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The systems of assessment of business surroundings in the companies of railways

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Abstract

In the situation of dominating in the world tendencies of economic depression as well as the crisis in European region, which is still continuing the companies, which aim at remaining and surviving in the competition, must analyze the surroundings of the competition actively. That concerns the companies, which performs as monopolies in the market, and the companies working in the sector of railways are usually among them. The question which needs to be considered is as follows: what method or methods should be chosen for assessment of business surroundings? In order to answer this question it is necessary to perform the analysis of the estimation of demands for every company, which would help to define the demands of the companies. In this case first of all, it is important to answer such question as: how does the company perform in the market: as a monopoly, an oligopoly or a rival? The next question is what kind of funds is used in the company, which is analyzed: national or private? For this purpose the companies working in the sector of railways must also estimate their demands according to the criteria which were defined above.

Keywords: the systems of assessment of surroundings; competitive intelligence; strategic places; collecting of information and its analysis.

1. Introduction

While assessing the business surroundings in the companies of the sector of railways it is important to take into

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account the monopolistic position of this business sector and consider this position as constantly changing and variable one. While analyzing the case of Lithuanian railways the perspective but variable oriental markets are pointed out. For example, during the war in Afghanistan the great amount of carriage was transported throughout the sector of Lithuanian railways and as a result the return of the company had increased very much, but after so called Afghanistan transit had ended up, the sharp decline of the company‘s return was noticed. So, in our opinion, in order to avoid great declines in the companies of the sector of railways more extensive diversification of the markets is necessary. For this purpose an optimal method or methods of assessment of business surroundings must be selected. Subject to the goals the most optimal methods can be used to achieve the goals which are set.

The other authors divide the levels of assessment of surroundings into the assessment of micro surroundings and the assessment of macro surroundings. The analysis of the works of different authors shows that to assess business surroundings in the most cases the following qualitative methods are used: PEST analysis, PISETA analysis, also the analysis of dynamics of surroundings and the analysis of scenarios (Zvirblis, 2011).

The other authors maintain that while performing PEST qualitative analysis the factors which have a predicted friendly influence and predicted unfriendly influence are accentuated (on the ground of expert assessment), the impact of substantial factors of macro surroundings on the strategy of the company is designed. Besides, if this analysis is performed together with the analysis of dynamics of surroundings and the analysis of scenarios, it enables to predict comparative intensity of the impact of accentuated factors (for example, highly friendly, friendly, unfriendly, highly unfriendly and so on) also the tendencies and courses of their alterations (Ratcliffe, 2000).

The other authors maintain that with regard to outlook of quantitative assessment the tasks of reasoning of the principles of quantitative assessment of business surroundings come. It is important, that such assessment were integrated into the general system of assessment of strategic decisions of the market surroundings (Zinkeviciute, 2007).

In our opinion the most thorough and effective methods to complete the tasks of assessment of business surroundings is the methods of assessment of competitive surroundings on the ground of experience of special agencies, which is also called the methods of competitive intelligence or business intelligence. The methods are adapted to achieve commercial goals and are based on the experience of intelligence services and their long-term practice in the sphere of forecasting and analyzing of public information, because they include maximum components and assesses maximum characteristics. Besides, the methods are considered to be the most flexible ones concerning the ways of adapting to the situation of competitive surroundings and the tasks which are set. They help to involve the characteristics, which are not covered by other methods, into the process of assessment. So **the aim of the article** is to identify the potentials of the use of the methods of assessment of competitive surroundings in the companies of the sector of railways.

2. The integrated assessment of business surroundings in the sector of railways on the international aspect

It is necessary to remark that at present the strategy of development of Lithuanian transport and transit is included into the long-term (till 2015) strategy of development of Lithuanian economy, which was approved by the LR government resolution Nr. 853, 12-th of June, 2012, only as separate fragments. Only the strategic aims and devices of development of several particular types of transport are thoroughly presented in the strategy of development of Lithuanian transport and transit. Meanwhile one of the most important new directions of the European Union and Lithuanian policy on transport is to strengthen the interaction between different types of transport. In the field of transportation of passengers it is implementation of the conception of „one ticket“ (when passengers are allowed to use a one same ticket in various means of transport to meet their needs. In the sphere of freight intermodal processes and technologies are accentuated. To develop intermodal transport establishment of modern centers of logistics (villages of cargo) or just centers of transport is especially important as well as integrating them into the system of centers of transport in Europe and the region of the Baltic Sea, which is being founded (Allee, 1995).

In this strategy the perspectives on long-term development of establishment of modern public centers of logistics (villages of cargo) are analyzed. Intermodal interaction while developing Lithuanian transport facilities is also emphasized. Updating and developing of road, railway, sea and air facilities must be concerted so that intermodal operators could use effective technologies and processes of transportation, well-balanced development of various types of transport would take place as well as proper interaction between them and the systems of transport in nearby countries (especially countries-members of the EU) (the strategy of development of Lithuanian system of transport till 2015, 2005).

In our opinion creating of such strategies requires the assessment of competitive surroundings of the sector of railways with the assistance of modern technologies.

The importance of competitive ability is emphasized in the Green Book of the EU what transforms the stressed role of the assessment of business surroundings to another level. (European Committee, 2012).

From the point of medium-term perspective advanced technologies and innovations make durability of a product shorter and organizations and employees are made to adapt constantly. Besides, after the international distribution of work had changed and new strong companies from the countries of developing market economy, which mostly specialize in luxury goods, had appeared, competitive pressure on European companies increased.The competitive ability of European economy, its performance, saving of working places and creating of new products and, consequently, new vacancies will depend more and more on **European companies' capability to strengthen their competitive ability using modern aids and to adapt to the changes quickly but smoothly**. Technological changes and innovations might make organizations and employees create adaptive strategies, but there is also the opinion that innovations, which are combined with academic reserches and education might be an effective way for Europe to win in the battle with crisis. (European Commettee, 2012).

The other authors also remark the importance of competitive intelligence and maintain that in order to identify the actions providing great extra bevefit, which could help to strengthen the competitive ability of the region, strategical intelligence is necessary. To make the influence stronger MTTP and the sources of information must get the critical extent and at the same time the improvement of competence, educational levels and facilities of knowledge must be arranged (Ashton et al., 1994).

Consequently, the countries' institutions and regional authorities should create **the strategies of advanced specialization,** which would be used in order to strengthen the general influence of regional policy and the other policies of the EU (Burritt et al., 2002).

In our opinion, the created regional strategies should also help to adapt the methods of competitive intelligence for the places of stategical importance both at regional and national levels.

According to the other authors, identification of the components of business surroundings enables to accentuate substantial components of surroundings, which have (might have) strong influence on the results of the company's work, in the particular situation. As the authors of the article present the analysis of the common case first of all the components, which are researched by expanded qualitative analysis of surroundings, are defined. Besides, it is stressed, that despite the fact, that every mentioned component of macro surroundings has the factors, which are known as international phenomena, it seems to be purposeful to accentuate an external (foreign) macro surroundings. It is possibly accentuated on the new aspects, first of all considering the current processes of globalization and integration, which cause a lot of changes in business surroundings. The following points, which are typical for this surroundings can be indicated:

- influence of free commercial zones;
- influence of offshore centers;
- potentials of moving of the trade to another country;
- expansion of international concerns;
- participating of the country in regulation of economy (Zvirblis, 2011);
- participating of international organizations in regulation of economy.

In our opinion, the analysis of such peculiarities of macrosurroundings is especially important, for example, for the company, which provides international transportation by railway, so it should be integrated into the complex assessment of business surroundings. Applying to the analysis of the topic of assessment of microsurroundings, which include consumers, present and potential rivals, suppliers, it is necessary to emphasize that in this case identification has its particularity. It in turn requires thorough analysis, which can also be defined as a study of identification of the problems.

The other authors maintain that strategies of advanced specialization might ensure the more effective use of public funds and encourage private investments. Instead of distributing of investments among various spheres and business sector in driblets such strategies can help the regions concentrate the financies on several general priorities. Besides, they can become the main factor aiming at multi-stage controlling of integrated policy on innovations. They also must be closely related to other spheres of policy and in order to use them it is necessary to realize the advantages of the region considering other regions and potential benefit, which the regions and countries might get working in close collaboration (Braziulis, 2012).

Advanced specialization can not be treated as the strategy, which is imposed from above. It helps companies, the

centers of scientific reserches and universities to get on the stick together in order to find not only the most favourable spheres of the regional specialization, but also weaknesses, which impede innovations. While using advanced specializations different innovative capacities of regions according to their ecomomical situation are taken into account. Leading regions can invest money in development of common technologies, but in other regions the investments in adaptation of technologies and services to the particular sector or closely related sectors seem to be more useful (Hyršlová et al., 2008).

The stability of the strategy will depend on whether political instruments will be presented timely and coordinated properly also on admnistration including the ways of involving of the concerned parties into work. It is necessary to use the mechanisms of political training, especially while assassing one another involving state officials, specialists and concerned parties of the region.While using advanced specializations it is necessary to take advantage of regional variety, encourage collaboration with other countries and regions and create new potentials also avoid decomposing and ensure smoother spread of learning all over Europe (Jasch et al., 2009).

European Committee expressed the opinion that it is necessary to answer the question , what general factors of these strategies should be‘. It should help to prepare the general offers, which can be variously regulated and realised by the regions aiming at arranging the particular strategy corresponded to their situation (European Committee, 2010).

In our opinion, in this case European Committee understand and emphasize competitive assessment of business surroundings not only in a private sector, but in regional and national sectors as well.

According to the other authors competitive intelligence also takes an interest in foreign economic policy in the spheres, which might have some negative influence on development of economy in the country. Unlike industrial intelligence competitive one mostly uses so-called transparent sources of information. All the secret agencies and the structures, collecting private information admit that about 80% valuable information is founded using precisely such sources (Kmieliauskas, 2003). That proves that the methods of competitive intelligence are approachable for business.

3. The possible methods and models of assessment of competitive surroundings in the sector of railways

Mostly the company of the sector of railways decides independently what methods of analysis will be chosen. However, while assessing the set goals and tasks?

According to the other authors, the assessment and analysis of rivals (the companies, which might become rivals due to their work) at the primary stage of assessing of them it is already necessary to collect great amount of information. So it is important to save up a reliable database. It is necessary for identifying of rivals and certainly for assessing of them. It must be emphasized that analysis of rivals and methods of qualitative assessment of rivals are expanded enough. The most important items are as follows: assorting and accentuating of rivals, disclosing of display of the barrier of mobility, creating of the matrix of the position of strategic groups in the market, SWOT analysis for assessing of more internal factors, comparative analysis (using the methods of smooth research). Another opportunity is using TOWS analysis while assessing more external factors (Boguslauskas et al., 2009).

Quantitative assessment is undoubtedly promising in this sphere as well, although it is necessary to take into account especially wide spectrum of criteria. Value-added, which is being made, the change of supply, the level of internal profit could be firstly named as underlying complex criteria. However, while creating the methods of quantitative assessment it seems to be purposefully to concretize the whole of complex criteria assigning appropriate determining factors to every criterion. It is purposefully to use that, first of all, for the rivals of one objective group (Zinkeviciute et al., 2011).

The environment of the sector of railways is external (from the point of the company) potency and factors, which are typical for the companies of a particular sector of economy. Every sector of economy has its particularity and its general display is extent and technology. Although such characteristics as duration of existence, the chain of value, structure, the role of rivals, vertical and horizontal integration, average profitability, distribution of input according to the types of supplies and so on are very important for the business as well (Gray et al., 2001). Hereby, this component of surroundings is the object of especially multilateral analysis. Here are also the most commonly-used methods of statistical analysis, structural analysis, analysis of scenarios, and analysis of the sector SWOT. However, in our opinion, the method of TOWS analysis would be more appropriate for this case. Among specific methods of study the analysis of curve of experience of input, model of the cycle of existence, the matrix of peculiarities and

potentials are used. To carry out the quantitative assessment of the whole of the parameters of the environment of the sector the basic models adapted according to an available relative method of multi-criteria assessment must be also created.

The presented general principles of quantitative assessment of the studied components of surroundings, first of all, suppose reasoning of the method of quantitative assessment and creating of the aspects of formalized components (the models of assessment) also including of the primary factors and partial criteria into the system of assessment. It includes expert assessment of primary factors and their stress also identification of quantitative parameters of integrated proportions (the indexes of the level of components) (Tint, 2010).

While studying the possible methods of quantitative assessment of surroundings it was decided to select the most promising quantitative method –multi-criteria analysis, particularly the group of the methods of assessment as the mostly related to the designed tasks and corresponding to the object of the research. The method of the process of analytic hierarchy (AHP), also the method of summing up of the products of the significance and importance of the criteria (KRRSS) are accentuated inside the group.

Use of the KRRSS method, which enables to unite the primary, on principle very different factors to summarizing proportion is based on the cases of the sector of railways, which are being analyzed. Besides, the KRRSS method is appropriate, if all the factors in the system are independent and if their interaction is not important for the integrated proportion (as it was found while analyzing the cases) as well. The method has good software (for example, adapted MS Excel program is possibly used). Hereby, after having completed formalization the models, which are considered to be the foundation for quantitative assessment of components of surroundings using the KRRSS method, were created (Gaidelys, 2011).

The other specialists of competitive intelligence accentuate some methods, which, according to them, would be the most utility and easily adapted to the demands of business organizations. They maintain that there are no absolutely utility methods, so specialists of competitive intelligence should use various methods subject to the character of the set tasks (Gaidelys, 2011).

The method of alternative sources suggests several explanations how to solve the problems of competitive intelligence. It is used in the situation when specialists of competitive intelligence get contradictory or uncertain data from different sources of information. It is the same if the user of the information requires the analysis of several possible scenarios aiming for a long-range forecast (Galvin, 1997).

The method of analysis of potentials enables an analyst of competitive intelligence to believe acting as the leader, who must take the decisions and predict future operations of the business organization. This method allows identifying risks and estimating opportunities the business organization might face while making efforts to affect the competitive situation and answering the question: ‚What to do? In order to use the method the first step, which should be taken, is re-formulating of the problem of competitive intelligence as it were expressed by the leader, who takes the decisions (New Entrants, 1998). The further actions towards using of the method depend on the particular situation (Kokubu, 2002).

The method of the contrary analysis intends to change or give up the primary assumptions considering the rivals and reconsider the courses of analysis. The method is useful due to the fact that it makes doubt seemingly clear information and that enables to avoid stereotypes and other consequences, which could diminish the quality of the analysis (Rensli, 1996).

Such reflection is typical for bureaucratic institutions. The method makes the specialist of competitive intelligence coherently revise all possible explanations and variations of the rivals ‘operations. Hereby, the method helps the specialist of competitive intelligence avoid choosing of the variations of limited consideration.

Divergent methods are characterized by constant hypothesizing, presenting new outlooks and ideas, which require that the specialist of competitive intelligence should be intellectual, self-possessed and creative. While using the methods the specialist of competitive intelligence makes the list of assumptions and decides how these assumptions could change his attitude towards the problem. Later on he makes the list of issues connected with collecting information and finally he re-formulates the problem. It is necessary to remark that while assessing the hypotheses the specialist of competitive intelligence must avoid partiality. In the beginning of analysis hypotheses must be put down; later the specialist of competitive intelligence can test three or more techniques of creating of hypotheses, which include using of theory, situational logic and comparison. The author claims that the methods must give the answers to the questions, which begin „How...“, Why not...“, „What if...“and „I wish...“. It is considered to be the

attempts to create as many hypotheses and ideas as it possible. According to the author, the specialist of competitive intelligence should generate from 5 to 10 hypotheses but not less than 3 ones, because if the number of hypotheses is smaller than 3, they rarely cover the whole diapason of expected answers and alternatives.

The method of analysis of events accentuates one or another event, which takes place in the external surroundings of a business organization and shows tendencies and the peculiarities of performance of rivals as well. This method at one or another level is used by all the analysts, but to tell the truth, not always they follow the methodical instructions strictly. If the method is used following the strict system, it can show important tendencies in the competitive surroundings of business organization. So this method can become an instrument for early warning, as it enables to notice the changes in the competitive surroundings in good time. The chronology of operations of rivals, the analysis of recent purchases of a business organization, information concerning the geographical activeness of rivals etc. are usual (Sauka, 2009).

The method of analysis of competitive hypotheses enables to compare analytical conclusions and explanations concerning the activity of rivals. The methods enable the specialist of competitive intelligence to check compatibility of collected by competitive intelligence information and identify possible inaccuracies in the final report. Later on such information must be analyzed additionally. It occurs due to the human nature, which does not allow checking of compatibility of the information collected by competitive intelligence coherently. An analyst of competitive intelligence usually selects one hypothesis, which he tries to confirm later and which, from his viewpoint, explains the processes, which take place. Such situation keeps on existing until the hypothesis, which was selected by the analyst of competitive intelligence, for any reason is denied. The disadvantage of this situation is that as the analyst of competitive intelligence assesses every hypothesis separately he often fails to compare and assess the whole collected information and several hypotheses at the same time. Hereby, there is an opportunity not only to select the hypothesis, which is mostly grounded on collected information, but also to check the sources of information the primary data is got from (Prescott, 2004).

So, specialists of competitive intelligence should be capable at selecting appropriate methods, which would help them to complete the necessary analysis and get objective results. It directly influences objectivity and success of the assessment, which is being performed (Gaidelys, 2010).

4. The stages of arrangement in the companies of the sector of railways

The other authors offer to introduce the system of six steps at the stage of business intelligence in the companies of the sector of railways. Although the most authors name requisitioning for getting information as the first step, in our opinion, first of all the demand for getting such information must come up.

Anyway, the steps, which are presented by those authors, who offer to partition the requisition into four parts, are as follows:

- The name of the employee who has requisitioned for getting information;
- The date of requisitioning (Roberts, 1995);
- The department the employee having requisitioned works in (Prahalad, 1990);
- The description of the information, which is wised to be obtained.

At the second stage, as the other authors point out, one of the most relevant issues while requisitioning is concreteness of demanded information. In order to get a concrete response to the requisition it is necessary to name clearly what kind of information is wished and maybe to point out what obtaining of it aims at. Otherwise, a risk of getting the information, which is not important for realization of the set tasks, might take place. So, it is possible to maintain that concretizing of information is the second step (Galvin, 2007).

As the author's advice, the third step aims at gathering of the qualified team consisting of experts in competitive intelligence. It is possible to notice the tendencies that to find experts in competitive intelligence is much easier in the countries where the service of intelligence has deep roots. It is also thought that early retiring of officers from the service of intelligence causes this fact. However, eventually the offers for specialists of the service of intelligence come up in the market and it seems to be quite easy for them to retrain as specialists of competitive intelligence and provide the appropriate services (Francis, 1999).

The other authors express the opinion that in the company, which employs 1000 – 2000 employees, 12-15 specialists of competitive intelligence work. With regard to the fact that the companies of the sector of railways

employs from 10 000 to 2000 000 employees and more than the number of specialists of competitive intelligence working for the company should not be less than 30 ones. Only then it is possible to achieve good results (Nakajima et al., 2006).

Some authors offer to get in touch with the colleagues working in subdivisions of sales and marketing at the fourth stage. In our opinion, good contacts only with the colleagues from the mentioned subdivision do not seem to be a sufficient measure because the risk of getting information connected with narrow specialization might take place. So it is purposefully to have good contacts with, for example, associations, which unite various business groups; with the companies, which administer commercial databases; top managers of companies, analysts, scientists etc (Fusfeld, 1995).

Some authors name acts of special attention (for example, sending letters of thanks) towards partners as the fifth step. Showing an attention is important not only for top management but also for other persons with whom you collaborate closely. That must become a natural process.

The authors name attentiveness and achieving of the goal as the sixth step. Every detail can play an important part and the wider relations are the better chance of getting necessary information is possible. So, attentiveness is a necessary component for every link (Panfeli, 1999).

Some authors think that in order to use the methods of competitive intelligence successfully the following elements are necessary:

- Constantly developing and at the same time stable structure of competitive intelligence;
- Devolution of coordination of the system (Strobel, 2001);
- Sensitive IT systems operate as training systems (Palásek, 2009);
- Relationships between strategic and tactical aspects (Rozekranc, 1998);
- Feedback from the consumers – infiltration (Wagner, 2006);
- Recommendations based on hypotheses (Petkus et al., 2009);
- Formalizing of the culture of intelligence.

As well as in other business organizations in the companies of the sector of railways it is necessary to assess the demand for use of competitive intelligence before selecting of appropriate methods (Montgomery & Weinberg, 2008).

The other authors offer to use the secretive type of the model of market intelligence, which should include different tasks of competitive intelligence, which are as follows:

- Identifying of consumers;
- Estimating of their demand for introducing of competitive intelligence;
- Identifying of the source if information;
- Collecting of information;
- Interpretation of the information;
- Transferring of reconnaissance information.

Despite the opinion that this model is of quite a good quality, it has certain weaknesses. The main failing is defined as the non-existence of guides for analysis of tendencies what does not allow to detect them according to the indications.

5. Conclusions

The methods of assessment of competitive surroundings (also known as the methods of competitive or business intelligence) grounded on the experience of intelligence agencies are the most thorough and effective methods, which enables to complete the tasks connected with assessment of business surroundings.

The competitive ability of European economy, its performance and retaining of workplaces also creating of new products and, accordingly, new workplaces will progressively depend on the capability of European enterprises to increase their competitive ability with the help of innovative means and quickly but smoothly adapt to changes.

Accordingly, the state institutions and local authorities should create the strategies of advanced specialization aiming at strengthening the collective influence of regional policy and the policies of other countries of the EU.

While arranging the strategies of development of transport the assistance of advanced technologies in order to assess the competitive surroundings in the sector of railways is necessary.

The strategies arranged by regions should help to adapt the methods of competitive intelligence to the places of strategical importance at the regional level and at the national level as well.

The scheme of external technologic intelligence, which should help to group the analyzed information, could be successfully used in the places, which are strategically important for the national security.

European Committee understand and emphasize the competitive assessment of business surroundingsnot only in the private sector but in regional and national sectors as well.

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