Sustainable Global Competitiveness Model as a New Strategic Opportunity for the Companies in Slovakia

ŠNIRCOVÁ Jana ¹, FIDLEROVÁ Helena ¹, BOŽIKOVÁ Lucia ¹

¹Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology, Paulinska 16, Trnava, Slovakia

Abstract Dealing with global competitiveness is nowadays the strategic issue for the Slovak companies in context of sustainability. It means for managers of company to define new future strategic goals, to identify current position in global market, primarily to focus the strategy on sustainable global competitiveness and to assess the competitiveness in new way regarding sustainability and social corporate responsibility. The aim of this paper is to present the contribution to holistic micro and macro economical view on competitiveness of company in context of sustainable development in global environment. The introduced sustainable global competitiveness model is based on our experiences within the research in manufacturing companies in Slovakia. It is a visualization of enterprise as a system with all relation performing in its environment. Sustainable global competitiveness model comprises the three pillar principle of the sustainable development, modified Porter’s value chain, and economical environment represented with Global Competitiveness Index (GCI) and other factors of environment which influence the company.

Keywords – Global Competitiveness, Sustainable Development, Competitiveness Assessment, Strategic Advantage, Value Chain, GCI.

1. Introduction

The past decades are described as a time of accelerated growth of economic, ecological and social problems in various parts of the world, including the small and middle sized companies around the world. It is apparent that many companies in Slovakia are in the same situation and they are right now facing the new challenge.

First part of the paper gives brief characteristics of the strategy, competitiveness with focus on global sustainable competitiveness and sustainable strategic advantage. The next part introduces a sustainable global competitiveness model based on our research and the experience from praxis, with emphasis on the position of company in global and national environment respecting the three pillars of sustainable development. It emphasizes the relation between environment and company, where the company is described by modified Porter’s value chain that in every activity respects sustainable development. Environment on global and national level is defined with the Global policy, the policy of the European Union and the economic policy of the Slovak republic. Under the impact of these policies, the competitivenes of the SlovakRepublic is shaped and which is then assessed along with the competitiveness of all countries around the world through the GCI index.

2. Competitiveness and Strategy of the Company

The word "strategy" has been used implicitly in different ways even if it has traditionally been defined in only one. Explicit recognition of multiple definitions can help one to maneuver through this difficult field.

Strategy is defined by Johnson and Scholes [1] as the direction and scope of an organization over the long-term: which achieves advantage for the organization through its configuration of resources within a challenging environment, helps to meet the needs of markets and to fulfill stakeholder expectations.
Mintzberg [2] provides five definitions of strategy: Plan, Ploy, Pattern, Position and Perspective. Strategy is a plan - some sort of consciously intended course of action, a guideline (or set of guidelines) to deal with a situation. By this definition strategies have two essential characteristics: they are made in advance of the actions to which they apply, and they are developed consciously and purposefully. As plan, a strategy can be a ploy too; really just a specific maneuver intended to outwit an opponent or competitor. Defining strategy as plan is not sufficient; we also need a definition that encompasses the resulting behavior: Strategy is understood also as a pattern - specifically, a pattern in a stream of actions. Strategy is consistency in behavior, whether or not intended. Plans are intended strategy, whereas patterns are realized strategy; from this we can distinguish deliberate strategies, where intentions that existed previously were realized, and emergent strategies where patterns developed in the absence of intentions, or despite them. Strategy is a position - specifically a means of locating company in an environment. Strategy is a perspective - its content consisting not just of a chosen position, but of an ingrained way of perceiving the world. Important is that strategy as a perspective is shared by members of a company, through their intentions and / or by their actions. Each of the above mentioned five ways of defining the strategy is necessary for understanding what strategy is, but none of them alone is sufficient to master the concept [2].

In practice managers are looking for the right strategy to find out opportunities and competitive advantage. Competitive advantage refers to the ability gained through attributes and resources to perform at a higher level than others in the same industry or market [3]. We agree with Lis et al [4] that an essential component of the manager's work is a reality of continuous improvement, gaining experience and gaining knowledge.

The goal of sustainable strategy is to meet the obligations to all the three values of sustainability (economy, society, nature), i.e. to operate based on triple income statement. Companies, which follow the principle of triple income statement, pursue the economic success and at the same time support the social and ecological context of their surroundings [5].

According to Steads [5], there are three requirements for successful sustainable management. At first it requires support and active participation of the managers on every level, starting from the strategic level to the operational level. Second – it requires open dialogue and processes of reaching the agreement that enable all the relevant stakeholders to express their opinion on all the actual problems, to the proposed changes and to how these changes will be solved. Third – it requires that all the changes in the organization and the approaches used for these changes should be efficiently implemented into the culture of the organization.

There are defined three major ways how companies can achieve sustainable advantage by Michael Porter in 1985: cost leadership, differentiation and focus. Although these main strategies were developed by researching companies, they can be useful for everyone, from employees to countries, who are seeking to stand out.

Definition of sustainable competitive advantage says that it is an advantage that enables business to survive against its competition over a long period of time. Sustainable competitive advantage allows the maintenance and improvement of the enterprise's competitive position in the market.

Sustainable competitive advantage is different from the competitive advantage. A company achieves sustainable competitive advantage if a firm makes the added value or the market position that cannot be easily replaced or duplicated by another company. Sustainable competitiveness is mentioned by some authors as ability to maintain or to improve the position of the company for the long time. Respecting the requirements of sustainable development it should be considered achieving competitiveness in context of three pillar principle. This more complex view at sustainable competitiveness is the ability of a company to maintain its position in the long term while respecting the requirements of sustainable (ecological, economic and social environment).

The idea of joining the ethics and morale with business was used by Tomáš Baťa, Czech top manager, who understood the importance of connecting the prosperity of the company and the region, in which he is doing his business, prosperity of his customers and also employees, who create the value of the company. Tomáš Baťa said in 1926: „I think that I earned the most after I decided for the course that seemed at first beneficial only to people – the public. The course of action, which at first promised benefits only to me and disadvantage to the public, brought disadvantages to both of us in the end” [6,7].

The result of joining acquiring the competitive advantage and respecting principles of sustainable development at the same time is the concept Creating Shared Value, based in 2006, by author M.E. Porter in the magazine Harvard Business Review. Creating Shared Value represents the creation of value with the goal to satisfy the current requests in the best possible way, with respect to the needs of the company, its surroundings and the society. It is a new
model of doing business, based on the business strategy with nonzero summary – win-win strategy [8]. Companies can create shared value according to authors Bockstette, V.; Stamp, M., [9] in different ways:

1. Re-definition of value chains. Companies can improve qualitative, quantitative, cost and reliability aspects of its inputs and distribution and at the same time to work as good manager of the basic natural resources and momentum of the economic and social development.

2. Changes in perception of products and services. Companies can satisfy the social needs and at the same time offer better services in the already existing markets, seek new markets or to decrease their costs through innovations.

3. Improving the local conditions. Companies are not isolated from their surroundings. To be able to compete and succeed, they need reliable local supplier, working transportation and telecommunication infrastructure.

3. Sustainable Global Competitiveness Model for the Companies in Slovakia

Sustainable global competitiveness model is new visualization of enterprise as a system with all relation performing in its environment based on our experience within the research in manufacturing companies in Slovakia (Fig. 1.). The base of the model comprises three vertically oriented pillars of sustainable development (ecological, economic and social pillar). All other elements in the structure of the proposed model are built on these three pillars [10].

Other building elements of the sustainable global competitiveness model are three horizontally arranged levels/spheres of influence. Spheres of influence determine factors of sustainable competitiveness. The global policy is on the top of the sustainable global competitiveness model. The policy of the European Union is influenced and therefore situated under the global policy. A national economic policy leads off from policy of EU. Within this deployment the hierarchy and impact among the individual policies is shown. These policies provide the decision level in strategic management.

The next element of the sustainable global competitiveness model is a global competitiveness of the country. This level represents the national policy of the state. Global competitiveness of the Slovak republic is defined with the global competitiveness factors of the country from the global competitiveness report of countries. The World Economic Forum began issuing its annual World Competitiveness Report in 1980 and the rankings in that report soon became a major criterion by which national performance was judged. Global Competitiveness Index (GCI) was developed by Xavier Sala-i-Martin and Elsa V. Artadi [11]. The GCI measures national competitiveness defined as the set of institutions, policies and factors that determine the level of productivity [12]. The GCI provides a weighted average of over 100 different variables, where each variable is considered to reflect one aspect of competitiveness. Approximately two-thirds of these come from the Executive Opinion Survey (EOS), and one third comes from publicly available sources (i.e. The World Bank, The World Health Organization, and UNESCO). The EOS is described by Schwab [13] as a comprehensive annual survey conducted by the WEF together with its network of Partner Institutes (leading research institutes and business organizations) in the countries covered by the report. Competitiveness is represented with these determinants: level of innovations, business sophistication of a country, institutions, infrastructure, macroeconomic environment, health and primary education, higher education, goods market efficiency, labor market efficiency, financial market development, technological readiness and market size [14].

According to our interview with the managers of companies in Slovakia, we can point out that there is a relation between global competitiveness of the Slovak republic and the competitiveness of the company. The level of global sustainable competitiveness for a country determines level of global sustainable competitiveness of the company. Reasons are that the conditions for development and existence of companies should be prepared by state and its organization and also the position of the state (GCI) depends on the competitiveness level of companies in chart of global competitiveness. The force of the impact of each company can be determined by the size enterprises.

In the introduced model of the sustainable global competitiveness is the company level presented as a modified Porter’s value chain. This modified Porter’s value chain proposed by Šmida and Sakál [15] consists from primary and supporting activities respecting sustainable development. Primary activities are sustainable infrastructure of enterprise, sustainable management of human resources; sustainable development technology, sustainable security and secondary are sustainable input logistics, sustainable operation, sustainable output logistics, sustainable marketing and sale, sustainable service.

The next part of the paper is focused on the importance of the before mentioned elements as parts of the sustainable global competitiveness model and relevance of their placement in structure. All new models based on modern economics, hence our
model, must respect the requirements for improving the quality of the social, ecological and economic environment. The increased interest in the three pillars principle in the field of transnational, national policy and in enterprises is an urgent need and one of the basic requirements for sustainable development of the whole society. The global policy, the policy of the European Union, the national policy of states and the strategy of enterprises must respect these requirements. Improving the quality of the social, environmental and economic environment should be a part of the decision-making process at each level of the organization and most at strategy level.

European Union defines three priorities in the strategic document Strategy Europe 2020 [16]:
- Intelligent growth: economy based on knowledge and innovation;
- Sustainable growth: support of more ecological and more competitive economy that uses the resources with higher efficiency;
- Inclusive growth: support of economy with high employment rate, which will ensure social and regional consistency.

---

Fig. 1. Sustainable Global Competitiveness Model for the Companies in Slovakia
Also, one of Slovak Strategic document - the National Strategic Reference Framework of the Slovak republic (2007-2013) - defines as horizontal priorities the Consistently Sustainable Development. The main goal of this program is to ensure environmental, economic and social sustainability of the economic growth[17]. Specific and partial goals listed in this document are [18]:

1. Increasing the economic prosperity: intensify the competitiveness and efficiency of the economy of Slovakia; increasing the level of research, development and education; decreasing the energy
and resources demand of economy and increasing the usage of renewable sources of energy.

2. Increasing the quality of the environment: rational usage of natural resources; reducing the impact of the climate changes; decreasing the pollution of environment; protection of the nature and the biological diversity.

3. Social consciousness and inclusion: decreasing the unemployment rate; improving the position of handicapped and marginalized groups of citizens; ensuring the protection of the health of the citizens.

4. Balanced regional development: improving the total economic, social and cultural potential of regions; improving the traffic infrastructure; improving the information infrastructure.

Economic, ecological and social pillars are essential to apply the desired sustainable development in the world, and therefore these pillars are an integral part of global sustainable competitiveness model. Social, economic and environmental requirements have become part of the global policies; they are integrated into the policy of European Union (Europa Strategy 2020) and the economic policy. If the company has the strategy to be successful in the global market and to increase the sustainable competitiveness, all these policies must be respected. Companies will be required in future to pay more attention to these policies, to increase their awareness of global changes, changes as results from relevant legislative documents and economic changes of the country.

4. Software Application for Calculating the Sustainable Global Competitiveness Index for Companies in Slovakia

Presented sustainable global competitiveness model visualizes a holistic micro and macro economical approach to the competitiveness of the company. It is a concept of defining the business strategy taking into account the determinants of business environment and factors inside the enterprise. The idea of the sustainable global competitiveness model was used also in a new software application for calculating the sustainable global competitiveness index for the companies in Slovakia [10]. Its aim is to define better strategy of the company, to achieve the strategic competitive advantage, to assess the competitiveness of the company and to predict it. The application was also created as an expression of the expected development of index and the development of internal factors that are important for creating the sustainable competitiveness. The whole calculation is user-friendly and based on the existence of relationship between the external environment and internal factors for achievement of the sustainable competitiveness of the company. The parameters of external environment have been taken from the GCI methodology for the Slovak republic and factors of the internal environment from modified Porter’s value chain, respecting introduced model of sustainable global competitiveness. During interviews the gained experiences of managers were helpful for establishment of the starting data for calculating the index of sustainable global competitiveness of companies.

Company representative as user of application will by able by means of customized Excel file to work with pre-prepared baser data. The user's task is to fill the required data about the company. The first list includes a set of questions that the user answers using binary cod - yes (1) or no (0). These questions are set in advance by us according to the identified sustainable value-creating activities within research in the companies in Slovakia (Fig. 2.).

The outcome of the proposed platform is an index of sustainable global competitiveness and graph presenting this index up to the present. The graph also illustrates the prediction of sustainable global competitiveness index for future (Fig. 3.) while respecting the input data.

5. Conclusion

Sustainability strategies have focused for the past two decades, on eco-efficiency, stakeholder engagement, and social responsibility in existing core businesses. Now companies are being challenged to move "beyond greening" to develop breakthrough innovations that confront directly the two biggest problems facing humanity: growing inequity and accelerating environmental degradation.

The introduced sustainable global competitiveness model considers better the company not as an isolated cell but in interaction with environment, with a goal to look for strategic opportunities and to be ready for new challenges in the global environment. We expect the synergy effect by using the model of sustainable global competitiveness including the calculation of index for defining the future strategy and the strategic advantages of the company.
References