

# COMPREHENSIVE STRATEGIC DECISION-MAKING MODEL IN BUILDING SUSTAINABLE COMPETITIVE ADVANTAGES

Nataša RUPČIĆ, Lara JELENC  
Ekonomski fakultet Rijeka  
I.Filipovića 4, 51 000 Rijeka, Croatia  
e-mail: nrupcic@efri.hr, ljelenc@efri.hr

*The paper suggests a comprehensive three-stage model, which offers an overall assessment of the company's performance, as well as external success factors, threats and opportunities. The analysis should enable the company to determine a set of feasible strategies and decide upon the most appropriate one, which implementation could improve its current position. Strategic decision making tools can be methodologically grouped into three stages, with the portfolio analysis representing its core. Portfolio methodology with all its limitations offers a solid ground in the strategy formulation process especially for companies in transition economies inexperienced in the strategic planning process. The basic idea is to enable companies build grounds for sustainable or long-term competitive advantage.*

*Key words: decision-making process, strategic planning process, strategy formulation model, portfolio analysis, competitive advantage*

## 1.DECISION MAKING PROCESS IN THE CORPORATE STRATEGY FORMULATION CONTEXT

Decision making process is a generic process based on choosing between two or more actions or options in order to achieve a determined goal. It is a complex process that involves collecting valuable information and their selection and evaluation based on some criteria. Many potential conflicts may arise in the process of decision-making due to a turbulent environment that serves as a framework for corporate decision-making process but also due to various interests of the stakeholders. Many authors (1) agree that a decision-making is a sophisticated problem solving process, which starts with a consciousness of the problem existence, the diagnosis of a problem, or simply with the problem recognition.

Declining business results often represent a problem that involves a detailed analysis of its causes and very often demand a shift in the business strategy. The discrepancies perceived in comparison of the achieved and planned figures act as a signal to start collecting information and perform analysis with high level of scrutiny. The information collected by analysis has great value, but has to be considered with the degree of caution due to the fact that the environment is characterized by risky and/or uncertain conditions. Future customer preferences, input prices, competitor's concentration and actions, world crisis, national economics are among many variables that contain a certain level of risk or a probability of occurrence and are beyond our direct control but strongly effect the business and the generation of cash-flow.

The economist therefore try to develop a set of tools and methods to help the executives analyze the external and internal factors with the highest possible degree of accuracy in order to select the most suitable strategy that would help engage the resources available and achieve the level of desired success measured in quantitative as well as qualitative way. These techniques may be viewed as strategic decision-making aids. The starting points that provide a basis for generating and evaluating feasible strategies are the firms' present strategies, objectives and mission, coupled with the external and internal audit information.

The process of the suitable strategy selection of a consists therefore not only of information collection, factor analysis, but also of the assessment of the potential strategy guidelines that emerge from the detailed analysis. The strategy selection is a non-programmed decision because it is a non-routine and unstructured decision often done in the different environment than similar earlier decisions. That by all means contributes to the complexity of the process (2). The decision criteria deserve special attention, because if subject to change the result may be a completely different strategy. A multitude of

criteria match with a multitude of company objectives that are ranked hierarchically according to their importance. Once the decision criteria have been agreed upon, the strategic decision makers are in a position to contemplate and decide how to achieve company's objectives. The result is a strategy.

The aim of this paper is to offer managers a comprehensive analytical model consisted of numerous techniques, with portfolio analysis tools representing its core, that should help companies analyze their performance and determine their current position. The purpose is to formulate a solid ground for the strategic planning process and enable the formulation of the company's strategy in the context of achieving sustainable competitive advantages.

## 2. COMPREHENSIVE THREE-STAGE MODEL IN THE FRAME OF THE STRATEGIC PLANNING PROCESS

Strategic planning process starts with the clarification of the organizational mission and values and identification of the organizational mandates. After assessing both external and internal environment, strategic issues facing an organization can be recognized, providing help in the strategy formulation process and establishment of an effective organizational vision for the future (3). Another perspective of the strategic planning process consists of the following phases: defining the company's mission, setting the company' objectives, conducting the portfolio analysis, and defining the strategic business unit plan (4).

The comprehensive model is specially designed for diversified companies which should focus their attention on (5): the extent to which the firm is diversified, measured by the proportion of total sales and profits contributed by each business unit, whether the scope of a company is mostly domestic or global, the moves to add new business to the portfolio and build positions in new industries, the proportion of capital expenditures going to each business unit, the influence of the chaotic environment and the competition threats etc. In that perspective strategy can be defined as the match an organization makes between its internal resources and skills and the opportunities and risks created by its external environment.

Strategy-formulation techniques can be integrated into a comprehensive three-stage model (6) helping strategists identify, evaluate and select strategies.

Table 1: Three-stage decision –making model

<b>STAGE 1: THE INPUT STAGE</b>						
External Factor Evaluation (EFE) Matrix		Competitive Profile Matrix		Internal Factor Evaluation (IFE) Matrix		
<b>STAGE 2: THE MATCHING STAGE</b>						
Threats- Opportunities- Weaknesses- Strengths (SWOT) Matrix	Strategic Position and Action Evaluation (SPACE) Matrix	Portfolio analysis			Internal- External (IE) Matrix	Grand Strategy Matrix
		ADL Matrix	BCG Matrix	GE Matrix		
<b>STAGE 3: THE DECISION STAGE</b>						
Quantitative Strategic Planning Matrix (QSPM)						

SOURCE: David, F. R.: *Strategic Management*, 8<sup>th</sup> edition, Prentice Hall, New Jersey, 2001, p.432.

Stage one of the strategy formulation framework consists of the External Factor Evaluation (EFE) Matrix, the Internal Factor Evaluation (IFE) Matrix, and the Competitive Profile Matrix. This so-called input stage summarizes the basic input information needed to formulate strategies.

Stage two, called the matching stage, focuses upon generating feasible strategies combining key strategic variables. This stage includes the following tools: SWOT Matrix, portfolio analysis that consists of the Boston Consulting Group (BCG) Matrix, and served as the starting point in the development of the GE Concept, as well as the ADL Matrix. Further analytical tools can be suggested such as Strategic Position and Action Evaluation (SPACE) Matrix, the Internal-External (IE) Matrix, and the Grand Strategy matrix. These tools rely upon information derived from the input stage to match external opportunities and threats with internal strengths and weaknesses.

Stage three, called the decision stage, involves a single technique, the Quantitative Strategic Planning Matrix (QSPM). A QSPM uses input information from stage one to objectively evaluate feasible strategies identified in stage two. A QSPM reveals the relative attractiveness of proposed strategies and thus provides an objective basis for selecting the ultimate strategy.

### 3. INITIAL STAGES ANALYTICAL TECHNIQUES

The stage one starts with the EFE and IFE Matrix that enables managers to select and quantify the influence of key external and internal factors resulting in weighted factor values for each set of variables. Competitive Profile Matrix on the other hand identifies a firm's major competitors and their particular strengths and weaknesses, both internal and external, in the scope of critical success factors.

The SWOT matrix is a starting point of the stage two, which confronts environmental threats and opportunities with internal strengths and weaknesses of a company combining them into a four-quadrant matrix with four emerging strategies: SO, WO, ST, and WT strategy. Strategically best position would be a situation where internal strengths can be used to take advantage of external trends and events resulting with the SO strategy.

The Strategic Position and Action Evaluation Matrix (SPACE) is a four-quadrant framework that indicates whether aggressive, conservative, defensive, or competitive strategies are more appropriate for a given company. The axes of the SPACE Matrix represent two internal dimensions: financial strength (FS) and competitive advantage (CA), and the two external dimensions external stability (ES) and industry strength (IS). These four factors are the most important determinates of a company's overall strategic position.

#### 3.1. Portfolio analysis

The most popular technique for assessing the quality of the businesses a company has diversified into is a portfolio matrix analysis (7). A business portfolio matrix is a two-dimensional display comparing the positions of every business a diversified company is in. Matrices can be constructed using a pair of key position indicators, the most revealing being the industry growth rate, market share, long-term industry attractiveness, competitive strength and stages of industry evolution.

Three types of business portfolio matrices used most frequently are the growth- share matrix developed by the Boston Consulting Group, the industry attractiveness-business strength matrix pioneered at General Electric and the Arthur D. Little industry life cycle matrix (8).

##### 3.1.1. The BCG concept

The prerequisite for a BSG concept is the organizational structure based on autonomous divisions, which combine similar products and activities forming a strategic business unit or SBU (9). Recognizing that some firms have SBUs of varying, the Boston Consulting Group (10) has developed a matrix that portrays their strength. When a firm's SBU competes in different industries, a separate

strategy must be developed for each business. The purpose of this strategic tool is therefore to help the firms discover and select which businesses have a perspective and should be helped to grow and which should be abandoned.

The horizontal dimension in the matrix is the relative market share (11) or the ratio of the firm's market share to the market share of the largest rival firm measured in the unit volume, not the currency unit. The vertical dimension is the market or industry growth rate (12). The BCG therefore graphically portrays differences between SBU's in a matrix where each SBU is represented by a circle, which area is in accordance with the relative importance of that product to the firm in terms of sales. The pie slice indicates the proportion of corporate profits generated by that division. Matrix differentiates between SBUs labeled as *stars*, *cows*, *question marks* and *dogs*.

The BCG matrix draws attention to the cash and investment flows between various types of SBUs and how corporate financial resources can be shifted between them to optimize the performance of the whole corporate portfolio. It is of a special concern to identify the *question marks* that would increase their market share and move into the *star* group if devoted extra resources. BCG argues that two best strategic options for a *question mark* business can be identified. Aggressive investment and expansion or divestiture alternative can be selected upon a fact whether the costs of expanding capacity and building market share outweigh the potential payoff and financial risk in order to pursue a fast growing strategy and gain on market share ratio. Fast growing strategy is advisable any time an attractive question mark is in an industry with strong experience curve effects. As the cumulative volume of production increased, the knowledge gained from the firm's growing production experience often led to the discovery of additional efficiencies. The stronger the experience curve effect, the more potent the cost advantages of rivals with larger relative market shares.

Portfolio analysis based solely on the BCG matrix is a toolkit that has several limitations. The most obvious critics are attributed to the fact that the two basic dimensions of the matrix are just simple proxies of complex variables. Market share is only one factor responsible for the industry attractiveness, and the relative market share is only one factor showing the competitive position. Strategic evaluation requires examination of more variables. The attractiveness of an industry increases also due to technological, seasonal, competitive and other reasons. The basic premises: higher market share leads to higher accumulated volume, which leads to lower unit cost and higher profitability can therefore be viewed as the fundamental deficiency of this approach. The four-cell matrix is constructed based on the high-low determination of the market growth rate while the majority of businesses are in markets with an "average" growth rate, meaning neither low nor high.

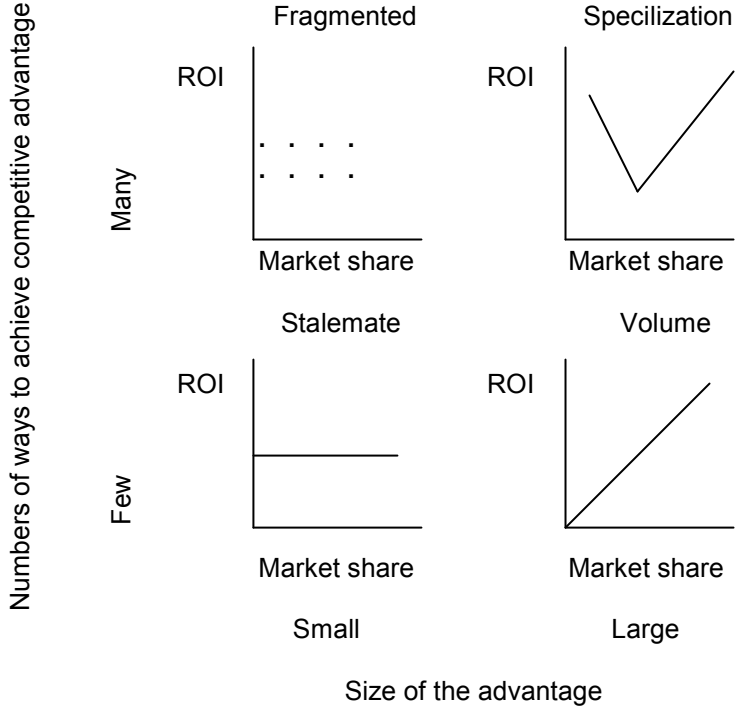
Some market share leaders have never been *stars* in terms of profitability. A market leader position in a slow growing industry does not result with abundant cash flows because as markets mature, more competition drags in and shrinks profit margins wiping out surplus cash flows. A cause for manipulation comes from the fact that it is a problem to clearly define a market and accurately measure market share and growth rate. Furthermore, the BCG matrix does not reflect the trend each SBU is showing over time and is more of a snapshot of a firm's position at a given point in time. The trend each SBU is showing is a crucial sign for investment flows. The BCG matrix is not a reliable indicator of investment opportunities across business units. For example, investing in a *star* is not necessary more attractive than investing in a lucrative *cash cow*.

The relationship between market share and profitability can also be opposed or at least not considered as tight as the experience curve effect implies. These effects vary across industries and market segments only sometimes creating major cost advantages. Choosing a strategy based on the assumption that experience curve effects and cost differences can drive the competitive advantage can often lead to misjudgments (13).

Because of even more emerging critics the BCG concept has to be modified (14). The Boston Consulting Group proposal for the current decade is a matrix with two dimensions: the size of a business's competitive advantage and the number of ways in which that advantage can be achieved. The **New BCG matrix** recognizes four categories of businesses: volume, stalemate, fragmented and specialization. It takes into consideration the ratio between the market share and the return on investment. The strategies of market share leadership and cost reduction are only meaningful in the

volume businesses. The stalemate businesses are in industries where profitability is low for all competitors and unrelated to the size of the business. The profitability of businesses in the fragmented category is uncorrelated with market share. There are poor and good performers among both large and small businesses. The performance in this category depends on how they exploit the very many ways in which they can achieve competitive advantage (15). The specialization category shows that the most attractive profitability may be harvested by the smallest businesses if they are able to distinguish themselves among their competitors by employing the focused strategy (16).

Table 2: New BCG Concept



SOURCE: Pearson, J.A. II, Robinson, R.B.: Strategic Management, Formulation, Implementation and Control, Irwin, Boston, 5<sup>th</sup> edition, 1994, p. 935

The horizontal axis in this new matrix is linked to the barriers of entry, because it is only with entry barriers that a business can sustain a long defensible advantage over its competitors. The number of ways to achieve advantages seems to be strongly linked to the issue of differentiation with the commodity and the specialty products at the extremes of the differentiation. The overall contribution of the new BCG matrix is its recognition that requirements for business success vary across industry settings and that a strategy based solely on gaining market share is not always effective in building a high return on investment (17).

3.1.2. General Electric Business Screen

The General Electric multifactor portfolio model also known as the Business Strength Matrix or General Electric Business Screen (GE) was developed by McKinsey Consulting Group in collaboration with General Electric. The fact that GE uses multiple factors to assess industry attractiveness and business strength, rather than the single measure, added a new dimension to the portfolio planning. Each factor should be weighted in accordance with the decision makers' judgment of the importance of the criterion to the firm's objectives. The selected factors are subjectively rated (18) multiplied with previously given weights, summed to find a total attractiveness score of the industry or the industry's long-term attractiveness. GE Matrix allows the flexibility of choice of the criteria attributed to the market attractiveness and competitive position, taking into consideration the specific characteristics of the industry and differences between the companies themselves. It plots not only the current SBU status, but also indicates the possible future position, based on projection techniques, but merely as extrapolation of past trends. Business Strength /Competitive Position serves as the horizontal variable

presenting the inner source of the company's strength. Although the number of factors building the Business Strength variable may vary, the suggested optimal number could be eleven (19); size, growth, market share, position, profitability, margins, technology, strength and weaknesses, image, pollution and human resources. Vertical axes of the matrix plots the industry attractiveness which represents environmental analysis of eleven factors: market size and growth rate, technological requirements, the intensity of competition, entry and exit barriers, seasonality and cyclical influences, capital requirements, emerging industry threats and opportunities, historical and projected industry profitability, social, environmental, and regulatory influences. The GE Matrix fields contain circles whose area is proportional to the size of the industry, with SBUs represented by pie slices that reflect their market share. For a diversified company to be a strong performer, a substantial portion of its revenues and profits must come from business units in attractive industries. It is particularly important that for core businesses to be in industries with good outlook for growth and above-average profitability. GE Matrix allows only industry - related diversification. In the case of unrelated diversification, separate GE Matrix should be constructed for each unrelated industry the company is engaged in.

The resulting outcome of the GE Matrix is wider and more detailed range of strategy options and strategy formulation than BCG Matrix. Subjectivity, although the strongest limitation of this analysis can also be viewed as involvement of the decision –making subjects in the process of strategy formulation that can result in more profound and sensitive notion of its strong and weak sides. The major objection to this matrix is the presentation of the multifactor variable in the single dimensional measure, ignoring the synergy (20) and the experience curve effects between SBU's. The SBU must have the excellent position in both variables in order to be successful. Improvement of a single factor contributing to the formation of each variable does not promptly imply a better position in the matrix, because a better position depends on the relative share of this factor in the variable. Depending on the location of a SBU within the grid, one of the following strategic approaches is suggested: invest to grow, invest selectively and manage earnings or harvest and divest.

### 3.1.3. Arthur D. Little (ADL) life cycle approach

ADL Matrix named after the consulting group and its founder Arthur D. Little, also known as Industry Life-cycle Matrix emphasizes the approach based on the life-stages of the industry maturity. Basic concept of the two-dimensional ADL Matrix implies that industries, as well as humans, go through specific life-cycle stages. One matrix axis classifies business units in an organization by the stage of the industry maturity distinguishing embryonic, growth, mature, and aging stage. The other represents unit's strategic competitive position clustered as dominant, strong, favorable, tenable or weak.

*Table 3: The Arthur D. Little Matrix suggests array of strategies*

### STAGE OF INDUTRY MATURITY

		STAGE OF INDUTRY MATURITY			
		Embryonic	Growth	Mature	Ageing
COMPETITIVE POSITION	Dominant	Grow fast Build barriers Act offensively	Grow fast Aim for cost leadership Defend position Act offensively	Defend Position Increase the importance of cost Act offensively	Defend position Focus Consider withdrawal
	Strong	Grow fast Differentiate	Lower cost Differentiate Attack small firms	Lower costs Differentiate Focus	Harvest
	Favorable	Grow fast Differentiate	Focus Differentiate Defend	Focus Differentiate Hit smaller firms	Harvest
	Tenable	Grow with the industry Focus	Hold-on or withdraw Niche Aim for growth	Hold-on or withdraw Niche	Withdraw
	Weak	Search for a niche Attempt to catch others	Niche or withdraw	Withdraw	Withdraw

*SOURCE: Bourgeois, L.J. III, Sharma, A.: Instructor's Manual Strategic Management from Concept to Implementation, The Dryden Press, 1996, OHT 8*

Each life-cycle stage is characterized by different investment requirements, profitability, cash flow and specific market share, which can be very helpful in defining a stage the industry is in. Matrix suggests twenty-four generic strategies, which provides the company with the strategic orientation. It is very difficult to determine precisely the turning point in the life cycle stages. It is a matter of constant statistical monitoring, feelings of change and notion that new streams are coming. Although the industry stage is a crucial business parameter, it cannot be the only one determining the strategy orientation. The crucial corporate requirement is the innovation process and the need for constant entering into new industries.

### 3.2. Other significant model tools

The Internal-External (IE) Matrix is similar to the BCG in that both tools plot organizations in a schematic diagram. Each circle represents the sales contribution of each division in percentages, and pie slices reveal the profit contribution of each division in both the BCG and the IE Matrix expressed in the percentage. But, there are also some important differences as the axes are different. The IE Matrix is based on two key dimensions: the IFE total weighted scores on the x-axis and the EFE total weighted scores on the y-axis.

The Grand Strategy Matrix has become a popular tool for formulating feasible strategies, along with the SWOT, SPACE, BCG, and IE Matrix. All companies and divisions can be positioned in one of the Grand Strategy Matrix's four strategy quadrants. The Grand Strategy matrix is based on two dimensions: competitive position and market growth. Data needed for positioning SBUs in the matrix is derived from the portfolio analysis. This matrix offers feasible strategies for a company to consider which are listed in sequential order of attractiveness in each quadrant of the matrix.

Table 4: Grand Strategy Matrix

		RAPID MARKET GROWTH			
		Quadrant II		Quadrant I	
WEAK COMPETITIVE POSITION		<ol style="list-style-type: none"> <li>1. Market development</li> <li>2. Market penetration</li> <li>3. Product development</li> <li>4. Horizontal integration</li> <li>5. Divestiture</li> <li>6. Liquidation</li> </ol>		<ol style="list-style-type: none"> <li>1. Market development</li> <li>2. Market penetration</li> <li>3. Product development</li> <li>4. Forward integration</li> <li>5. Background integration</li> <li>6. Horizontal integration</li> <li>7. Concentric diversification</li> </ol>	STRONG COMPETITIVE POSITION
		Quadrant III		Quadrant IV	
		<ol style="list-style-type: none"> <li>1. Retrenchment</li> <li>2. Concentric diversification</li> <li>3. Horizontal diversification</li> <li>4. Conglomerate diversification</li> <li>5. Divestiture</li> <li>6. Liquidation</li> </ol>		<ol style="list-style-type: none"> <li>1. Concentric diversification</li> <li>2. Horizontal diversification</li> <li>3. Conglomerate diversification</li> <li>4. Joint ventures</li> </ol>	
		SLOW MARKET GROWTH			

SOURCE: David, F. R.: *Strategic Management, 8<sup>th</sup> edition, Prentice Hall, New Jersey, 2001, p.218*

After the analytical tools enabled us to get the view of possible strategic actions, there is one analytical technique designed to determine the relative attractiveness of feasible strategies. This technique is called the Quantitative Strategic Planning Matrix (QSPM) and serves as an objective indicator suggesting which strategic options should be taken into serious consideration, based on previously identified external and internal critical success factors. Left column of the Matrix consists of key external opportunities/threats and internal strengths/weaknesses and the top row consists of strategic options. The left column of a QSPM consists of information obtained directly from the EFE and IFE Matrix. The top row of a QSPM consists of strategic options derived from the SWOT, SPACE, BCG, GE and ADL, IE Matrix, and Grand Strategy Matrix. The relative attractiveness score (AS) of each strategy is computed with the assigned weight determining the cumulative impact of each external and internal critical success factor. The results reveal which strategy is the most attractive in each set of options.

There is no limit to the number of strategies that can be evaluated at once using the QSPM. However, not every strategy suggested by the matching techniques has to be evaluated in a QSPM. Strategists should use good intuitive judgment in selecting strategic options that a company should consider implementing to include in a QSPM. It is particularly suitable that QSPM can be adapted and successfully applied to small, but diversified businesses and large for-profit and non-profit organizations and virtually any type of organization. Although developing a QSPM requires a number of subjective decisions, making small decisions, especially if they are made in a team, enhances the probability that the final decisions will be best for the organization. This fact is also a source of critics. Constant discussion and possible conflicts during strategy analysis may arise because of genuine



differences in interpretation of information and varying opinions. However, the ratings and attractiveness scores require intuitive judgmental decisions, even though they should be based on objective information.

#### **4. CONCLUSIVE ARGUMENTS**

The core of the explained comprehensive three stages analytical model consists of the BCG, GE, and ADL matrix, which are constantly under scrutiny by experts assessing their value and application. Several limitations have also to be taken into account: It is non realistic that there are no connections between the SBU. The portfolio analysis does not respect the market structures, deals with the past and the present, not the future and does not apply for new products. Other critics to the portfolio concept include the fact that the relationship between the market share and ROI does not have to be strong, and the fastest growing industry does not have to be the most attractive.

The final analytical step in strategic planning process is to determine how well each business unit fits into the company's overall business picture. The fit needs to be looked at from two angles (21): whether a business unit fits strategically with other businesses the firm has diversified into and whether the business unit meshes well with corporate strategy. The strategy attractiveness can be viewed from two points: strategic or financial. A business is more attractive strategically when it offers cost sharing and skills transfer possibilities and when it fits well into the corporate strategic direction. A business is more valuable financially when it contributes substantially to corporate performance objectives such as sales growth, profit growth, above-average return on investment etc. Businesses that don't have significant strategic or financial value ought to become divestiture candidates.

It is vital to consider some important issues in a relation to strategic decisions. The first is the internal consistency, or the need for congruency. There must be congruence between the corporate strategy and the strategies of other units in the company. The congruence between strategies is derived from the demand for consistency between mission, objectives and strategies. Very important is also the external fit of the strategic plan with the environment. The reason is obvious: the strategies do not come out of the blue, but are derived from the firm's mission, and objectives, detailed analyses on external and internal success factors, and are to some extent also consistent with past strategies that have worked well (22).

Restricting the analysis to just one type of portfolio matrix is unwise. Provided that adequate data is available, the majority of matrices should be constructed since they assess the company's portfolio from different perspectives. The analytical objective is to understand the portfolio's mix of industries, the strategic position each business has in its industry, the portfolio's performance potential, and the kinds of financial and resource allocation considerations that have to be deal with.

Although the popularity of the portfolio concept has diminished since the 80s, when over half of the largest business corporations used portfolio analysis, it is still used by around 27% of Fortune 500 companies in the corporation strategy formulation (23). Managers working on the strategy planning argue that the portfolio concept has too many limitations to be taken into serious considerations on strategic decisions. The remark comes from the impression that the results and information coming from the BCG, GE and other matrices should be taken as flawed and incomplete, representative of one's perception of the world as it is. Strategy formulation is a craft of finding compromises, which will develop, and shape the strategy as gradual adaptive process towards logical incrementalism (24). In the developing countries where large companies are few, capital markets are underdeveloped, and professional management is scarce portfolio management still works (25). Many firms, especially in the transition countries that have moved from the central planning system to market economy are faced with the need to develop a corporate as well as a SBU strategy. Many claim to have developed a strategy that serves only as a peace of paper with no utilizable value. Others perceive the need to develop a strategy but are blurred with the mere process of strategic analysis and planning.

It is therefore advisable for such companies, inexperienced in a strategy formulation process, to probe on portfolio analysis and perform all its stages suggested by the presented comprehensive model in order to have solid ground for strategy formulation, taking into account all its limitations. Individual,

more flexible approach in constructing the matrices makes them suitable for a wide profile of companies and can be of a significant help in diagnosing and grading the situation the company is in.

The empirical results of the study (26) conducted on the sample of eastern Croatian firms reveal that rationalism and statistical empiricism are lower ranked than intuition and informal empiricism. Moreover, 21,9% of the sample enterprises showed low level of planning incorporated in the decision making process and their management style is therefore characterized as "improvisational" by the authors of the conducted study.

The firms that have used the portfolio analysis sometimes consider it as a useful exercise tool done in a teamwork brainstorming process (27), admitting though that the analysis provided just the verification of the management's opinion on the corporate position. Still, they continue to use it in a frequency that depends on the turbulence of the environment. Sometimes it is fair enough to involve in such analysis once a year, but in a case of some changes in internal or external factors that significantly influence the company's well being it should be performed with higher frequency. It is also a chance to make different managers coming from the marketing, sales, controlling and other departments come together and express their views on the unit as well as corporate issues and agree on the strategy. The portfolio analysis should then by all means serve as a solid background upon which the consensus upon the strategy should be achieved.

Even though no single technique is substitute for creativity, insight or leadership (28) number oriented planning process is an important prerequisite and a starting point in the strategy formulation. It is still to be critically assessed, supplemented with dialog, discussion, and arguments in order to enhance communication. The assumption behind the toolbox idea is that it will allow managers to produce instant solutions to complex problems (29), but a tool cannot replace thinking. Above all, it is of importance not to exaggerate with collecting unnecessary data and information and make the mere process very time and resource consuming. The exaggeration can lead a company into a spiral of "paralysis by analysis" (30).

The main purpose is not only to view and assess businesses from many standpoints, and provide strategies that are consistent, but at the bottom line emphasize the development of sustainable or long-term competitive advantages.

## 5. REFERENCES

- (1) For instance: Kreitner, R.: *Management*, Houghton Mifflin, Boston, 1989; Hellriegel, D., Slokum, W.J.: *Management*, Addison-Wesley Publishing Co, USA, 1988; Mescon, M., Khedouri, F.: *Management*, Harper and Row, New York, USA, 1985; etc.
- (2) Tipurić, D.: *Odlučivanje kao proces*; Ekonomski analitičar, Zagreb, December, 1994, p. 22
- (3) Bryson, J. M. : *An Effective Strategic Planning Approach for Public and Nonprofit Organizations*, from *Readings in Strategy and Strategic Planning*, edited by Harry Costin, The Dryden Press, 1998, p.154
- (4) Kotler, P.: *Upravljanje marketingom*, Informator, Zagreb, 1994, p.43
- (5) Thompson, A., Jr., Strickland III, A. J.: *Strategic Management, Concept and cases*, 6<sup>th</sup> edition, Irwin, Boston, 1992, p.192
- (6) Model methodology taken from David, F.: *Strategic Management*, 8<sup>th</sup> edition, 2001, p.202-229 and modified by authors
- (7) Authors consulted an array of publications about portfolio analysis, some of them being: Thompson, Strickland, David, Taylor, Costin, Tipurić, Pučko, Aaker, etc.
- (8) Thompson, A.A., Strickland, A.J.: *Strategic management*, ibd., p.203
- (9) The BCG matrix has been introduced by Bruce D. Handerson and is also known as the Growth/Share Matrix
- (10) Apart from strategic business unit, one can use a term strategic business area (SBA), related to a group of related products contained in the range of the firm businesses, which have the characteristics of independence with clearly defined competition and ability to assure its own business success. Strategic business areas have very similarities, share the same means of production as well as

distribution channels and act in the same competitive environment, as suggested by Pučko, D.: *Strateško upravljanje*, Univerza v Ljubljani, Ekonomska fakulteta, Ljubljana, 1996, p. 147

(11) Originally the matrix consisted of a market share on the horizontal axes, but further analysis revealed that the relative market share would be more suitable as a horizontal variable. Using a relative instead of actual market share is analytically superior, because the former measure is a better indicator of comparative market strength and competitive position. For instance: if business A has a 15% share of the industry total volume and A's largest rival has a 30% share, A's relative market share is 0,5. Only business units that are market share leaders in their respective industries will have then market share values greater than 1,0.

(12) Early BCG methodology arbitrarily placed the dividing line between "high" and "low" industry growth rate at around twice the real GNP growth rate plus inflation, but the percentage can be raised or lowered to suit individual preferences.

(13) There are many examples confirming this thesis: Daimler Chrysler and Mercedes Benz both have low market share but generate superior profitability and cash flows through careful strategies based on differentiation, innovation and market segmentation.

(14) Pearson, J.A. II, Robinson, R.B.: *Strategic Management*, Irwin, Boston, 5<sup>th</sup> edition, 1994, p. 935

(15) Restaurants being the typical example

(16) Refer to generic strategies by M.Porter

(17) Pearson, J.A. II, Robinson, R.B.: *Strategic Management*, Irwin, Boston, 5<sup>th</sup> edition, 1994, p. 936

(18) The scale ranging from 1 to 5, 5 being the highest.

(19) Thompson, A.A., Strickland, A.J.: *Strategic management*, ibd., p.201

(20) <http://www.intranet.management.mcgill.ca/course/policy/276639/PORTF4/sld017.htm>, viewed on 20.1.2003.

(21) Thompson, A.A., Strickland, A.J.: *Strategic management*, ibd., p.207

(22) David, F. R.: *Strategic Management*, 6<sup>th</sup> edition, Prentice Hall, New Jersey, 1997, p.201

(23) Reimann, B.C., Reichert, A.: *Portfolio Planning Methods for Strategic Capital Allocation; A Survey of Fortune 500 firms*", International Journal of Management, March, 1996, p.84-93

(24) Whittington, R.: *What is strategy-and does it matter?* Rontledge, 1993, p.26

(25) Porter, M. E.: *From Competitive Advantage to Corporate Strategy, Strategy Seeking and Securing Competitive Advantage*, Harvard Business Review Edition, 1991, p. 242

(26) Marijanović, G., Horvat, J., Mikrut, M.; *Entrepreneurship decision making (Case study in East Croatia small businesses e.g. SMES)*, Transition in Central and Eastern Europe – Challenges of 21st Century, Sarajevo, October, 2002, p. 403-408

(27) Insight on the experience collected by interviewing managers from some Croatian companies.

(28) Bateman, T.S., Zeithame, C.: *Management, Function and Strategy*, 2<sup>nd</sup> edition, Irwin, Boston, 1993, p.144

(29) Werner K.: *Toolboxes are out; thinking is in*, from *Mastering Management*, Financial times, 1997, p. 640

(30) I Werner K.: *Toolboxes are out; thinking is in*, ibd., p.641