow the market requirements, both in terms of economic benefit for the company, and in terms of customer benefit. Though the products in the second quadrant are traded profitably, they are highly threatened by potential competitors. The solution to this situation can be a better response of the company to customers' requirements, transfer of the products to another market, or their phasing out. Products in the third quadrant follow the customers' requirements, but have lower economic benefit for the company. This suggests either that the cost of products is high, or that the products were marketed to an inappropriate market. Products in the fourth quadrant require a detailed analysis, and might need a significant improvement, or withdrawal from the market.

In addition, we will provide selected data from a market assessment survey made using the Miles and Snow model in Bioveta, a.s., along with the experience of the management of the analyzed company at specific markets.

If we look at the characteristics of individual markets in respect of Bioveta's range of products, it can be stated that the company is usually marketing a wide portfolio of products simultaneously both on domestic and foreign markets at all times. The company adapts its behaviour to the specific conditions on individual markets. The defender approach (1) may be applied by the company on the Czech market only, for products ordered based on public procurement. Prospector approach (2) is used primarily for entry into foreign markets. This approach is usually combined with the analyzer approach (3). Another approach which is also used both on Czech and foreign markets is reactor approach, especially for products that have high competition, or for products that are being pushed out of the market by more up-to-date and efficient preparations.

The experience of the company's management shows very different characteristics especially of foreign markets. The markets of veterinary pharmaceuticals and organic preparations in the current EU are characterized by complying with all rules, which are highly demanding from the administrative point of view, especially when seeking marketing authorization for the products at these markets. The major representative of this type of markets from the Bioveta's point of view is the German market. In addition, these markets can be characterized by good payment discipline and observance of business rules.

Asian markets can be briefly characterized by easier access in comparison with the EU, by a broad portfolio of products and high competition, which results in a pressure for low prices. Another important feature is the high risk regarding payment discipline of the companies. The requirements for product quality are standard, i.e. the quality is lower compared to the EU. Markets in South America and other countries on this continent have special characteristics of their own, and, from the point of the analyzed company, there is a high competitive strength of the U. S. and Mexican companies.

Significant specificities can be observed on the markets of Belarus and Russia. In particular, there is a lack of clearly-defined business rules, non-standard means are used, and business is carried out largely through business brokers.
As a result of the effects of the global economic crisis, it was necessary for Bioveta to markedly reduce its business contacts in the markets of Ukraine and the Baltic States, because of their low ability to pay.

The current situation of the analyzed company in individual foreign markets, with the exception of the above-mentioned countries, can be evaluated as good, as the financial strength of the company significantly increases, and the company is gradually succeeding to penetrate to new markets. It is clear from the performed analyses that two groups of factors are involved. The first group includes high-quality products and flexible pricing strategies following the development in individual markets, and price stabilization, or a slight decline in prices. The other group of factors includes the application of the strategy of cost prioritization, which forms the basis for determining the appropriate price for each product towards competitors. The price relations for individual products are monitored using the aggregate value index analysis, which makes it possible to capture the changes in revenues from the products sold, due to changes in the amount of products and price effects. The company creates good prerequisites for achieving profitability of all products of the company.

A very important factor in the whole analyzed range of factors is a good orientation to customers' requirements, and market segmentation. Since 1990, the Czech Republic has been experiencing significant decrease in livestock and the related reduced demand of agricultural companies for veterinary products, which resulted in a decrease in the sales of Bioveta. It can be assumed from the current purchase price trend of animal products that the number of dairy cows and pig will be further decreasing. This will result in the reduced need for veterinary preparations and, therefore, decreased sales of Bioveta. The problem was dealt with in the past in successive steps by applying two groups of measures, which included expanding the portfolio of products, and changing over to the so-called "Hobby Programs" for pets, i.e. dogs and cats, both on domestic and foreign markets. The second measure aimed at a major increase in volume, i.e. an expansion of all demanded products of Bioveta to foreign markets. Both of these measures will have to be improved and pursued.

It is possible to say that a crisis in corporate management is a situation when the company fails to fulfill one of its long-term goals, which means that it is a partial crisis, or fails to fulfill more of its long-term goals; then it is a deeper crisis, or even a general crisis. Therefore, the nature of the crisis can be partial or comprehensive.
A procedure that allows to predict the crisis and, if need be, subsequently deal with it, can be divided into three stages: an analysis of the level of risk (1), crisis strategy formulation defining the risk level, or elimination (2) and implementation of the crisis strategy, i.e. mitigating or eliminating the causes of the crisis (3). The analysis of the level of risk is linked to the process of strategic decision-making, specifically to the methods of management environment analysis. Based on these methods, individual factors are determined, including the likelihood of their occurrence, both from the internal and external management environment. By assessing the above factors based on the likelihood of their occurrence and sorting them from the highest to the lowest, concurrently taking into consideration the impacts that the crisis causes, we have developed a crisis matrix. Based on the analysis of the crisis matrix we will determine the crisis strategy, i.e. we will establish the measures and procedures to mitigate or eliminate the crisis. It follows from the above that there may be four basic combinations of the likelihood of crisis occurrence including their impacts, namely: high likelihood of risk occurring with above-average to major economic impacts (I), high likelihood of risk occurring with below-average to small impacts (II), medium to
low likelihood of risk occurring with major economic impacts (III), medium to low likelihood of risk occurring with little economic impacts (IV). The mentioned alternatives are shown in Figure 1.


Where: P -likelihood of occurrence, H - high likelihood, L - low likelihood, D impacts

The crisis matrix gives indicative guidance on possible resolution of the crisis. Situations I and III require eliminating possible focal points of the crisis, either by not including the respective activity, or suppressing the activity and its subsequent termination, or formulating an alternative solution. Situation II requires either limitation of the respective activity, or searching for alternative solutions to the problem; situation IV allows for dealing with the crisis using an alternative solution, or using conventional measures. After determining the crisis strategy, it is possible, in the event of a crisis, to establish a plan the implementation of which can limit, or stop the crisis. Data from the crisis matrix serve as a detailed basis for a risk map, covering all areas of company operations. The results are used in practical applications by the analyzed companies.

The obtained results correspond to the works of certain authors. These include in particular Hron (2006), Gozora (2001), Šimo (2000), Švejnar (2008), Šuléř (1995), Tomšík (2004), WHITELAY (1994), and Zuzák (2008). The cited authors place considerable emphasis on managerial work, the development of business activities and effective implementation of marketing activities in the corporate management.

## 4 CONCLUSION

As follows from the performed analysis, if a company wants to succeed in ever increasing competition, it must strive to obtain valuable information on the management environment and other facts, which can be gained based on the implementation of management, marketing, economic and financial analyses. It can be noted that a functioning economy imposes new, important demands on the strategic decision-making of the corporate management using methods of crisis management. They preferentially include the following requirements:

- Application in practice of the system of recommendations from scientific studies for the limitation of the impact of financial and economic crisis;
- Adequate response of the company management to the changing environment, in particular to the external environment, with the requisite degree of creativity and with respect to customers' requirements;
- Application of modern methods of decision making together with a wellfunctioning company information system using state-of-the-art information technologies with a good grasp of strategic decision-making using appropriate systems of managerial and employee incentives;
- In case of problems in meeting critical business objectives, a timely application of recommended and applied methods of crisis management


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