Modern approach to strategic control in SMEs

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Abstract
The paper provides guidelines for improving the methodological basis for strategic controlling in SMEs and justifies the possibilities for application of adapted and approved matrix models in the strategic control of SMEs' activities. Indicated are also main advantages and disadvantages connected with the application of these models in the strategic management.

Keywords: strategic management, strategic control, SMEs, entrepreneurship

JEL classifications: M21, M10

Introduction

In the first decade of the 21th century the strategic management is developing (both as theory and practice) dynamically. Modern companies are attaching greater importance to the control as a managerial function and its links to planning processes and tools. Specific characteristics of strategic management in small and medium sized enterprises (SMEs) are observed, which require development, adaptation and application of specific tools such as matrix models.

Matrix models have been conceptualized as support tools for strategic analysis (for evaluation of the present strategic position of the existing product lines or products) and planning (determining the development of existing product variations and identifying new ones). At present, it is not sufficient for such models to be considered as analytical or planning tools, but also as a part of the strategic control techniques. As such they serve to control the implementation of strategic plans by identifying key operational parameters and after that comparing these parameters with the present and potential situation of the environment. In this context, the aim of this paper is to present the modern approach to strategic control (in SMEs) based on adapted and approved strategic matrix models.

Combining strategic planning models with control activities enriches the performance of the control function itself because of getting in touch with the external environment. It is well-known that it is the latter that outlines the parameters of each model and the realization strategy built on it.

Possibility of application of strategic matrix models, adapted for SMEs, in strategic control

The strategic control is fundamentally linked with the corporate strategy and through it with the relations between firm and environment. The strategic control plays a balancing role between different company activities and focuses on the main ones, concerning production of goods and services and trends in their development. A contemporary feature of the strategic control is its orientation towards (the instability of) environment and hence towards the degree of aggressiveness of the strategy and the possibility of undertaking a strategic reaction. In this connection, tools are need for realization of the strategic control function taking into account the fact that it has "primarily a subordinate role to planning"(Simeonov & Lambovska, 2011, p. 188 and p. 191).

The development of appropriate methods of management of SMEs represents a significant challenge for the modern theory and practice. One of the most important reasons is that small businesses do not operate under the same conditions as large ones, nor are they influenced by environmental factors in the same way (Todorov, 2011). These calls for a rearrangement of well-accepted traditional methods and techniques to better respond to the needs and requirement of the SMEs management (Papazov & Mihaylova, 2009, p. 269).

In the next paragraph several popular matrix models for strategic management will be presented. These models are adapted to the needs of the SMEs, so that their parameters can become manageable in terms of the strategic control.

Adapted Model of the "Growth-Share" Matrix for SMEs Management Purposes

The "Growth-Share" matrix is among the most commonly used management techniques. It often serves as an analytical tool or as a means for developing a company's strategy. The matrix can also be used as a modern strategic control tool.

Using models such as the "Growth-Share" matrix may seem reasonable when the product structure of a company contains diverse product ranges (assortments or brands). Examples are numerous: from different kinds of milk products, produced by a family dairy, over a set of alcohol beverages, delivered by a small vinery, to the sale of food and non-food assortments by tiny retailers, etc. (Papazov, 2009). In this case each brand from the diverse product range would resemble a strategic business unit (SBU) and can be analysed as such in the frame of "Growth-Share" model.

In its classic form, the "Growth-Share" matrix presents the company's production portfolio using two criteria – the relative market share and the market growth rate. The relative market share reflects the brand's stake of the firm relative to its largest competitor. The market growth rate is associated with the changes of sales in different periods of time (Papazov, 2008). It is considered that the set of these two criteria can play the role of observed parameters in view of strategic control.

The relative market share is displaced on the abscissa (X-axis) of a Cartesian coordinate system, while the market growth rate is situated on the ordinate (Y-axis). After defining the end points on both axes, the average value of the intervals is calculated. The middle and the end values of the X-axis and Y-axis divide the matrix into four quadrants presenting different combinations of values on the selected criteria (Figure 1).

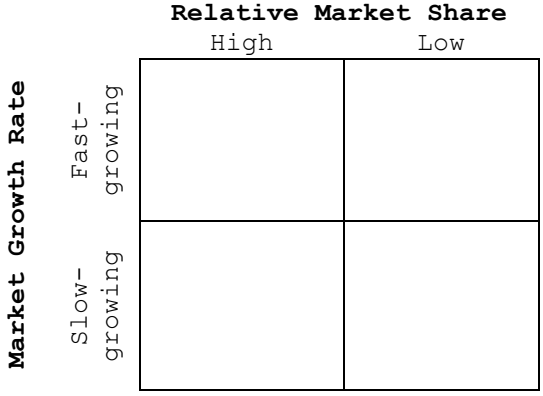

Figure 1: The "Growth-Share" Matrix

Individual SBU / brands are plotted on the matrix using the calculated coordinates after applying the selected criteria. Depending on the emerging configuration, conclusions can drown on the company's portfolio (if it has a balanced and/or sustainable character), and its strategic orientation. Imposing the results matrix on planned portfolio figure, deviations can be identified and prescriptions for corrective actions developed.

However, by the practical application of the model in its classic form (the model has been developed for large companies) some difficulties connected with data provision arise. Particularly "sensitive" is the aspect associated with the brand production: on the one hand, the National statistical institute (NSI) does not provide information about each economic unit (company); on the other hand, the creation of a database on an alternative way (e.g. within a branch or professional organization) is hardly appropriate due to contradictory interests. It is more logical to try to adapt the model, so that it can be used for planning purposes in SMEs. One way is to find out an alternative to the problematic (from informational point of view) criterion. Comparing the two touchstones typical for the "Growth-Share" method it can easily be concluded that for SMEs most of the problems arise when trying to determine the relative market share for a concrete brand. Often the costs needed are so high that they are unbearable for a small company.

The specialized literature (Zerres, 2009) prompts to replace the relative market share with the "cost effectiveness" criterion, thus changing the original matrix format. Cost effectiveness simply reflects the degree of covering the product costs by the generated sales revenues (National Accounting Standard (NAS) 13, 1998).

Cost effectiveness is a suitable criterion for two reasons: Firstly, it may be calculated on an inter-company basis. For this purpose it has to be consistent with the management accounting principles. In this way the SMEs will overcome the obstacles connected with the

provision of costly external information. Secondly, the criterion "cost effectiveness" is directly relevant (on the basis of costs) to the theory of "experience curve", which has provoked the choice of the criterion "market share" as indicator in the classical BCG variant. Additionally, the use of the ratio between revenue and costs more accurately sticks to the realities in modern business, because it reflects the marketing aspects of the activities and the increasing differentiation of production.

The biggest shortcoming of the replacement of a "relative market share" with "cost effectiveness" might be that the effect of the comparison and its applicability in the strategic control could be lost. In the original model direct comparisons with the largest competitor are an emanation of strengths (weaknesses) in the sector. Such comparisons have not only economic dimensions, but psychological as well, as they can mobilize firms to gain leadership positions in a given segment. Zerres does not comment on that negative effect while attaching importance to the fully "internal" aspect of the model.

The "internal" nature of the alternative version of BCG matrix can be surmounted by choosing an objective ("external") value for the separating interval between the quadrants built on the X-axis. Fortunately, in Bulgaria, such a value can be extracted from the statistical yearbooks: The Bulgarian National statistical institute provides information by sectors and sub-sectors on SMEs revenues and operating costs.

In accordance with the changes, the modified version of the growth-share matrix can be called "Growth-Effectiveness" matrix (Figure 2). On a firm level, it seems reasonable to determine the cost effectiveness for a time period through comparing the sales revenue with the costs by economic elements and by product types. It is appropriate to use accounting information referring to different analytical levels.

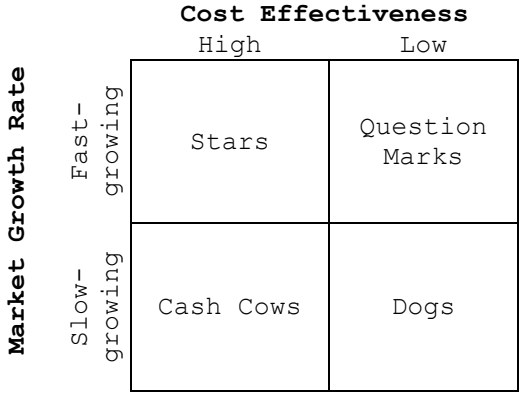

Figure 2: "Growth-Effectiveness" matrix

Because of its relatively simple nature, the adapted model of the "Growth-Share" matrix is suitable to be used for controlling purposes. It enables a quick valuation of the strategic position of different SBUs. The "Growth-Effectiveness" matrix allows making a comparison between the actual states of development with the planned ones. It can easily diagnose deviations in the individual strategic parameters like sales growth and cost efficiency. Using the presented model, the

strategic control focuses on the main, important strategic characteristics of a SME and visualizes their compliance with of environment indicators. In the event that the potential of SMEs expressed through the different criteria begins to deviate significantly from the parameters of the external environment (in this case cost effectiveness), the enterprise may lose competitive position and it is necessary to review its strategy.

The "Relative advantage matrix" (RAM) and the "Strategic position and action evaluation (SPACE)" matrix

Among the tools created for the needs of the overall strategic planning in SMEs the models "Matrix of relative (competitive) advantage" (RAM) and "Strategic position and action evaluation" (SPACE) can be distinguished. Their most important task is to encourage proactive managerial behaviour after realizing what is happening around them.

The idea of the first model is to help SMEs reveal the presence of specific competitive advantages in the context of the environment in which they operate. The second model (that can actually be viewed as a complement to the first one) attempts to formulate norms in respect to the eventual strategic line of conduct after considering additional factors related to the external environment. *These features of both models make them suitable for use in strategic control in SMEs*.

The creation of competitive advantages is an important strategic management issue in SMEs. Competitive advantages derive mainly from these characteristics of the product (or service) that make it better than the products (or services) of competitors. To some extent they are also directly dependent on access to adequate resources at an affordable price. The classical microeconomics examines competitiveness mainly in the context of the dichotomy "price – quality" of a product: a company is more competitive when it offers a product with a certain quality at lower cost and price than its competitors (cost advantage) or – by given market price – when it offers a higher quality than its competitors (differential advantage). For many economists, however, what represent a real interest are the factors that characterize the competitive advantages of SMEs as a whole. *In today's strategic control models these factors may have its place, because as mentioned, the subject of strategic control is related with correspondence of the elements of internal and external environment of SMEs, which have influence on their strategy*. Bamberger, who two decades ago performed one of the largest studies ever carried, synthesized twenty-six factors determining the competitiveness of SMEs (Bamberger, 1989). A short description of these factors, together with their original ranking, is presented in the following table (See table. 1.).

The factors listed in the above table find application in the so-called "Relative (competitive) advantage matrix" (RAM), developed by scientists at Plymouth Business School, UK. When used this toolkit allows managers to build up on a more flexible strategic response to environmental conditions based on the competitive advantages of the small enterprise.

The use of RAM runs in three phases. In the first one manager of SMEs participating in the study, are required to select 10 of all 26 factors corresponding to specificity of the firm. In the second phase

each manager assesses the selected factors applying a ten-grade system. Ranks are added together and divided by the number of factors to determine the mean competitive advantage score (i.e. the absolute competitive) of the company. The same procedure is repeated again to obtain the mean competitive advantage score for the company's most important rival. Finally, the two calculated scores are compared to determine the coefficient of the relative advantage of the studied SME to the referent company. If the calculated coefficient is greater than one, the surveyed company should consider itself stronger than the competition (Chaston, 1998; Papazov & Mihaylova, 2010).

Table 1: Competitive Advantage Factors in the SME sector

№	Factor
1	Product Quality
2	Reliability of Delivery
3	Reputation of Firm
4	Competence of Workers (Skills)
5	Flexibility of Firm
6	Quality of Management
7	Good Local Image and Contacts
8	Financial Capability
9	Purchasing
10	Social/Political/Economic Climate
11	Low Cost Position
12	Creativity
13	Product Image
14	Personal Selling
15	Payment Terms
16	Pricing Policy
17	Modern Techniques of Production
18	Market Share
19	Product Design
20	Engineering Capacity
21	Distribution Channels
22	Service After Delivery
23	Variety of Products
24	Advertising/Sales Promotion
25	Technical Assistance Before Delivery
26	Size of Sales Force

The RAM technique also contains a module for evaluating the factor levels in different time periods: the respondents are required to assess the factors in retrospect (three years before) or provide for their condition in the future (three years after). The results obtained complement the notion of the dynamic processes in the field of competitiveness. This module is suitable to be utilized for the purpose of strategic control, as the selected factors describing SMEs' competitive position can be perceived as controllable parameters oriented towards changing the SMEs' absolute competitiveness. If sporadic, poorly predictable and unpredictable changes of the ten key factors are established, the controlling unit will propose a significant change of strategy or looking for other strategic alternatives.

The method is easy to use and does not require significant resources. Among the weaknesses of RAM method can be distinguished the fact that

from all specific elements of the (business) environment only competition is considered.

The competitive factors are set as parameters in another tool that supports strategic planning in SMEs – the so-called model "Strategic Position and Action Evaluation" (SPACE). Its aim is to give rise to a concern in managers for a more flexible strategic response to environmental conditions, taking into accounts the competitive advantages or disadvantages of the small enterprise. This model can be used for the purpose of the strategic control, whereas the role of complex controllable parameters is performed by factors like competitive advantage and financial strength, described below and seen in the context of environment stability and sector strength.

The SPACE model (www.maxi-pedia.com) represents a matrix with four quadrants defined by two internal (competitive advantage and financial strength) and two external dimensions (environment stability and industry strength). For the different companies from different sectors of activity the factors that characterize the competitive advantage, the financial strength, the environment stability and the industry strength may vary. There are different combinations of factors that can be evaluated. Grouped on the basis of the above-mentioned criteria these combinations can include:

- Characteristics of the environmental stability (ES) like technological change, rate of inflation), demand variability, price range of competing products, barriers to entry into the market, competitive pressure, price elasticity of demand.
- Characteristics of the industry strength (IS) like growth and profit potential, financial stability, technological know-how, resource utilization, ease of entry into the market, productivity/capacity utilization, flexibility/adaptability.
- Characteristics of the competitive advantages (CA) like market share, product quality, competence/skills of workers, flexibility of firm, good local image and contacts, variety of products, modern techniques of production, advertising/sales promotion, quality of management, creativity.
- Characteristics of the financial strength (FS) like returns on investment, financial leverage, liquidity, capital required/ capital available, cash flow, ease of exit from the market, and risk involved in business.

SPACE matrix model represents the aggregate impact of all these factors by means of a Cartesian coordinate system, where the abscissa concentrates the values for competitive advantage (CA) and industry strength (IS) and the ordinate – the values for financial strength (FS) and environment stability (ES). Each factor of these four groups needs to be assessed by the manager or owner of a small enterprise. This is done with the help of a six-digit grading scale, where the values associated with ES range from (- 6) to (-1), and those related with IS and FS – from (+1) to (+6). For evaluation purposes the form of Table 2 can be used.

Table 2: A Form for Evaluation of Key Factors in the SPACE Matrix

Key factors	**Factors' grading system**							
1. Factors determining environmental stability (ES)		**worst**					**best**	
Technological changes	Many	-6	-5	-4	-3	-2	-1	Few
Rate of inflation	High	-6	-5	-4	-3	-2	-1	Low
Demand variability	Large	-6	-5	-4	-3	-2	-1	Small
Price range of competing products	Wide	-6	-5	-4	-3	-2	-1	Narrow
Barriers to entry into market	Few	-6	-5	-4	-3	-2	-1	Many
Competitive pressure	High	-6	-5	-4	-3	-2	-1	Low
Price elasticity of demand	Elastic	-6	-5	-4	-3	-2	-1	Inelastic
	Average							
2. *Factors determining industry strength (IS)*								
Growth potential	Low	+1	+2	+3	+4	+5	+6	High
Profit potential	Low	+1	+2	+3	+4	+5	+6	High
Financial stability	Low	+1	+2	+3	+4	+5	+6	High
Technological know-how	Simple	+1	+2	+3	+4	+5	+6	Complex
Resource utilization	Inefficient	+1	+2	+3	+4	+5	+6	Efficient
Capital intensity	High	+1	+2	+3	+4	+5	+6	Low
Ease of entry into market	Easy	+1	+2	+3	+4	+5	+6	Difficult
Productivity/capacity utilization	Low	+1	+2	+3	+4	+5	+6	High
Flexibility, adaptability	Low	+1	+2	+3	+4	+5	+6	High
	Average							
3. *Factors determining competitive advantage (CA)*								
Market share	Small	-6	-5	-4	-3	-2	-1	Large
Product quality	Inferior	-6	-5	-4	-3	-2	-1	Superior
Competence of Workers (Skills)	Low	-6	-5	-4	-3	-2	-1	High
Flexibility of Firm	Low	-6	-5	-4	-3	-2	-1	High
Good Local Image and Contacts	Low	-6	-5	-4	-3	-2	-1	High
Variety of Products	Low	-6	-5	-4	-3	-2	-1	High
Modern Techniques of Production	Low	-6	-5	-4	-3	-2	-1	High
Advertising/Sales Promotion	Low	-6	-5	-4	-3	-2	-1	High
Quality of Management	Low	-6	-5	-4	-3	-2	-1	High
Creativity	Low	-6	-5	-4	-3	-2	-1	High
	Average							
4. *Factors determining financial strength (FS)*								
Return on investment	Low	+1	+2	+3	+4	+5	+6	High
Leverage	Imbalance	+1	+2	+3	+4	+5	+6	Balanced
Liquidity	Imbalan	+1	+2	+3	+4	+5	+6	Balanc

	ce							ed
Capital required/capital available	High	+1	+2	+3	+4	+5	+6	Low
Cash flow	Low	+1	+2	+3	+4	+5	+6	High
Ease of exit from market	Difficu lt	+1	+2	+3	+4	+5	+6	Easy
Risk involved in business	Much	+1	+2	+3	+4	+5	+6	Little
	Average							

** The above table deviates from the content of the original one, especially concerning the key factors in the first column: some of them are changed, grouped or modified in compliance with main SMEs' characteristics.*

The factor values within the separate groups are then averaged with the purpose to calculate the company's point of strategic position (PSP). The coordinates of the PSP are obtained as follows: on the X axis – as the sum of the average competitive advantage (CA) and the industry strength (IS) values; on the Y axis – as the sum of the average financial strength (FS) and environmental stability (ES). At last, PSP is applied within the grid shown in Figure 3.

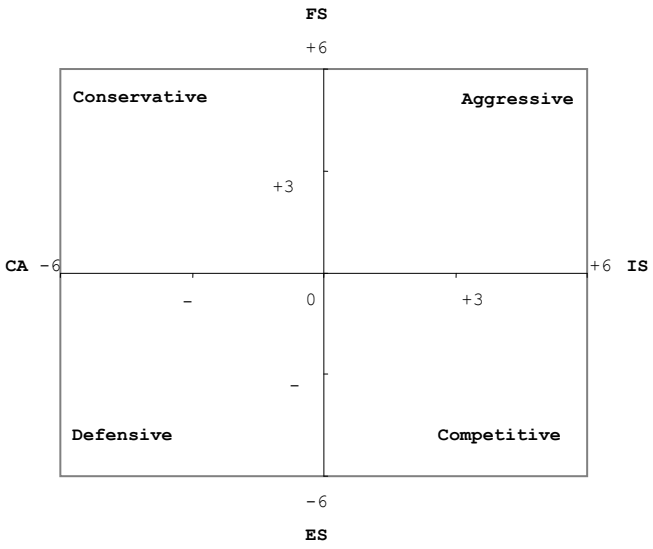

Figure 3: SPACE Matrix

If the PSP appears in the upper right (aggressive) quadrant of SPACE model, the company is located in the most advantageous position and it is appropriate to use the chance to benefit from external opportunities, overcome internal weaknesses and avoid external threats. It is possible to use a strategy such as market penetration, product and market development, vertical and horizontal integration, and conglomerate, concentric and horizontal diversification, according to the specific circumstances facing the company (Papazov & Mihaylova, 2010). Should the PSP settle down in the upper left (conservative) quadrant, the company should adhere to its core competencies and not take excessive risks. Possible strategic effects in this case are market penetration, market development, product development and concentric diversification. When the PSP falls into the lower left (defensive) quadrant, it is appropriate for the company to focus on the removal of internal weaknesses and avoid external threats. Protective strategies in this case relate to withdrawal, cuts, liquidation, and concentric diversification. When the PSP lies in the

lower right (competitive) quadrant, the company's response can be associated with competitive strategies such as vertical integration, horizontal integration, market penetration, market development, product development and joint venture.

The SPACE model does not engage substantial material, financial and temporal resources. It gives to managers the opportunity to better understand the competitive environment when doing strategic planning and control for SMEs. Focusing eventually on a limited, but representative quantity of strategic alternatives and finding a way to present them properly in the SPACE matrix, the model can be used to combine the evaluation of different factors with a concrete prescription of a strategic direction to be followed or taking a strategic reaction due to control action. Specific corrective measures in the SPACE matrix model can be identified on the basis of the outline plans and the subsequent profiles, as well as on their comparison.

Conclusion

It is practically impossible for SMEs to have established and distinct strategic planning and control systems due to the size of the undertaking, its specificities, levels of management, etc. They need a more flexible approach to link the planning and control activities with a clear, easily applicable and inexpensive instrumentarium. In this respect, the presented models are a part of the modern approach to strategic management and in particular to planning and controlling in SMEs. They support the assessment and monitoring of companies' competitive status across lines of business or production of assortments. Controlling the implementation of a strategy and the strategic response affects investment intentions. Therefore, it is important for the management of contemporary SMEs to know the model-based possibilities for strategic control anticipating the unity of external and internal environment.

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