

Application of a Matrix of BKG in an Assessment of a Market Line Item of the Company

O. V. Demyanova, I. A. Akhmetova, M. A. Pugacheva and A. I. Lazarchik
Institute of Management, Economics and Finance, Kazan Federal University,
420008 Kazan, Russia

Abstract: In study development of approach to carrying out the portfolio analysis in an assessment of a market line item of the company allowing to expand analytical ensuring adoption of strategic decisions for the account of an external environment of the company reveals. Development of the portfolio analysis was carried out from a line item of a priority of strategic reference points of management as necessary condition of implementation of effective production business activities of the entities in modern conditions. Application of the portfolio analysis assumes an assessment and the analysis of external and internal environment of the entity and also use of analytical methods in implementation process of strategy in single system of indicators that is necessary in case of adoption of the strategic decision and touches on issues of integration of traditional methods of management into single process of strategic management. Matrix of BKG (BCG Matrix) the tool of the strategic portfolio analysis of a market position of goods, the companies and divisions proceeding from their market growth and the occupied share in the market. Such tool as a matrix of BKG finds broad application both in management and in marketing and in other spheres of economy now (and not only).

Key words: Strategic analysis, business, entity, strategy, development, competitiveness, industry

INTRODUCTION

The matrix of BKG was developed by experts of the Boston consulting group (Boston Consulting Group) which is engaged in management consulting in the late sixties under the leadership of Bruce Henderson. The matrix is obliged to this company by the name. Besides, the matrix of the Boston Consulting Group became one of the first tools of the portfolio analysis.

Being the simple but effective tool, it allows to reveal the most perspective and on the contrary, the “weakest” products or divisions of the entity. Having constructed BKG matrix, the manager or the marketing specialist receives an evident picture on the basis of which it can make the decision on what goods (divisions assortment groups) should be developed and protected and what should be liquidated. The role of the company is determined by its place in a matrix. In total there are four quadrants and respectively 4 types:

“Star”: A product which has a considerable share in the growing market. The circle representing this product is in the right upper quadrant of a matrix. The company having such products, especially if they have considerable shares in sales to the company (that is radiuses of the

circles representing these products, bikes), spend considerable funds for maintenance of these products. In fashionable business similar goods require the special address: it is necessary to predict time of fall of “star” competently.

“Milk cow”: The product having a considerable share on the low-growing or reduced market. The circle of a product is located in the right lower quadrant of a matrix. The need for expenses on maintenance and sale of such product is low and at the expense of the high share occupied in the market such product brings in the income. Such product usually is a donor of means for development of new products. At the sewing entities different types of special clothes, a product of classical design, etc. can be “milk cows”.

“Question mark” (“The difficult child”, “Wild cat”, “Dark horse”) is a product with a low share in the fast-growing market. The circle of a product is located in the left upper quadrant of a matrix. The market (that is requirement) grows in such product but for increase in its release and capture of a considerable market share, considerable means are required. These means can be received for the account of “milk cows”. However also the decision on removal of such product can be made.

“Dog”: A product with a low share in the stable or decreasing market. The circle of a product is located in the left lower quadrant of a matrix. As a rule such products require disproportionately large volumes of resources. At the sewing entities among such goods there can be image goods which support sales of other goods (accessories) or innovative products which so far are tested by customers. Specialists suggest to allocate such goods in separate innovative group.

Depending on a combination of a share and growth of the market for each square individual marketing strategy is selected. One of possible strategy it is permanent to create products, best-selling. The money gained at the expense of such popular goods can be invested in “problems” to achieve their transformation into “stars”. In process of maturing of the stars market become popular “milk cows” and process repeats.

The analysis (from Greek analysis) literally means a partition, decomposition of the studied object on parts, elements on components internally inherent in this object. The analysis acts in dialectic unity with the concept “synthesis” connection of earlier dismembered elements of the studied object in a whole.

Most of researchers consider process of the strategic analysis together with strategic planning process. One consider that process of the strategic analysis is generated by results of studying of the internal and external environment of the organization. Its purpose to help the organization to capitalize the strengths and to minimize weak, to seize the opening opportunities and to be protected from the approaching dangers (Efremov, 2015). Other researchers consider strategic planning process together with the strategic analysis as process of development of the procedures and transactions necessary for achievement of the future. They distinguish long-term planning which is considered jet by the nature and strategic planning which allows the organization to create the future (Efremov, 2015; Markova and Kuznetsov, 2016).

The third without selecting the strategic analysis, represent strategic planning as process of organizational updating and transformation. Strategic planning provides the organization with the instrument of adaptation of its services and activities for satisfaction of the changing requirements of an environment (Efremov, 2015). Ansoff identifies processes of the strategic analysis and a formulation of strategy (Ansoff, 2014) without raising the questions of an efficiency evaluation of implementable strategy.

Thompson A.A. and A. Striklend consider rather widely the concept “strategic analysis”, emphasizing that strategic thinking and the strategic analysis lead to the right strategic choice, providing reasonable alternatives and key criteria of the choice.

Fred R. David in the model of strategic management marks out such analytical procedures for stages of development of strategy as external and internal audit which purpose to determine desirable parameters of the company and the development strategy of the company (Efremov, 2015).

The strategic analysis-the method of implementation of system and situational approaches when studying various factors of influence on process of strategic management is said by Vinokurov V.A. Zadacha of the strategic analysis consists in the substantial and formal description of an object of a research, detection of features, regularities and tendencies of development, determination of methods of management of this object (Vinokurov, 2015).

The strategic analysis is means of transformation of the database, received in an analysis result of Wednesday in the strategic plan of the organization (Utkin, 2015). D.’S Hasb are seen by the analysis in system of strategic management as an appraisal remedy and control of implementation of the strategic plan. At the same time, notes that this process shall be continuous and begin “with the strategy of development of strategy” (Hasb, 2016). The strategic analysis needs to be performed parallel to development of planning processes and preparation of the corresponding documentation.

Thus, proceeding from the provided opinions of various scientists, it is possible to mark out the following points of view to the place of the strategic analysis in system of strategic management:

The role of the analysis is unreasonably limited only to providing feedback (control and an assessment of results) managements. The concept of strategic management requires presence of an analytical basis at all functions. We recognize that by means of the strategic analysis there is a decomposition of the researched object on components for more exact understanding and studying at a stage of strategic planning there is an integration of results of the strategic analysis into the strategic plan of the organization. At the same time processes of the strategic analysis and strategic planning in system of strategic management proceed in unity.

Carrying out the strategic analysis allows to create a basis of creation of strategic management in the organization by information support of processes of a formulation of organization mission, the purposes, development and strategy implementation.

The strategic analysis is the first stage of process of strategic management to a formulation of a mission and the purposes of the organization it is necessary to pose accurately possibilities of own business and threats of an external environment.

At a stage of strategic control fixed carrying out the strategic analysis on purpose is necessary: timely cutting

off of impracticable strategy, maintenance of process of development of new, more competitive strategy, ensuring fixed compliance of implementable strategy with the purposes of the organization.

As the strategic analysis creation and accumulating of strategic information which will be used for forecasting and an assessment of tendencies of external factors an assessment of strategic alternatives, strategic capacity of the organization and competitiveness joins. In this case by means of the strategic analysis there is a creation of information support of strategic planning and strategic management in general therefore process of the strategic analysis provides collection, handling, classification, systematization, accumulating, storage of strategic information for the purpose of management.

Carrying out the strategic analysis develops at managers of a capability to strategic thinking and by that creates a basis for implementation in the organization of the concept of strategic management.

MATERIALS AND METHODS

The portfolio analysis is a tool of the strategic analysis by means of which the management of the organization reveals and estimates the economic activity for the purpose of investment of capital at the most profitable or its perspective directions and reducing or the terminations of investments into inefficient projects. The main acceptance of the portfolio analysis is creation two-dimensional (three-four-n-ykh) matrixes by means of which business units or products are compared with each other by such criteria as growth rates of sales, a relative competitive line item, a lifecycle stage, a market share, appeal of an industry, etc. At the same time, the principles of market segmentation (allocation of the most significant criteria on the basis of the analysis of the external environment) and the analysis of activities of the entity and coordination are implemented (on pair comparisons of criteria).

We carried out the comparative characteristic of some portfolio methods of the strategic analysis. Advantages of portfolio methods is complex consideration of a certain set of products, simplicity and presentation of representation of possible strategy, specific options of strategy, emphasis on the high-quality parties of the analysis. Refer static nature, limited quantity of line items and indicators, limited number of strategy, subjectivity to shortcomings.

The research conducted in the USA (Lamben, 2014) showed that the firms applying the portfelkny analysis had in general more expressed orientation to the dolgokstrochny purposes.

The lack of the portfolio analysis consists in use of data on a current status of business which can not always be extrapolated in the future. The showing simplicity of these methods is deceptive as they require a complete and solid data about a market situation, about strong and weaknesses of the entity and its main competitors. Creation of matrixes assumes carrying out a lot of work on market segmentation on collection of information which generally is absent in an obvious form.

The research and comparison of portfolio methods of the strategic analysis shows that the majority of concepts and applied methods is oriented to application at the corporate level and strategic decisions owing to the fact that in focus of planning there is an equity of the organization in general, come down to determination of optimum structure of investments.

The lack of classical models of strategic planning is that they don't take those capabilities of the organization which constitute a basis of effective functioning of business (distinctive features) into account.

Application of portfolio matrixes assumes that for each industry there is a limited number of strategy which can bring desirable results. Actually, there is a matching of strategy to the set conditions. Strategy have the universal and generalized nature. The attention concentrates on the finishing choice of strategic line items but not on expansion of the integrated and not obvious strategic prospects. In this case, the analyst doesn't create strategy and is engaged in simple matching. In practice of a technique of planning can't be directly used for strategy creation while analysis techniques allow to provide strategic process with essential information.

Distinction of methods of the portfolio analysis consist in approaches to an assessment of competitive line items of strategic units and market attractiveness. In the graphical plan the matrix of BKG represents two axes and four square sectors concluded between them. We will consider step-by-step creation of a matrix of BKG:

Collection of basic data: First of all it is necessary to constitute the list of those goods, divisions or companies which will be analyzed by means of BKG matrix. Then for them it is necessary to collect data on sales volumes and/or profits for some period (it is admissible for last year). Besides, similar sales informations of the key competitor will be necessary (or a number of the largest competitors). For convenience, it is desirable to provide data in the form of the table. So will easier process them. First of all it is necessary to collect all basic data and to group them in the form of the table.

Calculation of growth rate of the market in a year: At this stage, it is necessary to calculate an annual growth in volumes of sales (revenue) or amounts of profit. As option it is possible to calculate both increase in revenue and increase in profit in a year and then to calculate average value. Generally, our task here to calculate growth rate of the market. For example, if last year 100 pieces of goods and this year 110 pieces were conditionally sold, then growth rate of the market will make 110%. Then for each analyzed product (division) growth rate of the market is calculated.

Calculation of a relative market share: Having calculated rate of a surplus of the market for the analyzed products (divisions) it is necessary for them to count a relative market share. Methods to make it a little. Classical option to take the sales volume of the analyzed product of the company and to divide it into the sales volume of a similar product of the main thing (key, the strongest) competitors. For example, the sales volume of our goods 5 million rubles and the strongest competitor realizing similar goods 20 million rubles. Then the relative market share of our goods will be 0.25 (5 million rubles it is divisible on 20 million rubles). The following step calculation of a relative market share (in relation to the main competitor).

Creation of a matrix of BKG: At the fourth last stage creation of a matrix of the Boston consulting group is made actually. From the beginning of coordinates it is carried out two axes: vertical (growth rate of the market) and horizontal (relative market share). Each axis is halved, on two parts. To one part there correspond low measure values (low growth rate of the market, a low relative market share), another high (high growth rate of the market, a high relative market share). An important issue which it is necessary to solve here what values of rate of a surplus of the market and a relative market share to take for the central values halving BKG matrix axes standard values following: for growth rate of the market 110% for a relative market share 100%. And final action-creation of the matrix of BKG with subsequent its analysis.

Thus, each axis is halved. Four square sectors are as a result formed each of which has the name and value. We will talk about their analysis later for now it is necessary to put the analyzed goods (divisions) in the field of BKG matrix. For this purpose consistently note growth rate of the market and a relative market share of each goods on axes and on crossing of these values draw a circle. Ideally diameter of each such circle shall be pro rata to profit or revenue, corresponding to these goods. It is so possible to make a matrix of BKG of even more informative.

RESULTS AND DISCUSSION

We will construct BCG matrix for industries and we will determine a strategic provision of timber processing complex. We build a matrix on two indicators: the Growth Rate of an Industry (GRI) and a market share of an industry in volume of all industrial market (BED). Initial information is provided in Table 1. The matrix of BCG is provided in Fig. 1.

According to Fig. 2 timber processing complex “Dog” takes a position. The industry has small specific weight in a total amount of industrial production (1.5%) and growth rate of an industry below an average for 0.5% (103.5%). The industry receives some profit share but it shall be directed to maintenance and increase in a market share, has positive tendencies to occupy a quadrant “A wild cat”. In general, the timber processing complex has appeal with positive tendencies, besides that indicators of profitability of production and assets of timber processing complex remain at rather high level, yielding only to fuel industry we will construct the matrix of an assessment of prospects of development of industries developed by Rolbina E.S. Matritsa is under construction on two indicators: industry share in industrial production and profitability of production of an industry. Initial information for creation of this matrix is provided in Table 2.

Table 1: Initial information for creation of a matrix of BCG

Industries	Market growth (%)	Market share (%)
Power industry	100.9	6.40
Fuel industry	104.9	35.60
Ferrous metallurgy	103.8	0.30
Chemical and petrochemical industry	105.6	18.30
Mechanical engineering and metal working	120	24.30
Forest, woodworking, pulp and paper industry	103.5	1.50
Industry of construction materials	112.9	1.90
Glass and farforo-faience industry	89.9	0.02
Light industry	107.8	0.90
Food industry	99.8	8.50
Flour-grinding cereal and formula-feed industry	89.2	1.30
Medical industry	102.7	0.60
Printing industry	112.6	0.20

Table 2: Initial information for creation of a matrix of an assessment of prospects of development of industries

Industries	Market share (%)	Profitability (%)
Power industry	6.4	7
Fuel industry	35.6	33.4
Chemical and petrochemical industry	18.3	11.7
Mechanical engineering and metal working	24.3	8.7
Forest, woodworking and pulp and paper industry	1.5	30.1
Industry of construction materials	1.9	5.7
Light industry	0.9	6.7
Food industry	8.5	10

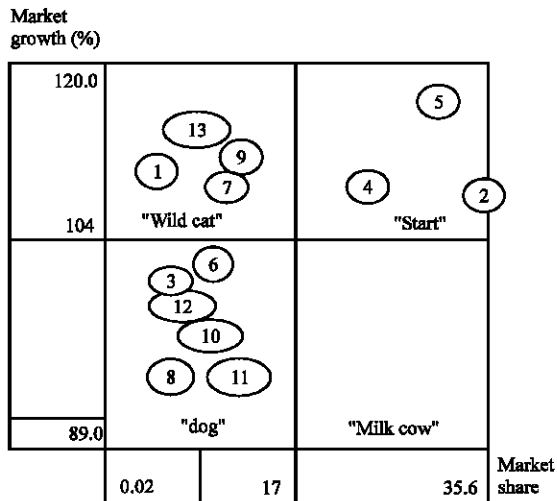


Fig. 1: BCG matrix

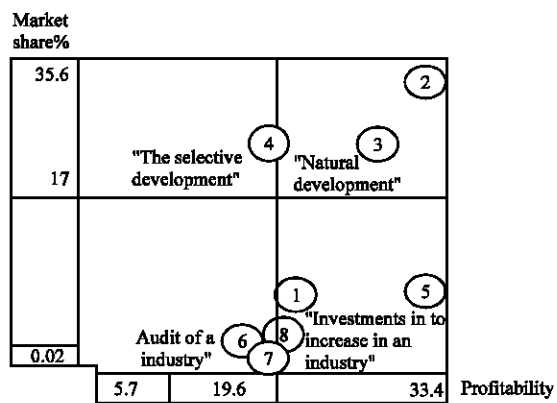


Fig. 2: Matrix of an assessment of prospects of an industry

According to the constructed matrix of an assessment of prospects of an industry (Fig. 3) the considerable market share but low profitability of an industry are characteristic of the chemical and petrochemical industry, mechanical engineering and metal working. For these industries strategy “the selective development” is recommended. At the same time three options of this strategy are possible:

- Research of allowances of cost reduction
- Research of opportunities of establishment of lower prices
- Increase in weight arrived due to growth or preserving at the reached sales volume level, taking into account market potential and its dynamics

The high market share and high profitability of an industry are characteristic of fuel industry, the strategy of

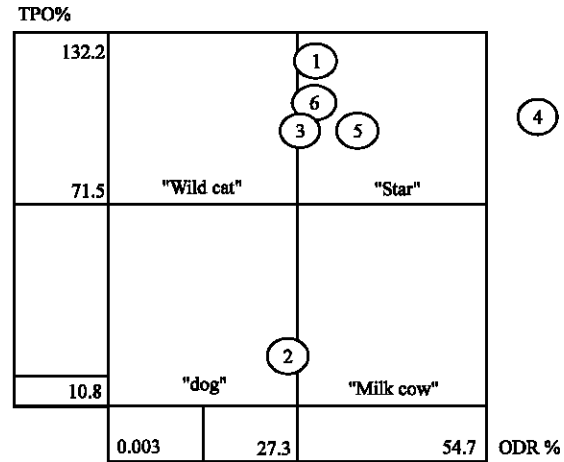


Fig. 3: BCG matrix

natural development characteristic of a stage of lifecycle on which there is this industry is recommended to it. For forest, woodworking and pulp and study industry the low market share but high profitability of an industry are characteristic. For this industry it is recommended additional investments into development of an industry. Both the low market share and low profitability of an industry are characteristic of other industries (power industry, the industry of construction materials, light industry, the food industry). For them audit of an industry is recommended. We research dynamics of economic indicators of work of timber processing complex. The main productions of the woodworking industry-sawing and furniture: they constitute nearly two thirds in products, number of the working, fixed assets. Now the woodworking industry of Tatarstan as well as in Russia, endures an acute economic crisis. The main signs of this crisis are: recession of amounts of the main production, especially sawing; decrease in internal consumption of production of a woodworking; noncompetitiveness of furniture in the foreign market; low investment activity of the woodworking entities, low technological level of production, high level of depreciation of the fixed business assets; repeated decrease in amount of release of the domestic woodworking equipment.

We will construct BCG matrix for the companies of the woodworking industry and we will determine a strategic provision of the furniture industry. Initial information is provided in Table 3. The matrix of BCG is provided in Fig. 3.

According to Fig. 3, the furniture industry occupies a quadrant “a wild cat”. The industry has small specific weight in the total production of the woodworking industry (18.3%) and growth rate of an industry, above an

Table 3: Initial information for creation of a matrix of BCG for the companies of the woodworking industry

Industries of the woodworking industry	Market growth (%)	Market share (%)
Sawing production	14.80000	132.2
Production of standard houses	0.00308	10.8
Production of construction details from wood	9.40000	101.1
Plywood production	54.7000	120.7
Furniture industry	18.3000	102.9
Other woodworking productions	2.8000	103.8

average 102.9%. The industry is associated with big negative financial flows. It is necessary for an industry financial resources for increase in a share of production and the market, however, the risk of financial investments is most high.

CONCLUSION

Problems of development of furniture production in the Russian conditions are allocated by us the following priority areas of work on development of furniture production: expansion of release of competitive products. By the available estimates, now and on the near-term outlook the need for furniture for the population and the state budget sphere is extremely big (by 6-8 times exceeds the existing sales volumes).

Expansion of export of furniture and its components. Decrease in amounts of release of furniture in recent years led to a certain loss of the foreign markets. The most part of production delivered to foreign countries are details and semifinished products just for decoration, the most material-intensive and rather inexpensive production from wood. To the CIS countries generally simple and sound furniture is delivered. It is known what deficiency of furniture such republics of the former USSR as Kazakhstan, Uzbekistan, Kyrgyzstan have problems with their insolvency are known.

Upgrade and technical retrofitting of the operating production capacities-for the purpose of creation of network of flexible furniture manufacturings with use of the complex equipment for minifactories.

Enhancement of a range of the made household furniture including from massive wood, taking into account the developed differentiation of buyers on the prosperity level, cultural level of their family life, the attitude towards fashion and other indicators.

Development of production of special types of furniture: office, children's, preschool and for organizations of education.

Active participation in the competitive biddings on purchases of furniture for the state needs. The organization of licensing of importers of furniture which will allow the state customs committee of Russia and the ministry of taxes and tax collection of Russia to register

and toughen control of importers to increase amount of the collected taxes and duties Activization of work on creation and development of the infrastructure providing a furniture industry at the entities of chemical, easy, textile, metallurgical and defensive industries for the purpose of the maximum reducing import of materials, semifinished products and products for production of furniture. Now the share of import materials in cost value of domestic furniture constitutes up to 70% Increase in efficiency of exhibition activities as important link of work on development of economy to increase in product competitiveness. Exhibitions the instrument of promotion of goods on the markets are equally interested in them producers, trading companies and consumers.

Forming of the effective sphere of advertizing of production as necessary link of system of marketing. For the vast majority of the entities it is a paramount task today. The absolute majority of successfully working entities have till 30-40 corporate shops. In an industry of promotional costs constitute no more than 0.2% of sales volume of production today. In developed countries with market economy the same indicator constitutes 3%. Work on change of an order of reference of advertizing costs for product cost is begun.

Creation of system of regulation and interaction between producers of furniture on the basis of voluntarily created regional associations (unions) of the entities and accounting entities on subindustries with subsequent their consolidation in the Union of lumbermen and wood exporters.

The state support of domestic manufacturers of furniture will be performed via the mechanism of leasing of the equipment, decrease in the property taxes in case of development of the new equipment, reduction of duties for import materials, accessories, equipment and spare parts which aren't made in Russia to it and also financing of the research organizations when carrying out research and development of industry value by them.

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