

COMPETITIVENESS OF SMALL AND MEDIUM SIZED ENTERPRISES IN UNSTABLE EXTERNAL ENVIRONMENT

KONKURENTNOST MALIH I SREDNJIH PREDUZEĆA U NESTABILNOM OKRUŽENJU

BOROČKI, Jelena; COSIC, Ilija; VIDICKI, Predrag & TEKIC, Zeljko

Abstract: *This paper will present the results of the study of the significance of the factors determining the competitive potential of the selected SMEs in the Republic of Serbia, applying modified SPACE analysis. The research covered 75 companies from Serbia. The basic premise of this paper is that a company can use its competitive potential by monitoring critical factors of competitiveness and by getting in these elements in strategic plan of company development.*

Key words: *SME, instable environment, competitive potential, modified SPACE analysis*

Sažetak: *U ovom radu prezentirani su rezultati istraživanja značajnosti faktora koji određuju konkurentski potencijal izabranih MSP u R. Srbiji, primenom modificirane SPACE analize za ocjenu strategijskog nastupa poduzeća. Uzorak istraživanja obuhvatio je 75 poduzeća iz Srbije, različitog profila. Osnovna pretpostavka ovog rada je da poduzeća mogu koristiti i pojačati svoj konkurentski potencijal prateći kritične faktore konkurentnosti koje kasnije ugrađuju u strategijski plan razvoja poduzeća.*

Ključne riječi: *MSP, nestabilno okruženje, konkurentski potencijal, modificirana SPACE analiza*



Authors' data: Jelena **Boročki**, Assistant Professor, Faculty of Technical Sciences, Industrial Engineering and Management Department, Dositej Obradovic Square 6, 21000 Novi Sad, Serbia, borocki@uns.ac.rs

1. Introduction

Enterprises' competitiveness, regardless of their activity, size, commercial/industrial branch they belong to, structure form, and life cycle stage, is, to a high extent, determined with the characteristics of the external environment the enterprise operates in. The dynamics of changes, impact of trends in different spheres of the external environment (economy, politics, science, and technology, global resources, society, and social values, demography, etc.) as well as the specifics of the state and/or region where major enterprise's markets are located, may significantly impact the type of strategic performance and/or the level of the enterprise's competitive potential. Quality and continuing analysis of the enterprise's external and internal environment, the capability of the enterprise to accept and respond to changes, or, even better – creates them itself, is the prerequisite of defining competitive strategy.

The situation analysis requires an enterprise to identify its key business (market/products/geographic areas) through economic and other characteristics of the business environment. With regard to the small and medium sized enterprises, the situation is somewhat more complex, above all, due to the lack of necessary competences, lack of resources, and necessary information. Though they often lack the potential of large enterprises, the small and medium sized enterprises have got certain advantage in relation to the large ones: flexibility to client requirements and changes, speed of decision-making, etc. Smaller firms have many features that distinguish them from larger firms, such as the absence of complex formal structures, dominance of owner-managers, lack of internal labour markets, environmental uncertainty and a limited customer base [1].

The use of certain methodology for the evaluation of competitive potential of the enterprise and for defining the external environment is most often not a typical activity of the SME sector. Yet, formal aspects of any enterprise (including SME) should be well analysed to clearly detect critical factors from the internal and external environment to determine their impact to the strategy, structure, and business processes. All scanning tools are limited in some way. It is difficult to identify all the determinants of change, which will make it difficult to prescribe appropriate strategies. Strategic posture and strategies of the enterprise determine how the enterprise will engage its competitive potential and its advantages within market competition. Continuing and dynamic monitoring of the critical factors defined from the competitive potential of the enterprise, harmonised with the level of the external environment (in)stability, in the process of applying the enterprise strategy, may be a good basis of acquiring competitive advantage. The main objective of this paper is to show what SMEs in transitions countries choose as critical factors which determine (in)stability of external environment and their competitive potential. This information should be valuable for both state institutions that help SMEs and for SMEs itself.

This paper will present the results of the study of the significance of the factors determining the competitive potential of the selected SMEs in the Republic of Serbia, applying modified SPACE analysis [2]. The results cover the presentation of the critical factors of the competitive potential of such enterprises, type of strategic approach, and level of the stability of the external environment as evaluated by the enterprises from the research sample.

2. SME Sector in Serbia – Current Situation

The significance of the SME in the economy of any state is non-disputable: number of employees, transactions, investments, export, etc. are some of the data which, in high number of countries, actually indicate the importance of the SME sector. The activities of numerous institutions, support by the government, designed programmes to stimulate the competitive potential, involvement in the projects, financial support, are standard methods of stimulating this sector. In the conditions when the state is in transition, as it is the case with the Republic of Serbia, the significance of this flexible and vital sector is higher, primarily to stimulate the economy, generate innovations, increase employment. The comparative analysis of the SME sector in the Republic of Serbia and in other countries of Europe shows that according to the participation in the number of the enterprises, employment, achieved turnover in GDP, this sector is at the level of European average. This is not the case considering the data: turnover per employee, profit per employee, and GDP per employee, as well as the investments per employee and per enterprise. In recent years, even besides significant government activities, the entrepreneurial environment in the country has aggravated: the number of the enterprises closed increased, business confidence has been lost, volume of investments has decreased, the sectors over indebtedness, and the business activities have been focused to less risky areas. It is increasingly difficult to open an enterprise and maintain its operation stable. Such situation is the result of not only the crisis in the world, but also of additional instability factors in the Republic of Serbia, stated by the enterprises within the research sample. The presence of local problems within the SME sector is also determined with the level of competitiveness of the state. According to GCI [3] data for 2011-2012, the Republic of Serbia is ranked 95th/142nd (i.e. 96th and 93rd in 2010 and 2009, respectively) [3].

Serbian economy and its economic processes were driven by a focus on regulation and strong government directives and incentives that have lead to a very active role of government in shaping national industries. Competitive advantage is gained by lower price and quality of goods/services that serve to improve development and minimize risks [4]. In such conditions of low competitiveness of the government, when the operation internationalisation may be one of the solutions, it is necessary to know what the available competitive potential of the enterprise is. As Hadjimanolis [5] points out «While firms in less-developed countries, in the recent past, were operating within a relatively protected environment, they must now face the global forces of competition. The globalization of the markets requires the adaptation of firms in order to survive».

Evaluations of the regional context is important because it is a source of competitive advantage to the firm: the availability, costs and quality of factors of production; the presence and quality of suppliers, distributors and producer services; the structure of competition; market characteristics, as well as the role of government and other semiprivate organizations in industrial development. In addition to the above conditions (firm-specific, external environment), there is general evidence that firm-level strategies (e.g., product and process strategies, marketing strategies) are crucial

in determining success or failure for both large firms and SMEs [6]. Survival and growth of SMEs is especially important in transition economies that are either very under developed or have a very small domestic market. Even when entrepreneurship and new venture creation is revitalized in a transition economy, there is still the problem of survival and growth. This problem is particularly acute for new ventures and SMEs in transition economies with very under developed or very small domestic markets. In these cases particularly when it involves countries looking toward future membership in the European Union (EU) it is essential for the SMEs to be involved in international business [7].

The basic premise of this paper is that a company can use its competitive potential by monitoring critical factors of competitiveness and by getting in these elements in strategic plan of company development. Creating the strategy based on the critical factors of the competitiveness and/or financial resources, the enterprise has got higher chance to achieve better results if the implementation control is realised.

4. Research/methodology

The research covered 75 SMEs from Serbia. With the aim of having as representative sample as possible, the companies different in their legal form of organisation, economic branch (economic sector), location, activity, and ownership were selected. The questionnaire for the evaluation of the enterprise strategic position (SPACE analysis) initially created by author Allen Rowe [8] served as the basis for the creation of new questionnaire, SPACE model modification [2]. 45, 3% of selected companies are service and 54, 7% are manufacturing companies.

Joint Stock Company	2,67 %
LTD	78,67 %
Entrepreneurship	12,00 %
Public companies	0,00 %
Others	6,67 %
TOTAL	100 %

Table 1: Legal form of enterprises

Aggressive	49,3 %
Defensive	17,3 %
Competitive	28,0 %
Conservative	5,3 %
TOTAL	100,0 %

Table 2: Type of strategic posture of selected SMEs

The model applied in the research includes four major components i.e. two for the evaluation of the external and two for the evaluation of internal enterprise environment, where all of the selected factors are evaluated in terms of both value and significance. The potential of an industry segment (PIS) and (in)stability of the

environment (ES) determine the external environment and competitive (CP) and financially (FP) potential define the internal environment. The potential of an industry segment may mitigate the enterprise competitive position, and the stability of the external environment may overcome the enterprise's financial limitations. Based on the research results, in our conditions, it is not possible to maintain either one or another thing at certain positive level: specifically, if the enterprise has got significant financial resources, the instability of the external environment is rather present. Through the evaluation in detail of the factors and indicators of the modified SPACE analysis, and after the implementation of relevant software, the result is as follows:

- current enterprise strategic position, including the direction and intensity of resulting vector,
- value and significance of all of the factors and indicators of all model dimensions,
- the set of the factors which should be modified to change the strategic performance, based on which the objectives for the next time period may be set up and strategic development plan may be created [9].

The SPACE matrix is broken down to four quadrants where each quadrant suggests a different type of a strategy: aggressive, conservative, defensive and competitive.

The research was realised through specifically defined questionnaires filled in by the members of the management structure by adjustment of the positions on the value and significance of each factor except for micro enterprises when the owner individually made decisions on all of the evaluations. It turned out that the critical factors for the analysed small and medium sized enterprises within the dimension of the **Environment Stability** were as follows:

- frequent changes of competitive product prices
- high inflation rate
- unfavourable relation of the government to economic branch (group, segment)
- high tax liabilities
- low rate of economic growth in the country
- frequent changes of energy prices
- aggravated conditions/unfavourable opportunities of getting borrowing (crediting conditions)
- Political instability
- frequent changes of production technology

Those are the unstable environments where the government determines the conditions to a high extent. The score for this dimension is -3.41 (minimum score of this dimension may be -6). The government institutions have got insufficiently good relation to the economy, and all this is followed by the frequent changes of the competitive product prices, production technology, high tax liabilities, and frequent changes of energy prices. Unfortunately, the majority of the enterprises are not able to impact and even less to

change the position of the government to the values of those factors which, to the highest extent, determine the instability of the external environment.

The score of the **Competitive Potential** of the observed enterprises showed that the critical factors are as follows (the factors of high significance for the enterprise operation with low value):

- low market share
- low level of impact to product/service customers
- high sales and distribution costs
- low sales personnel skills
- the lack of continuing product/service development
- low level of financial investments in the product/service development
- the lack of continuing development of operation technology
- low level of financial investments in the operation technology development
- the lack of continuing development of the personnel
- low level of financial investments in the personnel development
- adjustment of the organizational structure does not follow the changes in the environment or/and at the enterprise
- non-timely taking of corrective measures

The competitive potential of the observed SME within the research sample is low – it amounts to -2.06 (minimum value is -6), but it is still better than the dimension of the stability of the external environment. The corrective measures within the operating processes are taken with high delays. In general, the issue of the development is very critical regardless of whether it deals with the development of the personnel, technology, or products and/or services.

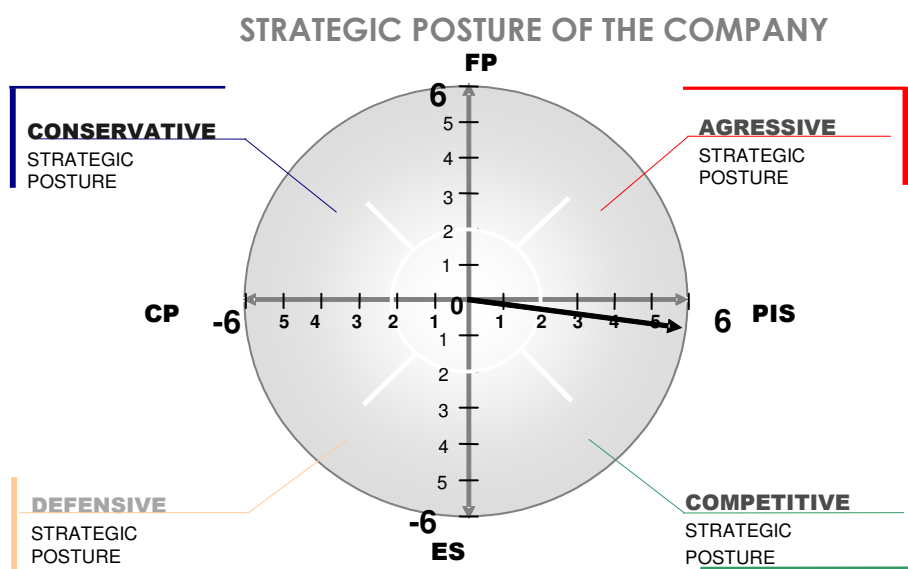


Figure 1: Average strategic posture of SMEs in research example [8]

If the type of the strategic posture is observed, based on the average values of all of the factors within the observed model, it is seen that the competitive strategic posture is typical for the SME within the research sample. This type of the posture is typical for attractive industrial branches. There is a competitive advantage in relatively unstable environment. This is the posture typical for the enterprises which "respond", understand that the environment is unstable, but the industrial branch is strong. This strategic approach is unstable, because there are no sufficient financial resources and competitive advantage. According to resultant position, it should be noticed that it is near to industrial strength scale.

5. Discussion

If the key factors of the SMEs are observed within their competitive potential, it may be concluded that the category of the development of the basic elements (the development of personnel, products/services, and operation technology) is very discontinuous (there is no continuity in designing the development processes) and the investment level is insufficient. This is certainly the issue which should not be neglected – continuing lack of investment may have dramatic consequences to the future. The degree of the impact to distributors and customers/users of services is low, and the adjustment of the organisational structure with the changes in the environment and/or enterprise is almost not made at all. Knowing that the organisational structure is the result of the ways in which the internal processes are implemented, how and whether the control and rewarding systems are implemented, how the authorities and authorisations at the enterprise are defined, this may be a problem regarding the correct use of the resources and/or competitive potential.

Possible activities in the situation to improve the market penetration (which are, at the same time, the recommendations for the enterprises with the competitive strategic performance) include:

- obtaining additional financial resources
- supplement of the sales personnel and enhancement of the sales channels
- expansion or improvement of the product line
- investment in the productivity improvement
- costs decrease
- protection of competitive advantage on the market whose potential falls
- the attempt of the integration with the enterprise having significant cash sources.

The advantage of the applied model lies in the fact that the change of the value of the critical factors (through the designed strategies and objectives of the enterprise) within certain timeframe, including the engagement of the resources, may also result in the increase of the enterprise's competitive potential. Of course, all this should also be observed from the aspect of financial resources of the enterprises. If the value and financial resources of the enterprise within the sample changed, the strategic

performance of the enterprises could become more aggressive, which would not be the case if the change of only the competitive potential factor change is observed.

6. Conclusion

The SMEs, the competitive potential and the impact of the stability of the external environment are interesting areas for the researches. Though the strategic management tools are not applied at the enterprises in Serbia to the extent which would be harmonised with the results in the developed economies, the enabling to use such tools and consulting activities for the SME sector in this area could also make a certain move. Though the SME sector is, indeed, significant for the economy, based on the research results, it may be concluded that the enterprises do not have high impact to the changes in the external environment yet, above all, due to the exceptional impact of the state which predominantly deals with own problems of survival.

Each of the strategic posture (also including the competitive one) may be related with some of the generic strategies. Thus, the *competitive strategic posture* is that such posture is typical for relatively attractive industrial branches in unstable external environment, and the enterprise should decrease its costs and increase financial resources. It is questionable whether the acquisition of adequate financial resources would be sufficient to outweigh unstable “hostile” external environment where the probability of the technology change, the change of the demand for the product/service, and/or the change of the competitive strategy are high. It was noted that in our conditions, the “hostile” environment means something completely different, in contrast to the predominant positions in the literature (since the above characteristics of the hostile external environment in the sample were assessed as somewhat above the average values). Since aggressive posture is the best one, it seems that SMEs in Serbia could not reach that posture in such instable external environment, even their competitive potential is not such bad, because of lack of a high level of financial potential, which is almost impossible to reach in a current situation.

The approach of determining the enterprise strategic posture not only provides current evaluation of the situation, but it also indicates the factors which should be dynamically monitored, their value should be changed (if it is assessed that the enterprise has got certain impact to its change) and the aggressive strategic posture should be strived to. Besides, the method of determining the strategic posture and the evaluation of the activities on the market are conditional of the systematic approach which may be used to relate various assumptions on important (key) strategic variables. Therefore, after careful assessment of the values and significance of each of the factors, it is possible to more efficiently review the alternatives and make an agreement about the strategy type. Of course, it should be considered that only by relating the existing strategic posture with possible impact (i.e. the enterprise’s resources to realise certain change, resources for achieving success), as well as with the available resources to achieve such change, as well as with the application of certain steps may the enterprise hope, with higher degree of reliability and probability, that it will determine the most appropriate strategy for itself and/or profit units. Thus, the competitive potential of the enterprises may be improved regardless of their financial resources.

The competitiveness of the SMEs within the selected sample of the research is not at the envious level, just like the competitiveness of the government. Since the external environment (the environment created by the government institutions having high impact to the enterprise operation) is also unstable, the improvement of the competitive potential is currently not an option. If the research itself would be expanded to large enterprises, too, especially to the public enterprises, it would be interesting to compare the results. Further research is also possible within the small and medium sized enterprise sectors in the states in the region which, above all, have got better competitive potential.

7. Literature

- [1] Floren, H. (2006). Managerial work in small firms: summarising what we know and sketching a research agenda. *International Journal of Entrepreneurial Behaviour and Research* Vol. 12, No. 5 (October 2006) pp.272–288, ISSN 1355-2554
- [2] Borocki, J., (2009). Development of strategic planning model as functions of enterprise innovativeness, Ph. D. Thesis, Faculty of Technical Science in Novi Sad, Republic of Serbia
- [3] The Global Competitiveness Report 2011-2012, [http:// www3.weforum.org/ docs/ WEF_GCR_Report_2011-12.pdf](http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf), access: 10-04-2012
- [4] Dobromirov, D.; Radisic, M.; Celic, Dj.; Bojovic, V.; (2011). Competitive advantages of Serbian Industry Sectors, *XV International Scientific Conference on Industrial Systems*, Beker, I., pp. 385-389, Novi Sad, Republic of Serbia, ISBN 978-86-7892-341-8, September 14-16, 2011, Faculty of Technical Science, Novi Sad
- [5] Hadjimanolis, A. (1999). Barriers to innovation for SMEs in a small less developed country (Cyprus). *Technovation* Vol.19, No. 9, pp.561–570, ISSN 0166-4972
- [6] Jones, O.; Macpherson, A.; Thorpe, R.; Ghecham, A.; (2007). The evolution of business knowledge in SMEs: conceptualizing strategic space, *Strategic Change*, Vol.16, No.6, sept-oct. 2007, pp.281–294, published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/jsc.803
- [7] Glas, M.; Hisrich, R.; Vahcic, A.; Antoncic, B.; (1998). The Internationalization of SMEs in Transition Economies: Evidence from Slovenia, *International Conference on Globalization and Emerging Businesses: Strategies for the 21st Century*, Montreal, September 26-28, 1998, published in *Global Focus*, Vol.11, No. 4 pp.107-124, December 1999
- [8] Rowe, J.A.; Mason, O.R.; Dickel, E.K.; Mann, B.R. & Mockler, J.R.; (1994). *Strategic management- a methodological approach*, 4th Edition, Addison-Wesley Publishing Company, Reading, ISBN Massachusetts,
- [9] Borocki, J. (2011). Analysis of Company Development Factors in Manufacturing and Service Company: a Strategic Approach, *Strojniški vestnik - Journal of Mechanical Engineering*, Vol. 57, No.1, (January 2011) pp.55-68, ISSN 0039-2480

Acknowledgement: The authors acknowledge the financial support of the Ministry of Education and Science of the Republic of Serbia, within the Project No 47005.



Photo 011. Cross on Sokolovac/ Križ na Sokolovcu