

Knowledge-management in managerial work of business management

Znalostní management v manažerské práci podnikového managementu

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Abstract: The paper presents the results of the research projects 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 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 using findings of knowledge management. The paper presents the results of applying the methods of BSG and SPACE analysis, namely during the years 1998–2006. The sphere of business of the company is also analysed using the correlation-table analysis method. All actions are focused on obtaining and maintaining the competitive advantage of the firm.

Key words: company management, strategic management, methods of decision-making, competition, marketing

Abstrakt: V příspěvku jsou uvedeny výsledky výzkumu 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. 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, a to při využívání poznatků znalostního managementu. V příspěvku jsou uvedeny aplikace metod BSG a SPACE, a to v období let 1998–2006 a dále zhodnocení předmětu činnosti firmy v roce 2006 pomocí metody korelační tabulky. Všechna opatření jsou orientována na získání a udržování konkurenční výhody firmy.

Klíčová slova: podnikový management, strategický management, metody rozhodování, konkurence, marketing

The development of new information technologies significantly influences the behaviour of enterprises. Gates (1999) says that the digital flow of information enables one to transform all kinds and forms of information into a unified digital form and subsequently download it into any computer, process it and send it to other users. This fact is very important especially in all fields of management, where all management processes are decision-making processes and subsequently processes of influencing and control, and all these processes are carried out through information processes.

The company management uses information from its information system for the purpose of strategic, tactical and operational management as well as for real-time management. Hron (2001) says that the basic constant in the management of the development of enterprises is change; well-mastered change is a basic criterion for the evaluation of the managerial work of all company managers. He emphasizes the need to create "homeostasis", i.e. a desirable adjustment of the internal environment of the management to the external environment, in the strategic management of a company. Company information systems

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should fulfil all company functions by supplying the necessary and required quantity, structure and quality of information. These individual functions fulfil the complex functioning of a company; a function is understood as a specific activity of a certain element in the company structure. The desirable state of the internal environment of company management should be understood as a dynamic balance of mutual relations and sub-connections of individual elements of company systems as well as relations and sub-connections to the company as a whole. The shortening of innovation cycles, increasingly tougher competition and increasing demands result into ever more difficult and expensive introduction of products of individual companies onto the markets. The said development places high demands on company management, provided that it should succeed in tough competition. A new generation of companies is gradually emerging; their rise is based on marketing management that should permeate the entire company and become a unifying dynamic force activating all segments of the organization towards gaining competitive advantages and gaining and preserving markets, i.e. its own customers. Gates (1999) shows the method by which information technologies manage the business sector and says that every manager should know how to keep pace with this development.

Hron (2006) writes, that knowledge management has become much more a matter of information technologies, and although the discussion on knowledge usually started at the level of strategic management in an enterprise it very quickly moved on towards the area of designing applications, architecture of the knowledge databases, searching for tools, etc. Tichá and Hron (2006) note that the opportunity for learning is greater in a firm with higher knowledge basis than in a firm less well equipped.

The author explains that, like living organisms, every organization best functions if it is based on a nervous system that constantly supplies information to all the parts that need it.

The quality of managerial decision-making is based on many complex factors undergoing dynamic changes; the task of high-quality managers is to successfully influence these changes towards well-defined strategic targets.

The aim of this research contribution is to present the summary of the results of the MSM 6215648904 research focused on the field of managerial decision-making in the managerial work of the company management using the principles of knowledge management for gaining competitive advantages for the company.

We have analysed in detail the field of decision-making of top management and focused on the gaining of

new business opportunities through well-functioning information systems and other technical managerial tools and the use of modern methods of strategic decision-making of the company management.

MATERIAL AND METHODS

The methodological procedure is based on sub-steps that can be characterized by the following algorithm:

- The analysis of the existing situation in the decision-making of the top management of companies in literature and the practice of the examined companies.
- Gradual implementation and review of the results of the research in the company practice.
- Practical recommendations for the improvement of the decision-making of the company management.

In order to achieve the set aim, we chose a methodology that enabled us to gradually implement the aim. We used the methods of strategic decision-making, especially the methods of the creation, implementation and solving of changes in business strategies, the method of controlled dialogue, PEST and SWOT analyses, auxiliary tools for the analysis of management environment – EFE and IFE matrixes, correlation table for the evaluation of the subject matter of activities, BCG and SPACE analyses and selected methods of crisis management. The analysed companies represent medium enterprises with a rather extensive scope of business which are equipped with modern technical management tools necessary for individual types of financial, economic and accounting analyses in relation to the analyses of management and marketing. Specific data were gained from selected enterprises, especially from Bioveta, a.s. in Ivanovice na Hané. The contribution subsequently specifies partial outputs of the results found through the methods of the analysis of the management environment and strategic decision-making and the methods of crisis management that reduce business risks and enable us to promptly respond to changes in business environment and thereby face emerging critical situations.

RESULTS AND DISCUSSION

Managerial work in company management is based on a range of important prerequisites and the ability to master working with information. Other important

prerequisites of successful managerial work include high requirements, both personal and qualification prerequisites, and demands for other specific knowledge and abilities resulting from the cross-disciplinary nature of this work. Requirements concerning managerial work are constantly rising in relation to the effects of world-wide globalization processes, the development of modern information technologies and other factors. Managerial work is carried out by individual positions in company management during the performance of their managerial functions, i.e. planning, organizing and managing people, conducting operative management and control and performing their managerial roles and the related continuous managerial functions in information, decision-making, influencing and control processes.

Successful managerial work is defined by factors determining the company's identity. These factors include several synthetic indicators (Svoboda et al. 2006), especially the following indicators:

- Company design created by visually or aurally harmonized attributes of company symbols;
- Company culture, i.e. a set of standards, customs and rules determining the behaviour of all people in the company;
- Company behaviour, i.e. the company's responses to all stimuli from the surroundings, external interest groups and individuals and impulses transmitted by the company to its surroundings, which can be of an informational nature (marketing aspects), material and power nature (e.g. the quality of products) or combined nature;
- Company communication, i.e. the communication of company information to the external environment, which can be divided into two basic groups: The first group consists of information for all entities. The second group consists of information provided to selected users, e.g. suppliers, etc;
- Company products, which are characterized by their quality, structure, price, distribution, form of communication, product design, etc.

All the aforementioned parts contribute to the creation and preservation of company image, which is often a crucial factor for attracting new customers, suppliers and collaborators; hence all managers and company employees should constantly build a good image.

In their work, managers should follow the aforementioned attributes and employ specific principles enabling efficient conducting of managerial work.

These principles are as follows:

- Definition of priorities in process management;
- Orientation on people;

- Customer orientation;
- Precise conducting of managerial work;
- Timeliness and correct sequence of the solutions of decision-making processes and the implementation of the “prevention principle”, i.e. the sooner we resolve accumulated problems, the lower the losses arising from unsolved problems.

In his research, the author of this contribution found that a range of managerial measures aimed at the creation of conditions may help to gain competitive advantages for enterprises through logical and subsequent steps of managerial decision-making by company managers in specific fields of activity, specifically the creation of important prerequisites in the managerial environment. All these measures can contribute to the synthetic effect – the achieved economic profit of the company. It can be said that a company's prosperity is based on its market orientation on the customer and the resulting well-formulated distinctive business strategies of the company, together with sub-strategies, which are as follows:

- Marketing and business strategy;
- Financial and investment strategy;
- Production strategy;
- Quality control and change management strategy.

Well-defined business strategies and sub-strategies place new demands on modern company information systems and company information technologies that enable the fulfilment of all managerial functions and roles.

With regard to the aforementioned facts, we can say that there are two basic methods of gaining competitive advantages:

- The implementation of the strategy of minimum costs, i.e. focus on primary costs together with the differentiation of products;
- Orientation on factors leading to an increase in earnings, i.e. especially the quality of products, a broad range of products and high-quality marketing measures.

If we assess the sold products of the company according to their economic benefit for the company in a correlation table, from the most profitable to the least profitable in relation to the fulfilment of the current requirements of customers, arranged from the products that best fulfil the current requirements of customers to products that least fulfil the current requirements of customers, the result is four variants of combinations of both aspects. By analysing these combinations, the company management may

identify basic causes of successes and failures in the sales of individual products.

The aforementioned arrangement will create four quadrants:

- I. Profitable products that fully accept the current requirements of customers.
- II. Profitable products that do not fully accept the current requirements of customers.
- III. Low-profit products with good responses of the company management to customer requirements.
- IV. Low-profit products that do not sufficiently accept the current requirements of customers.

According to the aforementioned analysis of the products of Bioveta sold in 2006, the first quadrant included 57.2% of products and the second quadrant 12.5%. Products in quadrants I and II were produced with cost profitability exceeding 10.1%, i.e. with good economic benefit.

Quadrants III and IV include products with cost profitability up to 10.0%. Quadrant III includes 25.5% and quadrant IV includes 4.8% of products.

The analysis clearly shows that products in quadrant I accept market requirements from the perspective of economic benefit for the company and from the perspective of customer benefit. Quadrant II includes the sales of profitable products that are strongly threatened by competitive products. This situation can be resolved by better responses of the company to customer requirements, the transfer of the products to other markets or their gradual elimination. Products in quadrants III accept customer requirements; however, their economic benefit for the company is low. This means that the costs of the products are high or the products are marketed on inappropriate markets. Products in quadrant IV require a detailed assessment; they should be either significantly improved or withdrawn from the market.

At this point, we will present the results of analyses by the Boston Consulting Group (BCG) and the related SPACE analyses examining the position of the said company on individual markets.

BCG monitors the market from two basic aspects – the growth of the market and the market share of the analysed company. These two aspects enable us to formulate a matrix of relations with four quadrants. The SPACE analysis evaluates the company's position on the market from the perspective of the sector environment; it relates basic factors of changes in the sector with assumptions and changes of crucial factors in the company field. The result is the depiction of mutual relations of the selected crucial factors of the strategic position on the market.

The analyses of selected markets by the BCG and SPACE methods concern the period from 1998 when Bioveta s.r.o. was transformed into a joint stock company to 2006. The analyses always depict the situation as of 31st December of the particular year. All data are utilized and processed in the information system of the examined company.

The figures in Table 1 show an overall positive trend in the portfolio of products in individual quadrants, although relatively high interim fluctuations requiring measures and corrections by the company management are also apparent.

Table 1. Share of products based on the BCG analysis (%)

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
2005	32.1	29.7	26.8	11.4
2006	34.1	30.1	24.5	11.3

Changes in the percentage shares of products in individual quarters are clearly beneficial for the analysed company – most products are in quadrants I–III. The results of the analysis also imply that the company suitably applies the strategy of the innovation of its products that is recorded at the initial introduction into practice in quadrant II, the values of which rose over time until 2005 when a fall to 29.7% was recorded. Products in quadrant I are crucial for the volume of earnings and customer satisfaction. They represent products well placed on a developing market. It is also clear that the company successfully employs the strategy of diversification, which can be identified from the growing representation in the market – increments in quadrants I–III.

Quadrant IV informs the company management about the share of unsuccessful products in the market which do not generate any profit for the company. A desirable substantial reduction of products in this quadrant resulted from the good utilization of the stock management application and the system of managerial incentives based on the size of the desirable stock of finished products. The only fluctuation

Table 2. Results of the SPACE analysis (points)

Year	Characteristics			
	sector		company	
	level of attractiveness	stability	financial power	competitive advantage
1998	3.2	3.5	4.7	4.9
1999	3.7	3.6	4.9	5.1
2000	4.2	4.0	5.2	5.0
2001	3.9	4.0	5.2	4.9
2002	4.3	3.9	5.7	5.3
2003	4.4	4.0	6.0	5.4
2004	4.2	3.9	5.4	5.5
2005	4.4	3.7	5.2	5.2
2006	4.4	3.8	5.3	5.7

occurred in 2005 due to increased competition, especially in the EU markets.

The SPACE analysis supplements the aforementioned findings and its overall results show that the field of the sales of veterinary bio-preparations and medicaments is rather stable but the sales of individual products are subject to dynamic changes. The results in the monitored period are specified in Table 2.

Table 2 clearly shows that in the monitored period, the financial power of the company significantly rose from the initial 4.7 points to 5.3 points (evaluation based on a scale of points). The highest value was achieved in 2003 – 6.0 points. The decrease in 2004 was primarily caused by initial problems related to the entering of new markets. The company's competitive advantage also improved – from the initial value of 4.9 points to 5.7 points in 2006. As far as the business in the production of medicaments and bio-preparations is concerned, it can be assessed as stable – the current value is 3.8 points compared to the initial value of 3.5 points. The level of attractiveness is also a good opportunity for the company during the entire period. The initial value was 3.2 points and the current value is 4.4 points. The aforementioned values characterize selected markets and represent average values.

DISCUSSION

The creation of strategic management resulted from quick and often radical changes, especially in the external environment. Another important reason bringing about the need for strategic management has been the growing size of companies and their complexity

and diversity. Hence it is obvious that predicting the future of all entities, especially enterprises, has been ever more difficult and has required faster responses to unpredictable changes. As stated by Hron, Tichá and Dohnal (1995), strategic management represents a multidisciplinary approach. It includes the theory of organization, micro-economy, i.e. the theory of company, and the theory of industrial organization. The theory of organization formulates roles of individuals and connects them with company targets. The theory of company integrates target-oriented companies into market relations in the business environment. Strategic management therefore includes the company's behaviour in the external environment and its internal functioning in the decision-making and management processes. The findings of this work correspond to the findings by Porter (1994), who says that the gaining of competitive advantages is the core of productivity of every company. According to Porter, competitive advantages especially include low costs, the differentiation of one's own products from competitive products, technological excellence of products and technologies. Porter claims that the attractiveness of markets, potential growth on markets and the possibility of gaining competitive advantages depend on the existing competitive structure of the market and the organization's ability to cope with the five competitive forces determining the intensity of competition in the sector and its profitability potential. The influence of the state on all competitive forces can be included as a general framework. The company should occupy such position in the sector and select such approach to competing companies that would limit the influence of competitive forces, enable it to use the forces in the sector for its own

benefit, if possible, and take up a firm position on the particular market.

The findings correspond to the works of a range of authors, especially the works by Hron et al (1995), Gozora (2000) and Šimo (2000) who emphasize managerial work and the application of managerial activity in the company management. The works by Kotler (1998), who says that in their work, managers need information processed by company information systems divided into news systems and marketing research systems, also support their opinions. These opinions are also supported by P. Svoboda (1999).

CONCLUSION

The results of the research clearly conclude that companies with modern management need a well-defined system of strategic management and the management of changes within this system, which contributes to the balance between the internal management environment and the external environment, i.e. their homeostasis. This concept requires a perfect supply of information and modern technical means of management, especially high-quality information systems. Rapid changes, especially in the external environment, require that company management selects new approaches and methods of decision-making and possess a well-designed algorithm enabling flexible responses to customer requirements. The results of the research are gradually implemented and tested in practice in various enterprises, especially in Bioveta, a.s. in Ivanovice na Hané.

Efficient managerial work is limited by a range of important factors. These factors are as follows:

- Personality of the manager and his/her qualification for managerial work;
- Assertiveness, i.e. the application of the qualification into managerial functions and roles and the observance of the following principles:
 - Business ethics and diplomacy;
 - Management style;
 - Relationship to subordinate employees;
 - Mental hygiene;
 - The application of suitable management tools.

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