

The Opportunities of the Use of Competitive Intelligence in Business: Literature Review

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Abstract

The article is aimed at the revelation of the opportunities of competitive intelligence application in business using different ways and tools of information collection. The scientific literature identifies the following stages of CI interpreting it as a process: establishment of the need, evaluation of the need, need fulfilment plan, need funding, long-term plan making. However, companies not always search for the information about competitors' actions but they might want to seek to protect their information from competitors. Under the conditions of this reverse need, the following stages of CI can be defined: identification of possible threats, evaluation of the threats; assessment of threat level, selection of priorities, funding, and threat elimination. It has been established that the most popular CI information sources are as follows: company's own knowledge obtained while searching competitors' websites, participation in fairs and exhibitions. It shows that information is easily accessible, although it is not always reliable or verified. The model presented by the authors of the article enables to identify the main specificities of CI using in big and small - medium business sectors. The main differences between these two sectors include CI funding and access to secret competitors' information.

Key words: competitive intelligence, ways and tools of information collection in competitive intelligence, business enterprises, small and medium business.

1. Introduction

Relevance of the topic

The impact of small and medium business on economics of the country has been analysed in different aspects. Under the modern conditions of competition in the market, it is extremely important to foresee competitors' actions. To accomplish this, enterprises need to collect the information and convert it to the knowledge necessary for business establishment and development.

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At first, in order to enter, survive and develop in the market, enterprises have to gain the comparative advantage of their goods/products. According to Wright et al. (2009), “in order to create and maintain a market advantage, firms must monitor a vast array of elements about competitor activities, embracing all aspects of the business” (p. 941). One of the ways to gain a comparative advantage in the market is application of competitive intelligence (further in the text - CI) in business enterprises (Priporas et al., 2005; Rittenburg et al., 2007; Wright et al., 2009; Wright et al., 2012). CI enables collection of the information about competitors; it can also be useful seeking for a take-over, company merger, checking a current/potential partner, supplier or customer or aiming at collection of the detailed information about a competitor. Wright (2010) motivates business enterprises to use CI stating that it provides: “an objective view of the market place; a reduction in decision making time, minimising risk and avoiding surprises; identification of opportunities before the competition does; identification of early warning signals of competitor moves; time to consider counter moves; input to idea generation; challenges to, and/or verification of, assumptions; challenges to, and/or verification of, intuition; a proactive decision making attitude; support for prioritization of decisions; stimulation for pursuing improvement rather than mediocrity; a reduction in uncertainty” (p. 521).

It can be stated that application of CI in business seeking for a competitive advantage can become an important tool that provides a structured complex of data collection, analysis and conclusion making.

Scientific problem research level

Up to now, competitive intelligence has been researched in the following ways:

- ✓ studying and defining the concept of CI (Calof, Viviers, 2005; Brody, 2008; Jourdan et al., 2008; Saayman et al., 2008; Smith et al., 2010; Wright et al., 2009; Wright, 2010; Wright et al., 2012; Yap et al., 2013). In many cases, the concept of competitive intelligence is usually interpreted as competitor’s intelligence, business intelligence, intelligence *economique* or environment scanning. Most sources note that there is no universally accepted concept of competitive intelligence;
- ✓ analyzing tools and methodologies of CI in the SMEs sector (Bisson, 2010; Bose, 2008);
- ✓ identifying and classifying the attitude and behaviour of small and medium business in case CI is applied. For instance, researching competitive intelligence (Turkey), Wright et al. (2012) highlight attitude (attitude towards CI), gathering (intelligence gathering strategies), use (use of CI in the decision making process), location (location for intelligence gathering in the firm), IT systems (IT systems used by manage CI) and technology support (technology support used for CI);
- ✓ identifying the stages of the CI process (Wright et al., 2009; Calof, Viviers, 2005; Saayman et al., 2008; Priporas et al., 2005; Nasri, 2011; Bose, 2008; Gaidelys, 2009);
- ✓ analysing CI programmes for SMEs (Smith et al., 2010);
- ✓ studying CI problematic (Gaidelys, 2011).

With reference to the analysis of the scientific literature, **the scientific problem** can be formed: what are the opportunities to apply CI in business practice?

The aim of the research

Is to reveal the opportunities of competitive intelligence application in business using different ways and tools of information collection in competitive intelligence.

The following *objectives* have been raised to fulfil the aim of the research: 1) to identify the main stages of the process of CI; 2) to systematize the ways and tools used to collect the information about competitors in CI; 3) the create a framework that would reveal the opportunities to apply CI in business.

The methods of the research

Include comparative and structural analysis of the scientific literature, logical analysis, qualitative and quantitative analysis. The first section of this article reviews CI stages; further the methods and ways to collect information in CI have been systematized. With reference to the scientific literature, the framework that enables to envisage the opportunities of CI in small and medium business sectors has been presented.

2. Identification of the Stages of Competitive Intelligence Process

Some scientists agree that CI can appear as both a product and a process (Priporas et. al., 2005; Nasri, 2011; Bose, 2008). CI can be treated as a product when it provides the information about the competitors in the market. This information is used as the main tool choosing a business action strategy in the market. CI can also be treated as a process during which the information about products, competitors, customers, suppliers, partners is collected, analysed and planned. Scientific literature covers the following stages of CI treating it as a process (Nasri, 2011; Calof, Vievers, 2005):

- 1) **Planning and focus.** In the initial stage, it is necessary to define the problem or aim which will be solved/fulfilled with the help of CI. Company managers should know what information they need, by what term it should be collected and for what it will be used.
- 2) **Collection.** In this stage, all available ways and methods to collect the information from all possible and available sources are identified.
- 3) **Analysis.** In this stage, analysis of the information is carried out. It is not treated as the main stage of CI since the quality and reliability of the collected information can determine the course of further tactical and strategic decisions.
- 4) **Communication.** The final product is delivered to a customer/decision maker in the preferred form. The results of the research are often used as final conclusions for further analysis such as competitor profiling, scenario planning, scenario analysis and etc.
- 5) **Process/structure.** In this stage, particular decisions need to be made and particular procedures that are necessary for implementation of the decision need to be started. That is why company's employees can efficiently contribute to the system of CI and get benefits from its process.
- 6) **Organization awareness/culture.** Creation of appropriate atmosphere for CI as well as staff training in this field are extremely important steps in the process of CI in an enterprise.

The number of the stages of CI process introduced in the scientific literature can differ. Bose (2008) identifies only five stages of it: (1) planning and direction; (2) collection; (3) analysis; (4) dissemination and (5) feedback. Dissemination means the same as communication. The last stage – feedback – is aimed at evaluation of the CI data which is provided to company's managers. Salles (2006) reduces the process of CI to three stages which include intelligence stage or so-called stage of information collection aimed at problem identification and perception of problem structure, second, i.e. design stage aimed at the search of possible solutions, and the third - selection – stage aimed at making of the final decision to solve a particular problem. Gaidelys (2010) analyzed the need of big companies and corporations for CI and interpreted the CI process as follows: it is “working out new products and introducing them into the market; keeping up strategies, purchasing of new companies and mergers of business included; sales and supply to the market; human resources; marketing communications” (p. 1063).

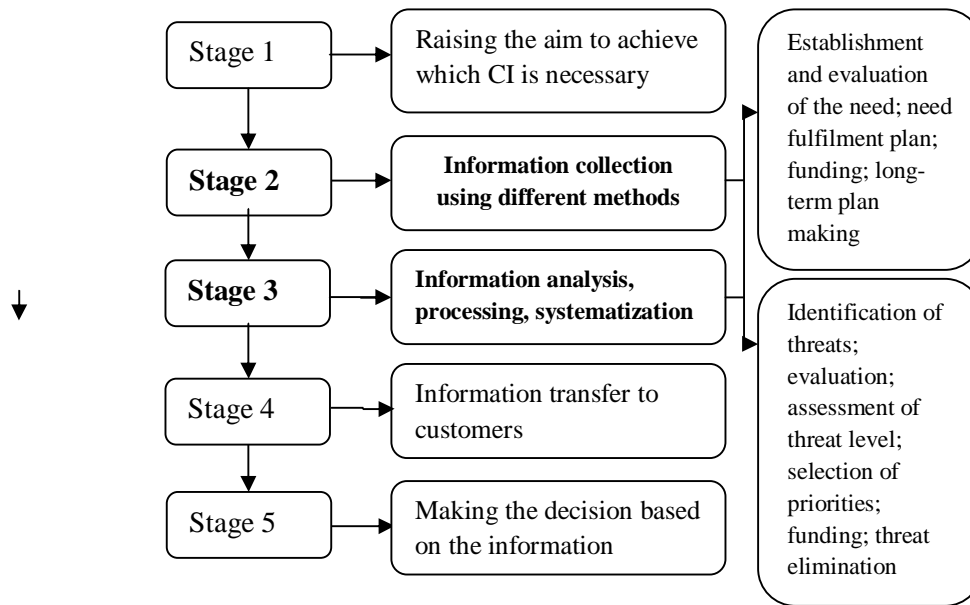


Fig. 1: CI process (source: prepared by the authors)

As it can be seen from Figure 1, the main stages in CI process are second and third. During his research, Gaidelys (2009) identified the following stages of information collection and analysis (see Fig. 1): establishment of the need (consultations while establishing the necessity of information protection and information volumes); evaluation of the need; need fulfilment plan; need funding; long-term plan making. It should be noted that companies not always search for the information about competitors' actions. In fact, the need can be reverse, i.e. companies might want to seek to protect their information from competitors. Under the conditions of this reverse need, i.e. information protection from competitors, the following stages can be defined (Gaidelys, 2009): identification of possible threats; evaluation of the threats; assessment of threat level; selection of priorities; funding, threat elimination.

Summarizing, it can be stated that a company which seeks to use CI services, at first should define the aims. Considering the aims, CI professionals apply particular methods and ways to collect necessary information, analyze the information and present conclusions to the customer. Finally, the customer makes a decision on the further business strategy.

3. The Methods to Collect Information in Competitive Intelligence

CI is the process that consists of different ways and methods to collect the information about competitors. The services of CI professionals are used when a company needs to obtain the geographical data, compare financial indicators, search for the information in press, revise new developing markets, review investment, collect the data about the biographies of highest-level managers, get the research and the results on reports on the research, carry out foreign business analysis, study economic indicators.

Mastering and developing these methods, an enterprise could achieve desired activity results. There are many methods that can be applied to collect, analyze and process the data. *The fundamental forms of analysis are: deduction, induction, pattern recognition, and trend analysis* (Bose, 2008). Induction method combines separate pieces of information in order to make general attitude or conclusions. Logical explanation enables to clarify why particular unrelated events go along.

“Deductive reasoning is the ability to apply general rules to specific problems to come up with a logical resolution. It involves deciding if the resolution makes sense.

Pattern recognition is the ability to identify or detect a known pattern (a figure, word, or object) that is hidden in other material” (Bose, 2008, p. 519).

During their research, Wright et al. (2012) found that the most popular information source is company’s own knowledge acquired searching in different competitors’ websites and participating in fairs or exhibitions after teaching the employees how they should behave in order to extract the desired information from their competitors without revealing company’s data to them. It shows that information is easily accessible, although it is not always reliable or verified. 60 per cent of the respondents involved in the research pointed that they get rather competitive information from their own employees. Researching the methods applied to collect the information about competitors in banking sector, Wright (2010) divided them into *analytical* (various mechanisms; spreadsheets and filtering databases; PEST and SWOT; team working and brainstorming; valuation techniques; financial ratios; statistical programmes) and *dissemination and sharing* (briefings and face-to-face meetings, e-mails, intranet, written reports, daily flash, newsletter, as per request, conference). Studying CI dissemination and sharing methods, it should be noted that, according to the data of the research carried out by Wright (2010), the most efficient way to get information is face-to-face communication with relevant people. Electronic method is fastest in the sense of information transmission, but it is questionable considering information feedback. What concerns absence of a dialogue in print mode method, it is considered to be the least efficient since it takes time costs for preparation.

Further in the article, the methods of performing competition analysis (information collection) applied in different countries are systematized (see Table 1).

**Table 1: The methods and tools of performing competition analysis applied in practice
(source: prepared by the authors)**

Author, year,	Methods and tools of performing competition analysis
Wright et. al., 2012 (Turkey)	Searching the websites about competitors. Websites and Google are the most widely used tools. Specific software designed for the analysis of statistical information as well as Espacenet patent database appear as less used tools. Participation in fairs/exhibitions seeking to acquire the knowledge which is not publically announced.
Priporas et. al., 2005 (Greece)	Market research (86 per cent); competitors’ profile (96 per cent); SWOT analysis (66 per cent); information collection on competitors’ technology (82 per cent); financial analysis (46 per cent); information collection on competitors’ employees (34 per cent); CI department operation (4 per cent).
Nasri, 2011 (Tunisia)	SWOT analysis; BCG (Boston Consulting Group) matrix, Porte’s Five Forces.
Bose, 2008	Modified SWOT framework
Fleischer and Bensoussan, 2003	Industry analysis (Porter’s Five Forces Model), strategic group analysis, SWOT analysis, financial ratios, and value chain analysis.
Wright, 2010 (UK, Banking industry)	Various mechanisms (43 per cent); spreadsheets and filtering databases (30 per cent); PEST and SWOT (22 per cent); team working and brainstorming (13 per cent); valuation techniques (9 per cent); financial ratios (4 per cent); statistical programs (4 per cent).
Vedder et. al., 1998 (IT sector)	Special information exchanges programs, involving regular site visits and discussion of the full range of upstream computing activities; websites

*percentage shows the frequency of the use of the method.

There are many theoretical methods of competitiveness evaluation that are occasionally mentioned in scientific studies. However, it does not mean that they are not applied in practice. For instance, TOWS method which evaluates a firm's threats (T) and opportunities (O) in relationship to its weaknesses (W) and strengths (S) with the objective of initiating strategic change to enhance the firm's competitive position; also, such information source as "Head Heating", when highest-level managers are enticed from famous companies in order to obtain secret information and competition strategies.

Summarizing, it can be concluded that companies can stay competitive only when they flexibly react to market changes and are able to obtain important information at the right moment applying not one but several CI methods.

4. The framework of the opportunities to apply competitive intelligence in business

The analysis of the scientific literature has revealed that very few companies, especially the ones operating in small and medium business sectors, have established a department of CI in their organisation. Establishment of such department is related to high costs and problems while organising activities inside the department or in other cases when CI services are bought from outside. At the same time, big companies (for example, „Procter & Gamble“; Shell and so forth), seeking to gain a competitive advantage in oligopolistic markets, often use the services of CI professionals

Figure 2 illustrates the model which reflects the main specificities seeking to use CI in small and medium business sectors.

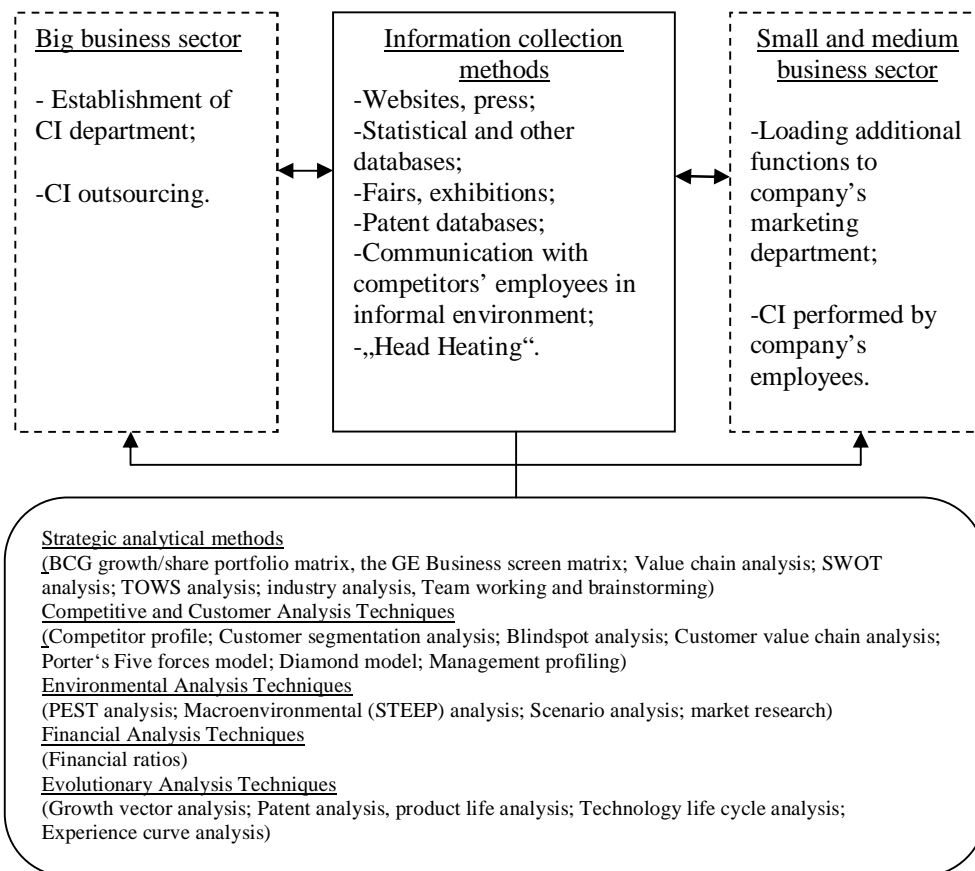


Fig 2. The framework of the opportunities to apply competitive intelligence in business

(Source: prepared by the authors)

Interpretation of the model. CI can be applied by both big and small companies. The main differences between these two sectors include CI funding and access to secret competitors' information. Similar methods and ways to collect information about competitors can be applied in both sectors, although data quality, interpretation and a final result can significantly differ. One of the main roles in CI is played by high-skilled and experienced human resources. Therefore, big companies using CI services from outside or establishing their own CI department usually get more opportunities to obtain important information in comparison to small and medium business sector while the companies operating in small and medium business sector are forced to research the market and the aspects related to CI by themselves, so they face such difficulties as information accessibility and reliability.

Conclusions

Summarizing the results of the research, the following conclusions can be made:

1. CI can be treated as a process during which the information about goods, competitors, customers, suppliers, partners is collected, analysed and planned. The scientific literature identifies the following stages of CI interpreting it as a process: establishment of the need (consultations while establishing the need and volumes of information protection); evaluation of the need; need fulfilment plan; need funding; long-term plan making.
2. Companies not always search for the information about competitors' actions but they might want to seek to protect their information from competitors. Under the conditions of this reverse need, the following stages of CI can be defined: identification of possible threats; evaluation of the threats; assessment of threat level; selection of priorities; funding, threat elimination.
3. Companies can stay competitive only when they flexibly react to market changes and are able to obtain important information at the right moment applying not one but several CI methods.
4. It has been established that the most popular CI information sources are as follows: company's own knowledge obtained while searching competitors' websites, participation in fairs and exhibitions after providing the employees with appropriate training that enables to extract the desired information from competitors without revealing company's data. It shows that information is easily accessible, although it is not always reliable or verified.
5. The model presented by the authors of the article enables to identify the main specificities of CI using in big and small - medium business sectors. The main differences between these two sectors include CI funding and access to secret competitors' information.
6. Due to CI services obtained from outside or operation of an internal CI department, big businesses usually get more opportunities to obtain important information while small and medium business companies are forced to research the market by themselves which causes such problems as information accessibility and reliability.

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