METHODS OF STRATEGIC ANALYSIS SUPPORTING THE ELABORATION OF COMPANY’S INNOVATION STRATEGY

Abstract: Both theory and practical experience in the scope of company management prove that formulation and selection of innovation strategy should be preceded and accompanied by analyses of numerous internal and external factors which may strongly influence the functioning and future development of an organization. Thus the implementation of strategic analysis methods in course of the said formulation and selection process should constitute the basis for preparation of every innovation strategy stemming from the innovation process ongoing within a given organisation.

Keywords: Strategic analysis; methods of analysis; innovation strategy.

INTRODUCTION

The development of an appropriate innovation strategy requires the gathering of multiple important information and it is frequently connected with the considerable risk which should be eliminated or neutralised at the very moment of emerging of the strategic concept. This is best done by the performance of appropriate analyses allowing for the determination of the company’s internal potential and of the current state of the complex and
unstable external surroundings. Such activities constitute an absolute necessity in the conditions of contemporary economy, as lack of knowledge on the possessed resources and conditions of the surroundings may lead to the failure of the implemented innovation strategy. Thus the aim of the hereby article is to describe selected methods of strategic analysis and to confirm, that the implementation of the said methods facilitates the creation of appropriate and effective innovation strategy which shall provide the organisation with the expected and tangible benefits, resulting from the implemented innovation.

1. SELECTION OF INNOVATION STRATEGY

A strategy constitutes a basic instrument in contemporary company management hence in the era of continuous change it becomes an effective method of supporting the effective development of an organisation. This results from the fact that a strategy not only includes the plan of the company’s activities which has contributed to the market success and survival of numerous companies, but it also constitutes a concept capable of explaining the reasons behind failures resulting from the mistakes made in course of its preparation and implementation [Koźmiński, Piotrkowski, 1995, p. 123; Berliński, Penc-Pietrzak, 2004, p. 37]. According to the general definition the innovation strategy is described as the long term operation plan prepared in order to facilitate the innovation management process, or the process of searching for such types of innovation which, supported by the possessed resources, shall increase the market effectiveness of a company [Pomykalski, 2001, p. 84].

The creation of innovation strategy involves conscious and programmed activities aimed at searching for the chances of development, new technological solutions, new products, new marketing forms and such methods of personnel training that would enable the staff to create and appropriately implement the said products or solutions to meet the expectations of the market [Drucker, 1994, pp. 387–389; Penc, 1999, p. 308]. However, such activities require numerous and thorough analyses particularly in the scope of availability of resources and company’s competence, idea, initiative or innovative solution, the risk connected with the formulation and realisation of the given innovation strategy, the cost of implementation thereof and the probability of final success [Pomykalski, 2001, p. 286]. The following stages occur in course of innovation strategy preparation: the strategy
formulation process covering the stage of strategic analysis and of strategic planning leading to the selection of the strategy; the strategy implementation stage which includes the implementation of the selected innovation strategy, its subsequent monitoring and inspection.

The innovation strategy formulation process most frequently relies in the creation of a new innovation strategy or in the search for the most effective methods of implementation of the already existing innovation strategy, mainly in order to implement the existing innovation solutions more effectively and to create long-term competitive advantage of an organisation. Due to lower costs and faster realisation the latter solution tends to be adopted more frequently, although in long-term perspective it may prove less efficient.

When resolving to commence the creation of an innovation strategy regardless of its character it is justified to refer to the recommendations applicable for the classic strategy and at the very beginning to pay attention to the potential opportunities resulting from the implemented innovations, acceptable risk related to them, the scope and structure of innovation activities, methods of financing and the changes within the organisational structure necessary for the appropriate absorption. [Drucker, 1976, p. 292].

In the classic approach to innovation strategy formulation this process may be divided into two phases, i.e. the analysis phase and the decision phase and also into corresponding stages requiring specific actions which include: the analysis of the company’s surroundings, formulation of strategy, selection of the company’s strategy, selection of the competitive strategies, creation of strategy implementation plans and monitoring of strategy realisation [Pomykalski, 2001, pp. 289–291]. On the other hand the empiric approach assumes that the basis for the future development of the company shall be the adopting of experiences of those companies that have been successful in the market as well as independently conducted experiments as the company’s own resources continue to grow. This approach seems effective when solving complex and hidden development issues of a company but more as complementation of the classic approach in the area of analysis of factors which are difficult to control and require unconventional methods.

When formulating an innovation strategy it is best to assume, that the said strategy refers only to a selected area of the global strategy and as such it is implemented within specific spheres of the company’s operation. It is more effective as business strategy, because not only does it contribute to the realisation of the global strategy, but it also supports achievement
of objectives connected with the new product, service, process or method of management and it determines the effective usage of resources at the company’s disposal. Still even in this case the precise determination of the desired objective remains the most important issue as only then it is possible “...to initiate the diagnosis of conditions, possibilities and strategic barriers which constitute the reasons for the evaluation of the designed objective” [Janasz, Janasz, Świadek, Wiśniewska, 2001, pp. 70–71].

In practice the process of formulation and selection of innovation strategy may be conducted in a more or less formalised manner, yet always with the use of adequate methods of strategic analysis. Obviously, following the implementation of the strategy it is necessary to monitor the said strategy continuously for the performed changes and achieved objectives. It is exactly during this process that the methods of strategic analysis or in wider perspective of strategic planning prove extremely useful [Byars, 1987, pp. 8–9] as they effectively support the realisation of all development activities, including the innovative ones, increasing the probability of obtaining the assumed goals.

Taking into consideration the close connection between strategic management and innovation management it seems not only justified but most of all essential to apply the selected methods of strategic analysis in the process of innovation strategy formulation [Griffin, 2000, p. 233]. This aspect has been emphasised by multiple authors who hint at the possibility to adapt some of the traditional methods of strategic analysis or their general modifications to the needs of creation of innovation strategy [Berliński, 2003; Jasiński, 1997, p. 47].

2. THE SELECTED METHODS OF STRATEGIC ANALYSIS

Both simple and more complicated methods, including those with various level of complexity, are used within the frames of the performed strategic analysis. These methods vary from one another in terms of their approach to the analysis as certain of them are based on qualitative analyses while the others on the quantitative ones. Their variety is also connected with the different objectives of individual analyses and consequently with the assumed different ranges of factors influencing the selection of the future strategy of a company. The above mentioned factors have been divided into the external factors located in the company’s surroundings and the in-
ternal factors creating the company’s potential. As a result of this we can talk of the performance of the strategic analysis of:

- external surroundings within which the company functions with the division into closer and further competitive surroundings;
- internal surroundings, that is the company treated as a collection of resources, skills and values.

One of the methods that may be used in the process of formulation and selection of innovation strategy is the well-known and frequently applied SWOT analysis. It is acknowledged as a helpful and attractive tool as the procedure of performance of the said analysis involves the identification of strengths and weaknesses within the company but also of the opportunities and threats existing in the surroundings which have a considerable influence onto the accuracy and rightfulness of the diagnosis [Romanowska, 1998, p. 60]. This method allows for determination of mutual dependencies between the external and internal factors and for the determination of the influence of the surroundings onto the functioning of the company.

The performance of the analysis of strengths and weaknesses that is of the internal factors should provide the management of the company with the information on which areas of activity and innovation the activities of the company should concentrate to obtain competitive advantage. The strengths of the company include its unique resources, skills and specific features differentiating it from other entities, whereas the weaknesses are those elements of the company that limit the effectiveness of its operation or hinder its further development. In numerous situations these notions require to be defined more precisely and then certain diagnostic tools such as the list of areas of strategic importance for the functioning of the company and the characteristic of the key competitor or a group of key competitors may prove helpful. Hence every systematic analysis of strengths and weaknesses should include three mutually connected stages, the performance of which allows to obtain synthetic image of the condition of organisation being diagnosed (see table 1).

The analysis of strengths and weaknesses is usually accompanied by the analysis of external opportunities and threats which constitutes the second dimension of SWOT analysis. In this aspect the point of reference is constituted by all the phenomena occurring in the company’s surroundings such as main partners of the company in the market (suppliers, customers, competitors) or the functional aspects (division of surroundings into areas different in terms of the functional aspect). Depending on the identification method and manner of exploitation for the company’s own needs of a spe-
cific event occurring within the company’s surrounding the said event may become both an opportunity and a threat for the company. In such situation the best solution is to identify the apparent threats and subsequent change of their qualification to opportunities allowing for the creation of long-term competitive advantage [Obłój, 1998, p. 114–122].

Table 1. Activities required for the determination of the competitive situation of the firm

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Stage 1</td>
<td>Identification of key areas of activity i.e. technology and production, marketing and distribution, financing and accounting, human resources management, organisation and management, after sales service</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Selection of reference scale for the evaluation of strengths and weaknesses of the company which may be performed by the application of an appropriate approach called benchmarking relying in the identification of the main competitor – a leader that we shall be compared with</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Building of the company’s competitive profile and summary of results by comparison with the main competitor, interpretation and creation of the outline of functional activity programmes</td>
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SWOT analysis is considered to be one of the comprehensive methods of strategic analysis as it examines nearly all factors influencing the development potential of a company. Yet the problem is the lack of unified definition and organisation of the scope of strengths and weaknesses and of opportunities and threats, as well as the non-existence of a universal and standardised procedure to be followed in course of performance of the said analysis which would allow for its objectiveness [Jurek-Stępień, 2007, p. 215]. Contrary to the common belief SWOT analysis is not applied solely as a tool for diagnosing the company and its surroundings but it may be also useful when formulating the company’s strategy [Obłój 1998, p. 182–203]. An example of the approach exploiting the creation and selection of a strategy on the basis of SWOT analysis is the concept of H. Weihrich which describes 7 stages among which the first four involve analysis and the following three stages cover the selection of the company’s strategy (see Table 4) [Gierszewska, Romanowska, 1994, p. 179].
Table 2. Procedure for formulating and selection of a strategy with the use of SWOT

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Determination of the company’s profile</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Identification of the company’s strengths and weaknesses</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Preparation of analysis of the current situation of the company and forecasts for the future</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Identification and evaluation of the company’s surroundings</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Formulation of strategic options for the company</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Defining the activities and tactics required for the achievement of goals</td>
</tr>
<tr>
<td>Stage 7</td>
<td>Preparation of strategic plan</td>
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</table>


The above mentioned possibility of smooth transition from the strategic analysis stage to the strategic planning stage proves the considerable usability of SWOT analysis as the method used for the evaluation of the strategic situation of a company and it means that the said analysis may be implemented when creating the innovation strategy.

On the basis of the quoted approach we are able to construct four types of normative innovation strategies which result from the analysis and evaluation of the factors determining the attractiveness of the market and the competitive position of the company, i.e. – the aggressive strategy relying for instance in the development of innovative products; the conservative strategy connected with the improvement of existing products, reduction of costs, development of new products and launching them onto new markets; the competitive strategy aimed at the improvement of a line of products, increase of productivity, cost reduction and the defensive strategy concentrated on the solutions which reduce the costs.

The described usefulness of SWOT analysis as such and as the method of selection of innovation strategy results from the fact, that in case of this analysis it is not necessary to systematically single out and describe all external and internal factors, but it is rather crucial to concentrate on the so called key factors in terms of their influence onto the further development of the firm. More or less extended lists of strategic questions, defined on the basis of both theoretical and practical research creating in a sense the model sets of factors determining the strategy, prove to be very useful.
when conducting this type of analysis [Thompson, Stricland, 1987, p. 98; Gierszewska, Romanowska, 1994, p. 211].

The SWOT method it is assumed to be relatively friendly, yet requiring a lot of work and not always precise, which in numerous cases generates the necessity to complement the said analysis with other methods in order to obtain proper evaluation of the organisation (e.g. the screenplay methods when analysing the external surroundings factors, the “5 forces” method by M.E. Porter when analysing the sector or finally the method of chain of values and key success factors when analysing the company’s potential) [Jurek-Stępień, 2007, chap. 9].

The screenplay methods belong to the research methods used for the analysis of macro-surroundings. They are exploratory and prospective in their character and serve for the determination of the influence of macroeconomic factors onto the company’s functioning while simultaneously they predict changes that may affect the said factors. As has been manifested in practice these methods allow for the construction of screenplays of states and processes occurring within the company’s surroundings that may be of considerable importance for the company’s development as they constitute specific opportunities and threats. Normally four screenplays are created different in terms of probability of occurrence depending on the development of the situation in the company’s surroundings. The most frequently created screenplays are: the most probable (screenplay, the probable optimistic screenplay, the probable pessimistic screenplay and finally the surprising one. The screenplays may be used in course of construction of strategic options for globally-oriented innovative companies due to the fact, that they allow for the analysis of factors such as: competitiveness at national level, at the level of sectors and other elements of international importance which tend to be essential for the recognition of innovation climate [Gierszewska, Wawrzyniak, 2001, p. 179–180].

The PEST method relying in the diagnosis and identification of macro-surrounding factors constitutes a perfect supplementation for screenplay methods. [Faukner, Bowman, 1996]. This method divides the external factors into political, economic, social and cultural, and finally technological ones thus creating specific sets of factors facilitating for instance further analysis and strategic choices within the frames of screenplays. The division of the examined macro-surrounding factors into appropriate groups may be characterised by certain freedom of categorisation yet it should always be adjusted to the company’s needs, its profile of activity and the geographic market within which the said company functions. The described
method proves useful when creating global innovation strategy as it pro-
vides relatively precise information concerning the macroeconomic situ-
a tion in its specific areas frequently determining the decision of implement-
ing an innovation for instance due to technological limits.

In case of performance of sector analysis it is recommended to use the “5 competitive forces” method by Porter. This approach has its source in the examination of competitive factors or, in other words, forces shap-
ing the competitive situation within the sector of activity appropriate for the firm. This method is a qualitative one allowing for the determination of factors directly influencing the competitive behaviour of firms within the examined sector. These factors are constituted by forces determining the conditions of competition such as the force of competition between the existing entities within the sector, the tender force of suppliers, threat of new entries by competitors and threat constituted by substitute products and services [Porter, 1994, p. 22]. In practice the procedure of sector analysis compliant with the ‘5 forces’ method involves a few stages covering the detailed analyses (see table 3).

Table 3. Sector analysis procedure compliant a “5 competitive forces” method by Porter

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Identification of the company’s sector of activity which shall be the subject of attractiveness evaluation</th>
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<tbody>
<tr>
<td>Stage 2</td>
<td>Evaluation of the degree of competition between companies existing within the sector, that is of the character and intensity of competition</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Evaluation of the force of influence and the negotiation position of both suppliers and customers</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Determination of the possibility of negative influence of new competitors and substitute products onto the competitiveness of the sector and product offer</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Determination of the attractiveness of the sector for the entities functioning inside it (or potential investors) including the evaluation of the competitive position of the given company</td>
</tr>
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</table>


It is assumed that the analysis of “5 competitive forces” allows for the explanation of the reasons underlying competitive behaviour of companies within the examined sector, but it does not take into consideration all the elements shaping these forces. It is advisable to keep in mind
the remaining factors within the company’s surroundings which may constitute considerable influence onto the company’s development and to attempt to include them in the conducted analysis [Strategor, 1995, p. 41]. The “5 forces” method has even seen the operationalisation of variables through the translation of these variables into questions and commands facilitating the evaluation of attractiveness of the selected sector. The key is the importance of the evaluation of influence force of individual factors onto the construction of effective and efficient company operation strategy [Gierszewska, Romanowska, 1994, p. 108]. This method proves very useful in course of construction of an innovation strategy oriented onto the functioning and competition within the given sector and taking into consideration the absorption capabilities of innovation among the entities existing within the said sector.

Among other methods of analysis of processes occurring within organisations the so called “general chain of company’s value” prepared by M. E. Porter proves useful [Porter, 2004, p. 37]. This chain divides the activities generating the added value into two main categories, i.e., the basic and auxiliary ones. Additionally, it also allows for the determination of mutual dependencies between the activities which leads to their coordination and increases the efficiency of functioning of the whole chain of values through the strengthening of the weakest links. Such activities manifest the effectiveness of potential management and the mutual dependencies existing between these links as they increase the value of the product for the buyers and strengthen the competitive abilities of the company. The links of the value chain are dynamic units and as such they guarantee the specific effects of synergy and subsequently become the sources of competitive advantage [Penc, 2003, p. 201].

The chain of values becomes a model reflecting the process of creation of certain values for the customer by the company and these values should preferably result from innovative activities. The performance of this analysis leads to the detection of all internal operations, their mutual connections and relation to the surroundings simultaneously displaying that with the involvement of the possessed resources the company is capable of creating innovations and generate the usability value for its customers, which is the condition for the creation of added value and surpluses influencing its future development [Urbanowska-Sojkin, Banaszyk, Witczak, 2004, p. 269]. Subsequently the comprehensive analysis of the value chain proves useful for identification and evaluation of those links of the said chain which shape the usability value for the customer in the most visible way simultaneously
indicating to the areas where innovative ideas might be found and later forged into innovation strategy.

Another method deserving attention in the context of preparation of innovation strategy is the so-called strategy canvas method constituting an analytical scheme of innovation value and creation of the so-called “blue oceans” [Kim, Mauborgne, 2005, p. 47]. This method is an example of a specific approach to the analysis of selected types of innovation strategy facilitating both the diagnosis of the current situation of the company within the specific market space and the identification of activities allowing for the construction of the so-called “blue ocean” innovation strategy. This method is characterised by a complicated procedure but its innovatory approach to the issue of search for new areas of activity generates interest as it places emphasis upon creative thinking generating innovativeness.

The basic assumption of the strategy canvas method is to cease the fight with competitors and to concentrate on the search for new market space (the so-called “blue ocean”) through the generation of new value for buyers, preferably in the innovation area. This allows to avoid competition in the area of the previous sector (so called “red ocean”) and leads to the loss of importance by the competitors due to the fact that, contrary to us, they concentrate solely on the analysis of the commonly known customer behaviour without creative generation of such behaviour. The sample comparison of activities characteristic for the listed areas has been presented in Table 4.

Table 4. Activities characteristic for the areas of the “blue” and “red” ocean.

<table>
<thead>
<tr>
<th>Characteristic activities of the company</th>
<th>Blue ocean – new space</th>
<th>Red ocean – current space</th>
</tr>
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<tbody>
<tr>
<td>Creation of new values for customers or of new fields of activity</td>
<td>Rivalry with the competitors within the industry</td>
<td></td>
</tr>
<tr>
<td>Building of new market position</td>
<td>Concentration on the maintenance of the market position</td>
<td></td>
</tr>
<tr>
<td>Offering complementary products</td>
<td>Aiming at maximisation of product quality</td>
<td></td>
</tr>
<tr>
<td>Concentration on new needs in the industry</td>
<td>Price competition within the industry</td>
<td></td>
</tr>
<tr>
<td>Defining of new group of buyers</td>
<td>Improvement of buyers’ service quality</td>
<td></td>
</tr>
<tr>
<td>Shaping new trends and solutions</td>
<td>Adapting to new trends and solutions</td>
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</table>

The activities described within blue ocean possess the strategic dimension and are defined as “innovation value” as they generate new demand and lead to the creation of new values. Thus the innovation value constitutes a specific cornerstone of the blue ocean strategy becoming for instance the new form of thinking about innovation strategy and the new form of its realisation manifested in the discovery of the “blue ocean” or in the increase of value for the buyer through the introduction and creation of solutions that have not been offered before. [Kim, Mauborgne, 2005, p. 47 and further].

The innovation strategies created on the basis of the method described above focus solely on the creation on innovation value. This means, they undertake the risk of stepping outside the existing area of demand in order to create new needs and solutions to satisfy them and not to create novelties which shall not find any application whatsoever. The weak systematisation of the method and lack of rules for effective risk management do not contribute to the popularisation of the method and the created innovation strategies are considered risky.

To sum up, the selection of an appropriate analytic method in the process of innovation strategy preparation perfectly eliminates the threats resulting from the improper identification of the conditions of the surrounding or from the ill-considered distribution of the possessed resources and skills to the alternative innovative ideas. As a result of this, the effectiveness of use of resources improves which leads to the greater probability of obtaining the strategic goals within the implemented innovation activities. It is also worth remembering that the conclusion of the process of innovation strategy formulation should result in the selection of the best strategic option for the organisation, hence it is recommended to use all the methods or solution supporting such decision.

CONCLUSIONS

The analysis of factors determining the future development of a company constitutes a perfect starting point for the formulation of any type of strategy as it is connected with finding answers to the strategic questions facing the organisation. The crucial character of these question requires the performance of specific analyses among others in the scope of the market situation, resources, company’s surroundings, selection of an optimal solution, application of financial or non-financial criteria or the implementation and
supervision of strategy. Hence the decision concerning the formulation of innovation strategy and its subsequent implementation must not result from an impulse of the company’s management but it should be the product of regular analytic and conceptual activities supported additionally by the thoroughly conducted strategic analysis and implemented solely with the desire for the company to develop only through the conscious introduction of new products, processes or organisational changes.

LITERATURE


Abstract: Teoria i doświadczenia praktyczne z zakresu zarządzania przedsiębiorstwem pokazują, że formułowanie i wybór strategii innowacji należy poprzedzać i uzupełniać analizami licznych czynników wewnętrznych i zewnętrznych, które mogą silnie oddziaływać na funkcjonowanie i przyszły rozwój organizacji, rzutując tym samym na jej prawidłowe zarządzanie. W rezultacie wykorzystanie w tym celu metod analizy strategicznej może i powinno stanowić podstawę opracowania każdej strategii innowacji, będącej efektem zachodzącego w firmie procesu innowacyjnego.

Keywords: Analiza strategiczna; metody analizy; strategia innowacji.