

METHODS OF STRATEGIC DECISION-MAKING IN THE MANAGEMENT OF ENTREPRENEURIAL SUBJECTS

METODY STRATEGICKÉHO ROZHODOVÁNÍ V ŘÍZENÍ PODNIKATELSKÝCH SUBJEKTŮ

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ABSTRACT

Ve vědeckém příspěvku jsou uvedeny výsledky výzkumu MSM 6215648904 (Brno, 2005) s jejich aplikací v podnikové praxi v oblasti strategického řízení podnikového managementu se zaměřením na metody rozhodování, které umožňují podniku reagovat na změny v podnikatelském prostředí. Rychlé změny zejména v externím prostředí vyžadují od podnikového managementu volbu nových přístupů a metod rozhodování, jeho dobře koncipovaný algoritmus, umožňující pružné reagování na potřeby zákazníků. V příspěvku jsou uvedeny konkrétní aplikace uplatnění v a.s. Bioveta Ivanovice na Hané, která provádí výzkum, výrobu a prodej veterinárních biopreparátů a léčiv se značně rozsáhlým předmětem činnosti, a to na trzích ČR, stávající EU a dalších zhruba třiceti zemí světa. Pro uvedený složitý předmět činnosti byly ve výzkumu zformulovány metodické postupy v oblasti marketingové činnosti, řízení zásob, řízení jakosti, systému motivace manažerů a zaměstnanců firmy. Práce navazuje na výsledky publikované ve vědeckých časopisech a prezentované na vědeckých konferencích, zejména IAES (Paris, 2002), ČZU PEF Praha (2002-2003), SPU FEM Nitra (2002-2004), Zemědělská ekonomika (IV/2001 a V/2003).

Key Words: company management, strategic management, methods of managerial decision-making, marketing.

Klíčová slova: podnikový management, strategický management, metody manažerského rozhodování, marketing.

ANNOTATION

The paper presents the results of the 12/EP 2001-2004 (Brno, 2002-2004) and MSM 6215648904 (Brno, 2005) researches with their applications in enterprise practice, in the sphere of strategic control of enterprise management focused on the methods of decision-making enabling an enterprise to respond to changes in the entrepreneurial environment. Rapid changes, principally in the external environment, require of the business management to select new approaches and methods of decision-making and to have a well conceived algorithm enabling a flexible response to customers' wishes. The paper presents particular applications in the joint-stock company Bioveta Ivanovice na Hané which has a very large scope of business. Bioveta deals with research, production and sale of veterinary biopreparations and drugs on the Czech market, the existing EU market, and about thirty other world markets. Within the foregoing complicated scope of business, methodical procedures were formulated in the research for marketing activities, inventory management, quality management, and the system to motivate managers and employees. The paper follows up with the results published in scientific magazines and presented at scientific conferences, mainly IAES (Paris, 2002), CAU PEF Prague (2002-2003), SAU FEM Nitra (2002-2004), and Agriculture Economics (IV/2001 and V/2003).

INTRODUCTION

As Drucker states [2], no century in the history of mankind recorded so many radical changes as the twentieth century. His publication "Řízení v době velkých změn" ("Management in the Time of Great Changes") presents practical experience of companies, particular approaches to given situations and their practical use.

At present, further fundamental changes come up to the changes characterized by the cited author. The new changes, provoked by integration and globalization processes in Europe, will create gradually a new entrepreneurial environment for Czech entrepreneurial subjects where a lot of large changes may be reflected. These changes will belong to main factors which will limit the behaviour of all entrepreneurial subjects in next years. It may be supposed that enterprises with established business contacts with the EU member countries or doing already business with other world countries will be prepared better for the process of changes.

THE AIM AND METHODOLOGY

The aim of this paper is to publish synthetic results of

the authors' research focused on the analysis of strategic decision-making of a company top management. For the purposes of this paper, the object of detailed analysis is the joint-stock company Bioveta, a.s. Ivanovice na Hané (hereinafter Bioveta) where the authors carry out the foregoing research and apply conclusions of results. Results of business activities of the company with the existing EU member countries are published and compared to other foreign markets and possible changes of the entrepreneurial environment after admission of the Czech Republic to the European Union are formulated.

Bioveta ensures research and development, production and sale of veterinary and some human drugs on the Czech market, in member countries of the European Union, and in many Asian, American and other countries. Currently, Bioveta trades with approximately 40 world countries and their number is growing every year.

The research is based on the methodology of creation, implementation and changes of entrepreneurial strategies, conceived and verified gradually in the practice of entrepreneurial subjects (Svoboda 1998 - 2004). This methodology continues the defined proprietary strategies of entrepreneurial subjects. The results of decision-making are applied to partial entrepreneurial strategies of selected entrepreneurial subjects in the sphere of business, marketing, inventory management, quality and change management, human resources management, and company financing.

The analysed enterprises working together in the research, including Bioveta, represent medium-sized enterprises with a large scope of business activity, equipped with modern management and communication technology.

The research used methods of strategic decision-making, the method of controlled dialogue with a company top management and members of the board of directors. Furthermore, marketing methods, accounting methods and other related methods were used. The aforementioned methods are based on the conclusions found out by the methods of analysis of the management environment, related SPACE analysis applications and BCG methods modified by the authors.

The SPACE analysis was carried out according to the methodology developed by a pair of authors Hron – Tichá [7] with the construction of 35 input characteristics divided into 4 summary areas, i.e. the analysis of financial strength of an enterprise, its competitive advantages, stability of environment, and the strength of sector. These areas are evaluated on a 0-6 score scale.

The Boston Consulting Group's analysis is adjusted to particular conditions of the company and is made according to selected Czech and foreign markets where Bioveta offers its products.

Data are followed since the transformation of the limited liability company to the joint-stock company in the year 1998 up to the year 2003. The results of the analysis are given in a percentage summary of individual products represented on selected markets, on the basis of the life cycle analysis of individual selected groups of products. The relative expression of monitored markets is due to non-publishing of concrete company data which must be kept in secret, for which the authors are fully responsible. Quadrant I includes products with a high market development and a high share in the market, quadrant II represents products with a high market development and a low share in the given market, quadrant III comprises company products with a retarding rate of market changes and a high share in the market, and quadrant IV reflects company products with a retarding rate of market changes and a low share in the market.

Furthermore, a lot of other methods used, i.e. management, marketing, and accounting methods, represent the economic side of controlled processes. Owing to the fact that a crisis situation may occur in any enterprise in the market economy, either partial or complex, the paper gives an algorithm of possible response of company management to the aforementioned situation.

RESULTS

A lot of conclusions result from the analysis of the process of strategic management in Bioveta which trades in veterinary drugs and biopreparations, mainly for livestock and pets. The following analyses and methods are used for a long time:

- Analyses and methods of management environment with formulation of its changes;
- Analyses and methods of creation, implementation and changes of entrepreneurial strategies;
- Analyses and methods of the scope of business activity of a company and its evaluation according to a series of viewpoints and requirements;
- Analyses of stocks of products and methods of their management;
- Analyses and methods of market research, research a development, registration, and sale of individual products;
- BCG and SPACE analyses;
- Analyses of revenues with a general price index, with the definition of basic factors of their changes etc.

Currently, Bioveta produces and markets 26 product lines in 375 versions and packages, including some products for a human medicine. This large and

complex scope of business activity requires a flexible and creative response to changing market conditions which make a significant element of the external entrepreneurial environment. Business activity is closely related to other enterprise systems: organizational and internal company management, economic and financial system, human resources management system, and information system which displays and integrates all the preceding systems, thus influencing decisions on approaches to the management of individual spheres of the company activity.

In relation to the analysis of strategic decision-making of the company management, approaches realized in the process of strategic management will be described in the system of company and internal company management of the analysed enterprise. The mentioned system went through a series of necessary changes and approaches. The company responds in this way to changes of the external and internal entrepreneurial environment by gradual application of new approaches in the process of company management control. After privatization, the newly established state enterprise Bioveta was transformed to a limited liability company in the year 1994 and then to a joint-stock company in 1998.

The present management system is simple and is based on the financial and economic management of the company and its internal units which are quite independent. The aforementioned management system and the other company systems are supported by the company information system which provides data and uses modern information technologies. The Bioveta managing director manages in line relations a financial director, a production director, a director for sale of veterinary biopreparations and drugs, a quality director, a marketing director, and a director of product registrations. Individual managerial activities of all functions are delimited by tools of direct and indirect company and internal company management, where the main place is occupied by economic and financial tools delimiting an economic framework for decision-making of all directors, with its upper and lower limits.

Now, results will be presented of the executed BCG analyses and the related SPACE analysis studying the position of the given company on individual markets. BCG examines two principal market dimensions, i.e. changes in the market growth and the share of products of the analysed company in the given market. These two dimensions enable to set up the matrix of relations with four principal quadrants. The SPACE analysis evaluates the company position on the market from the viewpoint of branch environment, putting into relation principal factors of changes in the branch on the one hand and

Tab. 1 Representation of products according to the BCG analysis (in %)

Year	Quadrant			
	I.	II.	III.	IV.
1998	38.1	24.0	25.7	12.2
1999	43.4	27.5	27.0	2.1
2000	34.5	31.0	30.0	4.5
2001	32.1	34.2	26.0	7.7
2002	27.2	34.5	22.1	16.2
2003	45.1	34.0	18.2	2.7
2004	38.7	35.1	17.9	8.3

preconditions and changes of decisive factors in the company sphere on the other hand. Thus, mutual relations of selected decisive factors of the strategic position of the company on the market are represented.

The analysis of selected markets with the BCG and SPACE methods had been realized in the company from 1998 to 2003, always as at 31st December of a respective year. It means that the whole period of the joint-stock company was studied. Data were collected from the company information system.

This paper only presents data which characterize the input and output periods, with a brief characterization of their changes. The products represented in Quadrant I were 38.1 % in the year 1998 and they only changed to 38.7 % in the year 2004, i.e. by 0.6 %. In Quadrant II, the initial representation of 24.0 % increased to 35.1 %, i.e. by 11.1 % in the aforementioned period. But reduction occurred in Quadrant III from the initial position of 25.7 % to 17.9 % and even more marked reduction occurred in Quadrant IV from the initial position of 12.2 % to 8.3 %. It results from the changes in the representation of products in individual quadrants that this representation is advantageous as the majority of products is included in Quadrants I to III. Furthermore, it is evident from the results of the analysis that the company applies well the innovation strategy to its products represented in Quadrant II in the time of launching, as their representation increased by 10 % in the given period. The products included in Quadrant I are principal from the customer's viewpoint of product quality, and the company's viewpoint of achieved volume of sales. These products are optimally placed on a developing market. It is also evident that Bioveta applies with success the diversification strategy to its products, which can be proved by the increases in Quadrants I to III. Quadrant IV informs the company management on the representation of products which are unsuccessful on the market and economically unprofitable for the company. The marked desirable reduction of products in this quadrant results from a good application of the stock management and the

system motivating managers to minimize stock.

The SPACE analysis completes the previous conclusions and its summary results reveal that the sphere of sale of veterinary biopreparations and drugs is quite stable, but with high dynamic changes in the sale of individual products. The company financial strength increased considerably in the monitored period from the initial state of 4.7 points to 5.4 points, which approaches the upper limit of the score scale. The company competitiveness also improved from the initial value of 4.9 points to 5.5 points in 2003. As for the evaluation of enterprise in the branch of production of drugs and biopreparations, it can be valued as stable, with the input value of 3.5 points and the output value of 3.9 points. The attractiveness rate was also a good opportunity for the company in the whole period. The input value was 3.2 points and the output value was 4.2 points. All the foregoing values characterize selected markets and are average values.

The experience of the company top management points at very different characteristics of individual markets, first of all foreign markets. The markets of veterinary drugs and biopreparations in the present EU are characterized with observation of all rules and quite high administrative demands, in particular when new products are registered on these markets. Furthermore, they may be characterized with a good payment discipline and observation of business rules.

Asian markets are characterized with a relatively easier entry in comparison to EU markets, a wide portfolio of products, but high competition, which is manifested in the pressure to reduce prices. Another significant feature is a high risk in the payment discipline of customers. Quality requirements are standard, quality is mostly lower in comparison to the European Union.

South American markets have their specific features and a high concentration of competitive American and Mexican companies. Strong specifics can be observed on the markets of the Ukraine, Russia, and Byelorussia. There are few exactly defined business rules, non-

standard means are used, business is realized through intermediaries to a large extent.

Bioveta's position on individual markets can be evaluated as good because the company financial strength is growing significantly and the company penetrates new markets and is successful there.

An important factor in the analysed time series is a good company focus on customers' demands and market segmentation. Since 1990 the number of livestock has decreased significantly in the Czech Republic and so the demand of veterinary products from the side of agricultural companies has also decreased, which meant reduced revenues for drug manufacturers and their distributors. The foregoing problem was solved by two kinds of measures: firstly, by extending the range of products, and secondly, by transition to so-called "Hobby Programmes" for home animals, especially dogs and cats, on domestic as well as foreign markets, and by a strong expansion on foreign markets.

As it is clear from the analysis carried out, every entrepreneurial subject striving for success in the entrepreneurial environment should identify risks through the aforementioned analyses and find out potential beginning of a financial or economic crisis. A whole series of internal and external users corresponding to individual interest groups should be interested in a financial situation. Internal interest groups comprise owners, managers and employees. External interest groups consist of customers, creditors, suppliers and a state. Both the groups have their specific and unsubstitutable roles, although there is a lot of mutual connections creating chain relations at financing the company entrepreneurial activity.

Observation of principles of financial and internal company accounting is projected into the financial and economic company context and can be found out by analyses. The research of selected entrepreneurial subjects revealed that violation of these principles could cause a crisis. The origin of a crisis is usually of a long-term character, except some changes in input and output prices and natural disasters. Furthermore, it was ascertained that the supposed height of potential damage could be expressed quite well, but the company management cannot define when and to what extent a crisis may develop. Crisis is understood, in accordance with a lot of other authors, as a marked deviation from the normal state which limits significantly or prevents an enterprise from meeting its basic goals. Thus, crisis may have a partial or complex character. The procedure enabling to predict a crisis and to solve it subsequently can be divided into three phases: analysis of the level of danger (1), formulation of the crisis strategy with delimitation or elimination of the level of danger (2), and implementation of the crisis

strategy, i.e. reduction or removal of causes of a crisis (3). The analysis of the level of danger is related to the process of strategic decision-making, i.e. to the methods of analysis of the management environment. On the basis of these methods, individual factors are formulated with probability of their occurrence, from internal and external management environment. By arranging the foregoing factors according to the probability of their occurrence, from the highest to the lowest probability, with simultaneous expression of impacts provoked by a crisis, so-called crisis matrix will be created. Analysis of the crisis matrix will define a crisis strategy, i.e. measures and methods to limit or remove a crisis. After defining a crisis strategy, a plan is drawn up in the event that a crisis occurs to limit or stop the crisis.

DISCUSSION AND CONCLUSION

A lot of authors deal with the management of changes, both in general and in concrete practical applications. Conclusions of this paper agree with works written by Hron [6], Gozora [5], Šimo [14], and other authors.

Drdla and Rais [1] provide recommendations important for a successful company management: what changes should be done, how to plan such changes, model situations of the management of changes, how to prevent conflicts, and how to solve potential problems.

Many authors conclude that the process of changes is more and more faster, which brings extensive advantages to consumers but, on the other hand, great problems to companies which want to be successful. And it may be observed that a company will only be successful if it is able to respond adequately to changes.

Significant conclusions were formulated by Gates [4] who states that a digital flow of information enables conversion of all kinds and forms of information into a uniform digital form, save them subsequently in any computer, process them and send further. This fact is very important as all managerial processes run and are put into effect through information processes. Thus, a perfect company information system is an important precondition of a good performance of all managerial functions of company management.

As it was proved in the research carried out by the authors of this paper, it is necessary to execute a lot of analyses in a company, in regular intervals or as may be required, to cope successfully with the process of strategic management. The analyses in question are management, marketing, accounting, financial, and economic analyses. All these analyses have common basic principles which are sophisticated and are mainly evident in accounting. They penetrate and impact significantly other spheres.

The aforementioned principles include first of all a chronological recording of accounting changes, systematic approach (synthetic or analytic), double entries, presence of documents and a true picture, carefulness etc. If these principles are followed in practice, then economic and financial information gives a real picture of the state and changes in the process of management of the scope of business activity, respecting a particular entrepreneurial environment. Failure to observe these principles often leads to a number of problems, frequently hardly soluble or even insoluble by a company. It is also important to not underestimate control by company management.

LITERATURE

- [1] DRDLA, M. – RAIS, K.: Řízení změn ve firmě. Computer Press Prague, 2001. ISBN 80-7226-411-7.
- [2] DRUCKER, P.F. Řízení v době velkých změn. Management Press Prague, 1998. ISBN 80-85943-78-6.
- [3] DRUCKER, P.F. Výzvy managementu pro 21. století. Management Press Prague, 1st reprint, 2001. ISBN 80-7261-021-X.
- [4] GATES, B. Byznys rychlostí myšlenky. Management Press Prague, 1999. ISBN 80-85943-47-2.
- [5] GOZORA, V. Prispôsobovanie podnikateľskej štruktúry poľnohospodársko-potravinárskeho komplexu európskym trhovým štruktúram. In: Medzinárodné vedecké dni. FEM SPU Nitra, 2000. ISBN 80-7137-715-5.
- [6] HRON, J. Změny v projektování modelů podnikatelských subjektů. In: Medzinárodné vedecké dni FEM SPU Nitra, 2001, s.48-53.. ISBN 80—7137-715-5.
- [7] HRON, J. – TICHÁ, I. – DOHNAL, J. Strategické řízení. ČZU PEF Prague. 1995. ISBN 80-213-0255-0.
- [8] KOTLER, P. Marketing Management. Grada Publishing. Prague. 1998 (9th reworked edition). ISBN 80-7169-600-5.
- [9] SVOBODA, E.: New approaches to the strategic decision-making of agrar sector bussines subjects in the Czech Republic. In: Agricultural Economics 4/2001, Volume 47, Prague 2001. ISSN 0139-570X
- [10] SVOBODA, E.: Strategické rozhodování v podnikovém managementu s využitím managementu změn. In: Firma a konkurenční prostředí. PEF MZLU Brno. Brno, 6.-7.3.2002. ISBN 80-7302-032-7
- [11] SVOBODA, E. – BITTNER, L. – SVOBODA, P.: Models of Strategic Decision Making in the Czech Republic. Charleston. <http://www.iaes.org/conferences/charleston.htm>
- [12] SVOBODA, E.: New Approaches to Company Management in the Czech Republic. IAES, Paris, 2002, <http://www.iaes.org>
- [13] SVOBODA, E. - BITTNER, L. – SVOBODA, P.: Algorithm of Decision Making Process by Corporate Management and Ways of Resolving Crisis Situations Caused by Accouting, Financial and Economic Risks. In: Komunikacie. Scientific Letters of the University of Žilina 4/2002, ISSN 1335-4205
- [14] ŠIMO, D.: Marketingové prístupy k efektívnemu manažmentu podnikov PpoK v SR In: MVD Nitra 2001, FEM SPU Nitra, 2001, p. 233-236. ISBN 80-7137-866-6.
- [15] WHITELAY, C. Podnik řízený zákazníkem. Victoria Publishing. Prague. 1994. ISBN 80-85605-69-4