INSTRUMENTS AND METHODS OF COMPETITIVE INTELLIGENCE

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Abstract

Most of specialists of competitive intelligence name collecting of important information which would help to make relevant decisions as a basis of the work of competitive intelligence. Although such methods of analysis as financial forecasting, analysis of budget, analysis of expenses, which are traditionally used in business, are very important to assess the activity of the companies they seem to be insufficient willing to assess the strategy of the rivals. Therefore originated facilities are not used completely or, on the contrary, in case the problems come unexpectedly the threats are not eliminated timely and the chance of reacting to the actions of the rivals on time is lost.

Keywords: competitive intelligence, methods and instruments of analysis.

JEL Classification: F23, F02, P21.

Introduction

Competitive intelligence professionals usually begin their work from the collection of information. Mobilization of available sources of information is required in achieving this. The more information competitive intelligence specialists collect and analyze the more likely to get a more accurate and detailed information about the objects in question. Often large corporations employ experts with different experience and using different work methodologies. Here arises a danger to obtain the conclusions based on different methodologies and often not based on any methodology, but simply based on personal experience of individual experts. In particular, it is apparent in analysis performed by former employees of special services. For example, data analysis methods used by competitive intelligence professionals who came from police services are generally very different from the methods of former employees of intelligence agencies. This is because such employees have very different experience and the methodology used is also very different (Sapkauskiene, Leitoniene, 2010).

It is often difficult to prove the representatives of the highest management the necessity to use the special methods of competitive intelligence and the subjects of business which are not usually familiar with advantages of using competitive intelligence expect to assess the actions and strategy of rivals using traditional means but do not get the result they wished and disappoint. Although it is necessary to remark that traditional analysis of business is not the methods used by competitive intelligence so it can not be effective enough. The specialists of competitive intelligence maintain that traditional methods fail to help react appropriately to unexpected aggressive tactics used by the rival. It happens because traditional methods do not assess the influence of external factors on successful work of a corporation. Such factors can be various: from personal contacts to contacts at political level and the actions followed (Banyte, Gudonaviciene, Grubys, 2011).

According to some authors specially mastered methods of competitive intelligence analysis enable to assess the external environment of the company or corporation properly and so to help make right strategic decisions. In order to use the methods of competitive intelligence analysis it is necessary not only collect and interpret indexes which are not quantitative and information about financial situation in corporation, sales and position in the market but also to get information about the actions of rivals, actions of monitoring institutions, technologies and other factors, which would help specialists of competitive intelligence to analyze and assess the collected information which is necessary for competitive intelligence analysis properly. The final result should be the answer to the question what is going around the business of a corporation and how it might influences the work of the corporation.

According to some authors former police service personnel often use the specific subject-oriented methodology and former intelligence personnel often use the process-oriented methodologies (Doronin, 2006).

Therefore, large business organizations are requires having a common methodology tailored to their specific needs, which helps their competitive intelligence professionals to collect and analyze information regardless of what their experience is and what methodology is applied.

According to some authors, open sources of information may be one of the most important source for competitive intelligence professionals, who work with large business organizations, because competitive intelligence professionals can collect up to 80 percent of intelligence information using them (2004, Miller).

Thus it is very important for competitive intelligence professionals to analyze publicly available information first. By this a lot of information about competitors, their strategies and actions planned can be collected.

The object of the research is the instruments and methods of competitive intelligence.

The aim of the article is to highlight and assess the instruments and methods of competitive intelligence.

The methods of the research are systemic comparative and structural analysis of academic economic literature, logical analysis, quantitative and qualitative analysis.

The logic of research process

According to some authors, basing on a system of methodological principles competitive intelligence professionals provides:

- The research topic and the subject of competitive intelligence;
- The research subject matter of competitive Intelligence and decision sequence;
- Competitive intelligence methodological approaches.

On this basis, two specific research levels can be distinguished:

- Empirical;
- Theoretical.

Empirical research level relates to the receipt and processing of initial actual data. It is usually divided into the actual operations and scientific facts.

Actual operation facts are the events that took place or take place at present time, and also a different sides or properties, relationship of tested objects.

Scientific evidence is facts presented to be examined in the analysis, understood and recorded in the form of logical disquisition (Gerasimov, 1982).

According to another author, the methodical origin of research is the main idea, which combines all the techniques of structural elements, and determines the organization of the procedure and its phases.

All method origins have their own logical sequence:

- Goals, objectives, research hypothesis;
- The criteria, specific development indicators of the phenomenon are directly related to the specific research methodologies;
- Sequence of methods used determined, experiment management procedures, registration procedures, variations and summation of experimental material.

According to other authors, prior to the selection of competitive intelligence research method the object to be studied must be taken into account (Guzavicius, 2005).

Research methodology is chosen depending on the goals and objectives set for competitive intelligence professionals.

The methods of analysis of publicly available information sources

According to some authors, while working with publicly available information, it is necessary to identify the aims and objectives of competitive intelligence and to find out the needs of the customer, i.e. what information consumer expects, and only then start selecting sources of information. It is very important to distinguish the information that helps solving specific problems among a total flow of publicly available information. This requires using goal-oriented information flows. That means not to collect all information from publicly available information means, but only that which can help achieve stated goals (Badd, 2000).

In order to achieve the goals it is necessary to distinguish the keywords that help selecting appropriate sources of information. For this purpose, authors argue, half hour is enough provided that competitive intelligence specialist is experienced and have the appropriate skills to work with such a methodology (Doronin, 2006).

The next step would be clustering of information collected, then classification, and then the final stage – preservation of selected information

According to another author's opinion, the data obtained from different sources of information duplicates each other, and this aggravates the work of competitive intelligence professional without producing desired results. Assumption is popular that the analysis of information flow of 7 million words must fit into a summary of 1-2 pages. Professionalism of the competitive intelligence professional is able to distinguish relevant information from the flow of information and to discern the ideas flowing from the context (Doronin, 2006). Although Doronin claims that publications can be distinguished as a basis to prepare basic reports, but there are concerns that all information sources could be in advance foreseen that might be interested for the information customer

According to other authors, there are two directions of practical use, they are (Gaidelys, 2011):

- Use of personal potential while dealing with the public media;
- Use of external options while dealing with the public media;

Use of personal potential while dealing with the public media. In this case responsible person every morning in the meeting, otherwise known as the "operational meeting", gives an overview or summary of public information to the heads. To each of the information the list of issues should be added to which competitive intelligence professionals should answer throughout the day, using other sources of information. All information provided at the meeting as well as raw sources of information of interest must be stored in electronic databases where desired information could be found using keywords.

Use of external options while dealing with the public media. It is sometimes cheaper to buy the original information from other sources including specialized companies. However, in this case we do not control the primary information source. There is a risk to overlook valuable business information; in this case continual collaboration with a particular company is more purposeful. However in this case there is information leakage risk, because the other company becomes aware of interests of business organization.

Other authors believe that the monitoring of primary sources of information can be successfully performed by librarians. Often they know several languages and have some experience in the collection and analysis of information. In practice often there are cases where specialists are selected and recruited to work on temporary contracts, in this case, they usually do not know what the purpose of collection and where this information will be used. (Sliton, 1998)

According to another author, according to the content public information media could be grouped into the following categories (see figure No. 1):
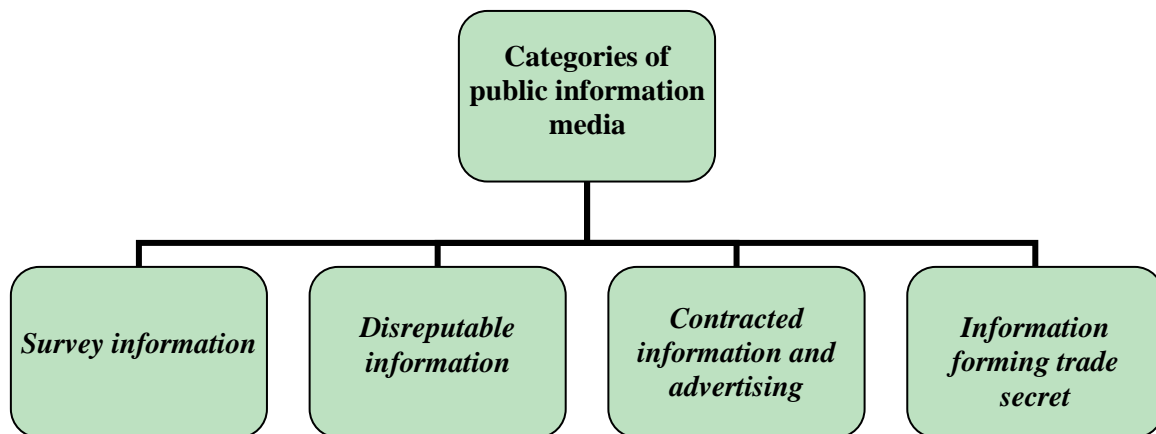
Figure 1. Categories of public information media (Chant; Zartarjan, 2003)

Another author divides methods of processing of public information into following categories:

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                    ┌─────────────────┐
                    │   Methods of    │
                    │  processing of  │
                    │public information│
                    └─────────────────┘
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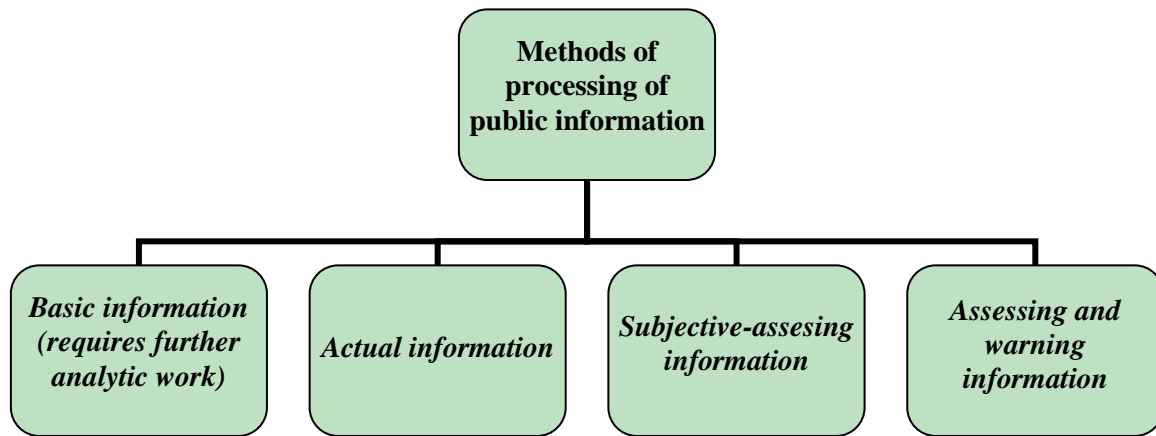
Figure 2. Methods of processing of public information (Doronin, 2006)

Other authors argue that public media contains errors so it is advisable to check the information received in multiple sources.

Ch. Chant, and V. Zartarjan conducted a study and found that only 4 percent of French journalists' examines economic and financial topics professionally, while this topic covers about 20 percent of whole press content (Chant, Zartarjan, 2003). It is equally important to capture not only mentioned facts, but to understand the author's personal standpoints. In this case, it is very important to know which financial-industrial business group owns certain public media. Public media often reflect the interests of their owners. It should be noted that there are more than one financial-industrial group in the market, whose interests often do not coincide, so keeping this in mind appropriate adjustments to the competitive intelligence analysis could be made (Gaidelys, 2011).

According to another author, foreign competitive intelligence professionals observed this allocation of business in Russia in 1999:

RAO „Gazprom" – newspapers „RT-Tribuna", „Trud"; magazines „Faktor", „Kompanija", „Neftegazovaja vertikal"; TV chanels „Prometei", „NTV".

„Lukoil" – newspaper „Izvestija", magazine „Neft Rosiji", TV chanel „REN-TV".

„Interros"-„Oneksim" – newspapers„Izvestija", „Komsomolskaja pravda", magazine „Ekspert".

Berezovski-Abramovich group – newspapers „Nezvisimaja gazeta", „Novyje izvestija", „Rosiskije vesti", magazines „Ogoniok", publishing house „Komersant", radiostation „Nashe radio", TV chanel „ORT", „TV-6" (Pappe, 1999).

The studies of foreign authors suggest that the primary information in both form and content can reflect interests of media owners and therefore that must be taken into account by competitive intelligence professionals and expressed in appropriate conclusions. Also it is necessary to check the authenticity in additional sources of information.

Methods of competitive intelligence

Other competitive intelligence professionals distinguish some of the methods which, they consider, are versatile and easily adaptable to the needs of business organizations. They argue that there is no absolutely universal method and competitive intelligence professionals should use various methods, depending on the nature of the tasks.

Alternative resources approach offers several explanations to explain the competitive intelligence issues. It is used when a competitive intelligence specialist receives conflicting or ambiguous data from different information sources and also if the information user requires to consider several possible scenarios in the long run (Galvin, 1997).

The opportunity analysis approach enables competitive intelligence analyst to imagine himself as the Head, who must make decisions and foresee business organization's potential actions. This method allows identifying and assessing potential risks faced by the business organization attempting to influence the competitive situation in response to the question "How should we act?" In this method the first step would be to reformulate the problem of competitive intelligence solutions into the language of decision-making manager (New Entrant, 1998). Further application of this method is dependent on the specific situation.

Counter-analysis approach aims to replace or abandon the initial assumptions about competitors and re-think the directions of analysis. This method is useful because it calls into question the clear information, so as to avoid the stereotypes and other consequences reducing the quality of the analysis. Such thinking is characteristic for bureaucratic institutions. This method makes a competitive intelligence specialist consecutively review of all the possible explanations and options of competitors' actions. Thus, this method helps a competitive intelligence specialist to avoid choosing options of limited consideration (Marso, 1998).

Divergence approach is characterized by a constant upraising of hypothesis, views or ideas, which requires that competitive intelligence professionals to be thoughtful, creative and self-contained. Using this methodology, a competitive intelligence specialist creates a list of assumptions and considers how these assumptions could change its approach to the problem. Later, he composes the list of questions for data collection and eventually redefines the problem. It should be noted that a prerequisite for assessing the hypothesis of a competitive intelligence professional is to avoid bias. The hypothesis must be recorded at the beginning then a competitive intelligence specialist may try three or more hypothesis-building techniques, i.e. the theory approach, situational logic approach and comparison approach. According to the author this methodology must answer the questions that begin with "How to ...", "Why not", "What if" and "I want", so attempting to create as many hypotheses and ideas as possible. The author states that the competitive intelligence professional must generate between 5 and 10 hypotheses and no less than 3, motivating by the fact that less than three hypotheses can rarely cover all the desired responses and a range of choices (Latgalica, 2008).

Factual analysis approach involves one or other event taking place outside of the business organization's environment and show trends, as well as features of competitors' actions. This method at some level is used by all analysts, though not always strictly observing the methodology. If used in accordance with the rigid system, the method can show important trends in business organization's competitive environment. Thus, this method may be an early warning tool, as it enables early detection of potential changes in the competitive environment. A simple chronology of actions of competitors, the analysis of the business organization's recent procurement, geographic data of competitor activity, etc. (Sauka, 2009).

Competing hypotheses analysis approach allows a comparison of findings and explanations about competitors' actions. This methodology provides competitive intelligence specialists with the opportunity to check the consistency of data collected by intelligence and identify possible inaccuracies in the final report. Subsequently, these data must be further analyzed. This is because human nature does not consistently check the consistency of intelligence data. In most cases, a competitive intelligence analyst selects one hypothesis that might confirm his opinion and explains the processes. This situation persists until a competitive intelligence analyst's choice of hypothesis is not denied. The shortcoming of this situation is that competitive intelligence analyst assessing the hypotheses one by one often misses the opportunity to compare and evaluate all data collected and the number of hypotheses simultaneously. In this way an opportunity emerges not only to select which hypothesis is better based on data collected, but at the same time information sources of raw data are checked (Prescott, 2004).

Thus, a competitive intelligence specialist should be able to choose an appropriate methodology that allows to perform the necessary analysis and to obtain objective results. The objectivity of the assessments and success depends directly on it (Gaidelys, 2010).

Methods of problem identification

According to other authors, a competitive intelligence specialist with large-scale or non-specific task can lead to a situation where the number of possible answers may not satisfy the information customer and can lead to inaccuracies and location. Here an experienced competitive intelligence professional have to be able to develop specific questions to help clarify the information needs of the customer.

In this case, the problems are grouped and each of them analyzed in several aspects. According to the authors, this method should help to identify and assess problems and to prepare them for further analysis (Kuznetsov, 2001)

Guiding questions requires only a single fact in the final result. According to the author, a competitive intelligence specialist work is to find the answer or know where to find it.

In *Time-not-Determined Problems* factors and solutions are known, or opportunities are known how to find them.

Possibly accidental problems foresee which of several possible outcomes are possible to occur to the maximum extent.

Table 1. Methods of competitive intelligence problem identification

Characteristics	Guiding questions	Time-not-determined problems	Possibly accidental problems	High probability of being accidental	Not determined
What question?	Information collection	Quantity	Evaluation of all results	Evaluation of results in conditions of uncertainty	Foresight of future actions
Facts	Confirmed	Partly confirmed	Weakly confirmed	Almost not confirmed	Not confirmed
Role of decision	Absolutely insignificant	Insignificant	Presumably insignificant	Significant	Very significant
Analytic task	Information finding	Method selection	Summation of results	Results description	Description of factors and perspectives
Analytic method	Source finding	Coordination of data and methods	Analysis of utility	Role performance	Modelling analysis
Competitive intelligence analysis tools	Coordination	Mathematic formula	Probability of utility, impact diagrams	Evaluation of various results	Expert evaluation
Competitive intelligence analysis conclusions	Facts	Comments and justification	Alternative results	Probable results	Preparation in perspective
Error probability	Low	Very low	Direct relation to credibility of initial data	Large error	The largest error
Continuation of competitive intelligence activity	Not foreseen	Not foreseen	Change observation	Repeated analysis	Thorough analysis

High probability of being accidental problems are characterized by the fact that the competitive intelligence specialist does not know and cannot identify all the possible choices and challenges

Not determined problems are characterized by the fact that the question and the data are incomplete and inaccurate; therefore the competitive intelligence professional must be satisfied with identifying the least possible opportunities and warning the customer (Kuznetsov, 2001).

Competitive intelligence techniques used depends directly on the expertise of competitive intelligence professional, and therefore according to dr. Vaidotas Urbelis it is easy to identify the nature of intelligence operating in Lithuania institutions – a State Security Department and the Second Investigation Department under the Ministry of Defence. It is natural that most of the potential of competitive intelligence professionals can come from these institutions (Urbelis, 2009).

Conclusions:

- The methods of competitive intelligence analysis are polarized towards the assessment of the rivals' companies but not towards the assessment of their strategy;
- Representatives of the highest management often do not see the difference between the methods and instruments used by competitive intelligence and traditional methods used by business;
- In order to use the methods of competitive intelligence it is necessary to get special experience and training.

The instruments competitive intelligence operates have a principle difference comparing with traditional instruments used for business analysis.

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