

# THE POTENTIALS FOR USING OF METHODS OF COMPETITIVE INTELLIGENCE IN THE SECTOR OF RAILWAYS

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## Abstract

*The sector of railways plays a very important part in economy of the most countries of the European Union. Usually such companies are known as the largest employers also taxes payers in the country, consequently their importance is really great. It is also noticed that the companies, which belong to the sector of railways compete in the market with the companies of other sectors of transport. That is why the matter of planning and implementing of the methods of competitive intelligence has taken on a special topicality as one of the ways to get a competitive advantage in the market. Usually to frame such methods on their own is a very difficult task for business organizations, so they seek assistance from the companies, which provide them with such service. However it is necessary to remark that competitive intelligence is a continuous process with no interruption and only in this circumstance it is possible to expect the positive results. In our opinion, this process should be started with framing of the methods.*

**The type of the article:** Theoretical article.

**Keywords:** the sector of railways, competitive intelligence, the methods of competitive intelligence.

**JEL Classification:** F23, F02, F44.

## 1. Introduction

The other authors maintain that in order to get the positive result of implementing of competitive intelligence in the sector of railways a tentative assessment of the companies of aforesaid sector is necessary (Alfa, 2013). At the next stage it might be essential to organize several educational seminars or discussions with the aim of explaining the benefit and advantages given by competitive intelligence to the middle and top management of the sector of railways. Then those employees of the sector of railways, who are in doubt, could join and create successfully the effective methods of competitive intelligence aiming to achieve the goals they set. If the definite and clear goals and the tasks are named and presented to the management of the sector of railways it will help to use the methods of competitive intelligence successfully in future.

**The purpose of the article** is to select and assess the appropriate methods of competitive intelligence for the sector of railways.

**The methods of the research** are systematic comparative and structural analysis of academic literature, logical analysis, qualitative analysis.

## 2. The application of the methods of competitive intelligence in the sector of railways

Although most of the companies of the sector of railways do not have direct rivals the companies operating this type of transport service must compete actively with the companies working in the sector of motor roads and also with the companies of waterways and airways. It is noticeable that the companies of the sector of railways are quite often affected by political changes

in the country especially if they are supported by national funds. Besides, they might become an instrument of political games.

The other authors point out that it is necessary to remark that the companies of national capital successfully collaborate with the companies of private capital in the most countries of Western Europe and especially in Scandinavian countries. The achievements of Scandinavian countries in this field show that the mentioned model works successfully and could be used by other countries (New Entrants, 2008).

The other authors interpret competitive intelligence as an analysis of information about the rivals, the market, juridical acts and changes in them, state institutions, which decisions influence the company's work also as making conclusions and forecasting aiming at getting competitive advantage in the market (Galvin, 2007).

The competitive intelligence provides the owners and administration of the company with the following information:

- About the prices offered by the rivals, discounts given, the conditions of contracts and specification of products;
- Where and at what price the rival buys the goods, stock, services;
- What part of the market the rival takes that is to say what amount of clients one has;
- What plans the rival has;
- What reputation the rival has, what the partners, clients, suppliers think of the rival;
- What kind of publicity the rival uses, what way, at what price, what agents are engaged;
- What publicity campaign the rival is going to organize in the short run, whether it brings benefit;
- What policy on selling goods and services the rival uses;
- About the quality of production and effectiveness of manufacturing;
- About technologies and gears used;
- About the losses the rival had during the process of manufacturing;
- About the capacity and potentials of manufacturing;
- About logistics;
- What persons in the rival's company take the most important decisions;
- The personal characteristics of mentioned persons, their capabilities, contacts;
- What financial situation in the company is;
- What problems the company faces, the potentials it has ;
- What vulnerable spots in the work of the rival's company take place.

The competitive intelligence gets information from original as well as secondary sources. All they are important.

Original sources are the persons who know information about the work of the rivals. The employees working in the rivals company, clients, partners, suppliers might become such a source. Various company's documents such as accounts, reports, certificates, financial papers and others are considered to be original documents.

The sources which are not directly related to the rivals company are treated as secondary ones. They are, for example mass media, public accounts of the company, official statistics, researches of the market, various data, relatives or friends of the company's employees (Alfa, 2013).

The authors accentuated the spheres of the companies which are particularly interested in protecting of their information (Society of Competitive Intelligence Professionals, 1996) (Table 1).

**Table 1.** The companies which take the most care of their information security  
(Society of Competitive Intelligence Professionals, 1996)

The highest grade	The medium grade	The low grade
The air and its defence; the car industry; agriculture	Biomedicine	Chemical industry, building and realty
Electronics; petroleum and gas industry; food production	Financial service; express companies; industrial gear	Health care; wholesale; extraction of raw materials

The highest grade	The medium grade	The low grade
Information service	Pharmacy	Retail
Having realized properly.		
The air and its defence, car industry, agriculture	Biomedicine	Chemical industry, building and realty
Electronics, petroleum and gas industry, food production	Financial service, <b>express companies</b> , industrial gear	Health care, wholesale, extraction of raw materials
Information service	Pharmacy	Retail
Having realized properly		
The air and its defence, car industry, agriculture	Biomedicine	Chemical industry, building and realty

The presented above table shows that express companies (the companies of railways sector are among them) do not spare enough attention for its security when the companies of the sector of railways are considered to be the companies of strategic importance in the most countries.

Having practiced appropriately the measures, which have been reviewed in the report the business organization should get the following benefit (Miller, 2004):

- Saving of the company's finances;
- Increasing of the profit;
- Respectability;
- An assistance in the fight with rivals;
- Possibility of expanding the markets.

Intelligence services, which aim at getting information qualitatively and timely in order to make appropriate conclusions, often use divergent analysis. Divergent analysis is a constant method of hypothesizing, bringing forward ideas or attitudes, which requires analysts to be thoughtful, self-possessed and especially creative.

The process starts with written affirmation, defining of the problem or issue. An analyst makes the list of premises and decides how those premises could change his attitude towards the problem. Then the analyst make the list of the issues of available information collecting, if there is the information, which he wants to have before he starts to create ideas and hypotheses. Finally he reformulates the problem.

#### Two stages

**Cleaning:** before creating and assessing of hypotheses an intelligencer must get rid of bias which could impede the process of creative work. It is done by writing down sane ideas. Having written them at the very beginning of the process the blockage of the mind will be avoided later. However, these ideas are still valuable and will be used.

**Divergence:** afterwards an intelligencer tries three techniques of creating of hypotheses: academic, the logic of situations and using of comparison. He writes down the questions, which begin with „How...“, „Why not...“, „What if...“ and „I want...“, trying to create as many ideas and hypotheses as it possible. He also abstracts from assessing of the ideas with regard to their relevance and irrelevance or fineness and impracticability. The more he abandons himself to the unconscious the more better ideas can be possibly brought forward. Not less than 5 or 10 such ideas should be brought forward and categorically not less than 3 ones.

The process of selecting of useful hypotheses is considered to be uncompleted until the result of every hypothesis with conclusions and indications are found. Every hypothesis or premise is laid out with motivation why it must be taken or drawn out. Afterwards the result of every hypothesis is chosen according to the list of the conclusions or possible results, which could be got if this alternative was chosen. Finally, some indications, which will be observed if that result is really chosen, are named.

As well as in other sectors of business classification of information is relevant for the sector of railways. So, in our opinion, it seems to be purposefully to take into account the levels of classification of information recommended by other authors (Krizan, 1999).

Intelligence information can be classified according to (Krizan, 1999):

- Characteristics of quality;
- Levels of security;
- Stages of analysis of information;
- Stages of protecting of information from possible threats.

According to characteristics of quality the information can be divided into five groups. They are:

- Reliance;
- Attachment;
- Novelty;
- Particularity;
- Importance.

Besides, the information can also be divided into four levels of confidentiality. They are (The act on changing of the Act on Security of National Secrets, 1997):

- Limited use;
- Confidentially;
- Secretly;
- Absolutely secretly.

The last two levels are usually used in the spheres, towards which the state takes responsibility. They are the spheres, where the loss of information might shake national economical bases. The level of confidentiality connected with limited use can be used in any business structure according to the decisions taken by the leader or accredited persons. The level of confidentiality "Confidentially" is usually used in the system of banking in order to protect the information about clients and banking (Prescott, 2004). There are also special requirements for the rooms where the information of a certain level is saved. The higher level of confidentiality is the more serious requirements for its security take place.

In the communiqués of the Committee to the Council, European Parliament, European Economy and Social Needs Committee and Regional Committee (2001-2006) the security of networks and information is defined as „ a resistance of the network or information system to certain casual incidents or crimes, which menace to approachability, reliance, integrity and confidentiality of the data and related services, which the networks and systems collect and exchange“ (Homburg, 2012).

With reference to obtained experience, in our opinion, it seems to be purposefully to use in the sector of railways the following scheme of collecting and analyzing of information (Table 2):

**Table 2.** The scheme of collecting and analyzing of information in the sector of railways

The study	Competitive intelligence	
<b>The analysis</b>	Technological intelligence (technical expertise)	Business intelligence (business expertise)
<b>The organization</b>	Technical information	Business information
<b>The original information</b>	Technical data	Business information about the place

Three stages of collecting and analyzing of information in the sector of railways:

1. The analysis;
2. The organization;
3. The original information.

### **3. The stages of arrangement in the companies of the sector of railways**

The publishing company offer to introduce the system of six steps at the stage of business intelligence in the companies of the sector of railways (Mark, 1999). 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 (Homburg, 2012).

Anyway, the steps, which are presented by those authors, who offer to partition the requisition into four parts, are as follows (Homburg, 2012):

- The name of the employee who has requisitioned for getting information;
- The date of requisitioning;
- The department the employee having requisitioned works in;
- The description of the information, which is wished 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 authors advise, 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 (Valodkiene, 2011).

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 then 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 (Gaidelys, 2011).

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. (Berger, 1998).

The publishing company 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 (Berger, 1998).

In the article 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 (New Entrants, 2008).

Some authors think that in order to use the methods of competitive intelligence successfully the following elements are necessary (Panfeli, 1999):

- Constantly developing and at the same time stable structure of competitive intelligence;
- Devolution of coordination of the system;
- Sensitive IT systems operate as training systems;
- Relationships between strategic and tactical aspects;
- Feedback from the consumers - infiltration;
- Recommendations based on hypotheses;
- 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 (Meidute, 2012):

- 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 (Figure 1) 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. (Bartholomew, 2009).

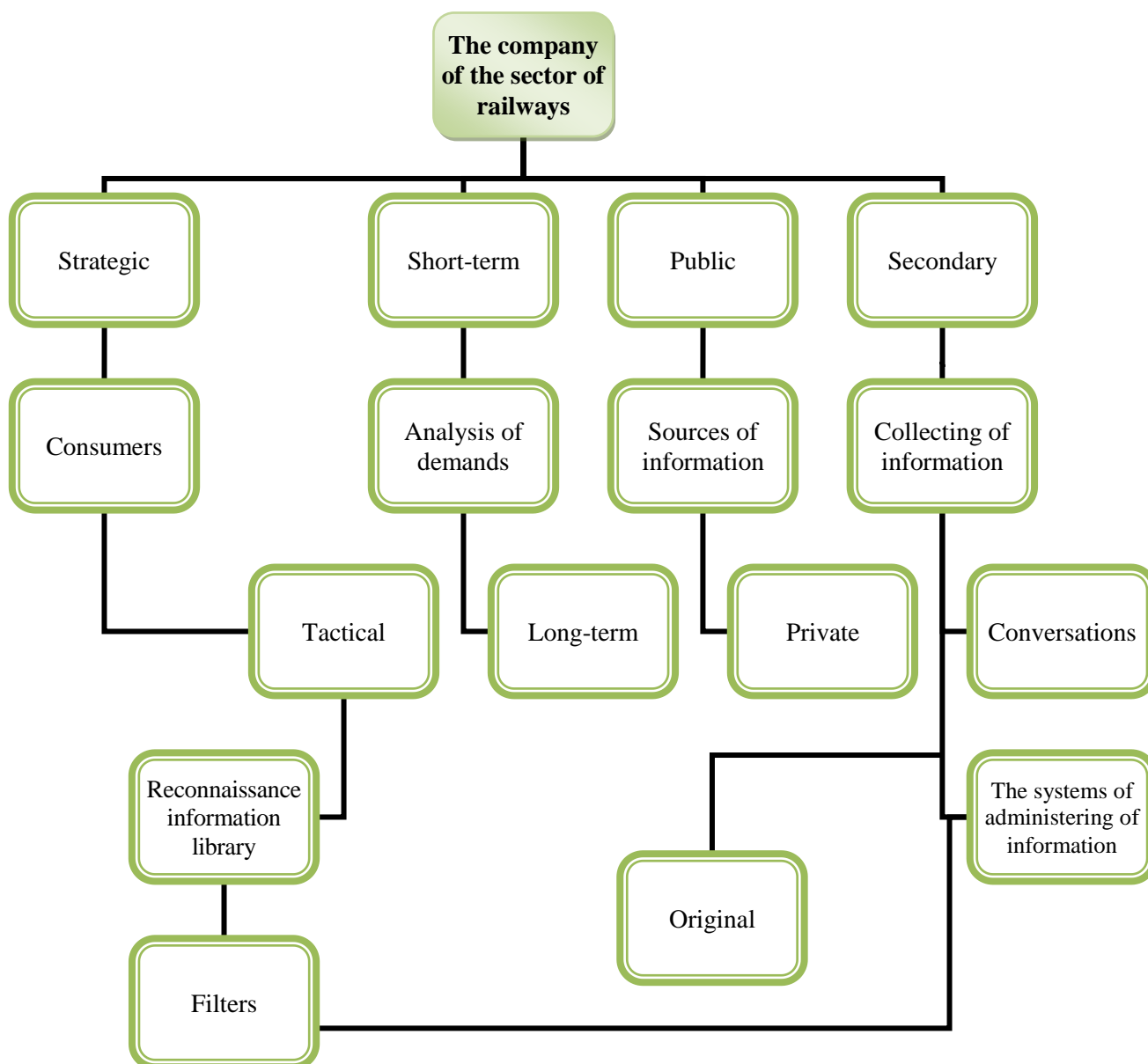


Figure 1. „A secretive“ model

#### 4. Discussion

The main problem is to select and assess the appropriate methods of competitive intelligence for the sector of railways. Those employees of the sector of railways, who are in doubt, could join and create successfully the effective methods of competitive intelligence aiming to achieve the

goals they set. If the definite and clear goals and the tasks are named and presented to the management of the sector of railways it will help to use the methods of competitive intelligence successfully in future.

Having performed the analysis the following results are got:

- While selecting the methods of competitive intelligence for the sector of railways a close collaboration between specialists of competitive intelligence and experts in the sector of railways is necessary.
- The methods of analysis of competitive intelligence are oriented towards gaining of a competitive advantage but not all of them are effective ones to be used for assessment of the companies in the sector of railways.
- Such primary factors as a right attitude of the top management of the sector of railways towards innovations, their initiative and consciousness help to take the first step towards successful use of the methods of competitive intelligence in the companies of aforesaid sector.
- The top management directing the companies of the sector of railways often finds it difficult to assess the peculiarities of use and practicing of the methods of competitive intelligence compared with traditional methods, which are used in business.
- In order to select properly the methods of competitive intelligence, which would be appropriate for the sector of railways the special experience and preparations are necessary.

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