# COMPETITIVE INTELLIGENCE AND COMPETITIVE ABILITIES OF ENTERPRISES

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#### Abstract:

This contribution deals with a method used for increasing competitive abilities of enterprises. It is called competitive intelligence and is used in western countries for quite a long time. Competitive intelligence (CI) is based on acquisition of open information sources, their analysis and using its conclusions to planning and to support decision making. A big emphasize is on mining public information sources which have to be collected only by legal ways. Finally, contribution points out to problems connected with CI implementation. Reasons leading to unsuccessful practising this method could be inappropriate specification of information needs, reluctance to communicate information and inefficient information flows.

Key words: competitive intelligence, CI cycle, competition, competitive ability, information sources

### 1. Introduction

In the age of fundamental and accelerated changes characterized by globalization, turbulence and complexity are companies forced to face increasing number of competitors entering new markets. Boundaries that once separated competitors are evaporating and the companies don't hesitate to cross industrial or geographic borders [5]. Many firms are finding that the only way to grow is by taking market share from the competition. Pressures from competitors, changing customer needs, and the macroeconomy continuously confront businesses, requiring them to constantly evaluate and change their strategic goals [4]. Competitive intelligence is a key subarea of knowledge management, which could lead these companies to successful acquisition of relevant information and transform them into strategic knowledge.

## 2. What Is CI

Competitive intelligence (CI), as formally defined by the Society of Competitive Intelligence Professionals (SCIP), is a systematic and ethical process for gathering and analyzing information about the competition's activities and general business trends to further business 'own goals.

Many people have the misconception that information equates to intelligence. Information in its purest form is raw data that is free of context and

meaning. However, the definition of competitive intelligence implies that information becomes competitive intelligence once it is analyzed and provides implications for strategic planning and decision-making. To many executives, competitive intelligence seems to be nothing more than what marketing or market research departments have been doing for years [9].

According to Hoffman [6] CI has two meanings: it's both a process and a product. The process is the methodical acquisition, analysis, and evaluation of information about competitors, both known and potential. The product is useful information information that enables managers to make informed decisions about everything from marketing and R&D to long-term business strategies. Good CI doesn't just provide data; it suggests a course of action or warns of a potential problem.

The expression "Competitive Intelligence" is not the only one and it is not accepted automatically into other languages [12]:

- instead of using "Competitive Intelligence" it is often used "Business Intelligence" (BI) in the USA, but Business Intelligence in a larger sense involves also Knowledge Management (KM);
- the French use only "Intelligence Economique".

Barson [1] says it concisely: competitive intelligence at work is having your finger on the

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pulse of the marketplace and knowing what your competitors are doing so you can prepare a counter-move.

## 3. Cl and its Variations

It was and sometimes still is variously called competitive intelligence, business intelligence, corporate intelligence, competitive information, commercial intelligence, etc. Most practitioners have settled on one term: competitive intelligence.

Under whatever name, CI consists of two overall facets. First is the use of public sources to develop data on competition, competitors, and the market environment. Second is the transformation, by analysis, of those data into information.

Today, however, there are at least four separate types of intelligence which are all related to CI and which we view as subsets (subarea) of CI. They are strategic intelligence, competitor intelligence, technical intelligence, and market intelligence [8].

## 3.1 Strategic Intelligence

Strategic intelligence is competitive intelligence provided in support of strategic, as distinguished from tactical, decision making. This means providing the highest levels of management information on the competitive, economic, and political environment in which companies operate now and in which they will operate in the future.

Strategic intelligence typically supports those in senior management, that is, those who make and then execute overall strategy. Its most common applications are in the development of the following:

- · Strategic (3-5 year) plans;
- Capital investment plans;
- · Political risk assessment;
- Merger and acquisition, joint venture, and corporate alliance policies and plans;
- Long-term research and development (R&D) planning.

Strategic intelligence usually focuses on the overall strategic environment. To develop the appropriate strategic intelligence, analysts must focus on many critical factors, such as technology trends, regulatory developments, and even political risks.

The time horizon of interest typically runs from two years in the past to five to ten years in the future. The major focus of strategic intelligence is on the future. Its goal is to give a company a view of its total environment - competitive, regulatory, and political.

## 3.2 Competitor Intelligence

Competitor intelligence is the use of public sources to locate and develop data that are then transformed into information about competitors, their capabilities, current activities, plans, and intentions.

Competitor intelligence is most often found providing assistance to strategic planning operations or to the operating managers within strategic business units.

Competitor intelligence usually helps answer a wide variety of key business questions, including ones such as these:

- Who are our competitors right now? Who are our potential competitors?
- How do our competitors see themselves?
   How do they see us? Are they right?
- What are the short-term and long-term trends in our industry? How have our competitors responded to them in the past: How are they likely to respond to them in the future?
- What patents or technology have our competitors or potential competitors recently obtained? What do those innovations mean to us?
- How and where are our competitors marketing their products and services? What is their rate of success? What new directions will they probably take?
- What markets or geographic areas will (or will not) be tapped by our competitors in the future?
- Can our market and geographic sectors respond to changes in pricing, delivery terms, or warranties? Will they?
- What are our competitors' overall plans and goals for the next two to five years in the companies where currently compete with us? What are their plans and goals for their other companies and how will those affect the way they run competing companies?

Competitor intelligence's time horizon typically runs from six to twelve months in the past to one year in the future.

## 3.3 Market Intelligence

Market intelligence is intelligence developed on the very current activities in the marketplace. In a real sense, market intelligence is a child of the computer age's support for the detailed analysis of retail consumer goods sales.

It could help:

- Find out that a product promotion is less successful than anticipated, and immediately respond to change a promotion that is not working or to intensity one that is working.
- Determine what other promotions competitors are running against yours - and where - and respond appropriately.
- "Test" product linkages by seeing if customers buying your products also buy another one very frequently and cross-promote your products.
- Who and what does market intelligence serve?

The primary customers of market intelligence are usually marketing departments and the sales force. To a lesser degree, market intelligence serves market planning by providing retrospective data on the success and failure of our own sales efforts.

Market intelligence's focus on sales, pricing, payment and financing terms, promotions being offered, and their effectiveness. In some companies, that may be further limited to what is happening with your own product or service.

Market intelligence's time horizon typically runs from three to six months past to no more than six months in the future. Most of the time, however, the horizon is actually measured in terms of weeks rather than months.

## 3.4 Technical Intelligence

Technical intelligence activities are those, which permit a firm to respond to threats from and to identify and exploit opportunities resulting from technical and scientific change. Technical intelligence, variously referred to as TI or as CTI (competitive technical intelligence) has become a growth area within CI.

CI itself has always had a particular relevance and linkage to research and development activities. Using CI techniques in areas of technology and research, those practicing technical intelligence now can determine the following:

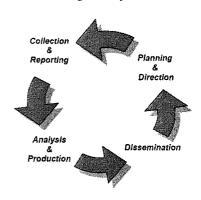
- Current manufacturing methods and processes in use.
- Key patents and proprietary technology being used by or being acquired by competitors.
- A competitor's access to, use of, and dependence on outside technology, as well as its need for new technology.
- The size and capabilities of competitors' research staff.
- Types and levels of research and development being conducted by competitors, as well as estimates of current and future expenditures for research and development.
- · What does technical intelligence focus on?

Technical intelligence's practitioners see it as having a slight overlap with both competitor and market intelligence, particularly with respect to its interest in suppliers and customers. However, instead of dealing with market trends, TI is usually primarily focused on technology trends and scientific breakthroughs. Technical intelligence practitioners have argued that technical intelligence, in fact, should focus more on opportunities for the firm than it should on threats to the firm. Technical intelligence's time horizon typically runs from twelve months in the past to five or more years in the future.

## 4. The Process of CI

The CI process is usually divided into five basic phases, each linked to the others by a feedback loop. These phases, making up the CI cycle, are as follows (Fig.1) [7,8].

Fig. 1: CI cycle



## 4.1 Establishing CI Needs, Planning

This means that company has to recognize the need for CI and define what CI is needed. It also means considering what type of issue (strategic, tactical, marketing, etc.) is motivating the project, what questions need to be answered with the CI, who else may be using the CI, and how and by whom the CI will ultimately be used.

## 4.2 Collecting the Raw Data

First, needs are translated into an action plan. This involves identifying the questions and the likely sources for collecting the data needed to answer those questions. Company may have to decide who should be collecting the raw data, which will be turned, into intelligence through the CI process. This can be one or more of the following: the end-user, internal CI professional, other employees, or an external CI firm. Company should have a realistic understanding about timing, financial, organizational, informational, and legal restrictions. Then the data sources that are most likely to produce reliable, useful data are identified and acquisition begins.

## 4.3 Evaluating and Analyzing Raw Data

In this phase, the data company collected are evaluated and analyzed and thus transformed into CI. This might involve comparing the data found with data from other sources, integrating conclusions from the data with other CI, or measuring the results of company's CI against predetermined benchmarks.

# 4.4 Communicating the Finished Intelligence

Preparing - sometimes with reformatting - the results and then presenting them in a usable "container" and in a timely manner. The CI may have to be distributed to those who asked for it and, in some cases, to others who might profit from having it. In some cases, the CI is simply made available to potential users. In any case, the final forms of the CI, as well as its security, are both important considerations.

In some literature we can find one another phase of CI - taking action.

## 4.5 Taking Action

Using the CI in decision making. CI may be used as an input to decision making or it may be the first of several steps in an overall assessment of, for example, a new market.

There is an additional factor, which runs through and directly links all of the phases of Cl. That is the need to continually monitor what you have done and how you have done it. The goal is to provide feedback to the other three phases of the Cl process and thus to improve the product of an individual assignment, as well as the entire Cl process as you are using it. Feedback to and from each phase is essential.

## 5. Information Sources for CI

About 90 percent of all information that a company needs to make key decisions and understand its market and competitors is already public or can be systematically, legally, and ethically developed from public data. But what can we mean by public? Public in CI is not equivalent to published; it is a significantly broader concept. Public, in CI, means all information you can legally and ethically identify, locate, and then access.

CI professionals have to be very careful to avoid crossing either legal or ethical boundaries when collecting data for any intelligence program. In spite of the print media's frequent failure to see or to communicate this, there is a distinct and critical difference between competitive intelligence and industrial espionage. Industrial espionage involves violating criminal or civil law to collect data. In some instances, a grey area exists between industrial espionage and legitimate intelligence collection efforts; in these instances, you may face taking actions that are not illegal but that still violate a company's policy or ethical standards.

The use of the terms black, grey, and white can be useful in understanding where Cl fits in the gathering of data. By black, we are referring to data acquired by illegal, that is, criminal means. Grey is that acquired by improper, but not criminal, ways. And white refers to data acquired by legal, proper means. (See Tab. 1.)

Information sources generally can be divided into two basic forms that are:

Tab. 1: Resources Utilization to Inform	nation Acquisition
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·		Public Available Sources	Methods Available to Companies	Illegal Methods
Informa	confidential) tion Sources Information 5%	PROHIBITED	PROHIBITED	ESPIONAGE
Open (pub- lic) Informa- tion Sources 95 %	Grey Information (available)	CI	CI	DANGEROUS FOOLISHMENT
	White Information (published)	CI	EXPENSIVE FOO- LISHMENT	DANGEROUS FOOLISHMENT

Source: [2]

- Unpublished sources: they could be gathered by special methods
- Published sources: they could be found in variety of sources - printed or in a electronic form - annual reports, articles from economic press, statistics, patents, professional magazines, conference papers and others

#### **Published Sources**

Traditionally, CI relied upon published company reports and other kinds of printed information. In recent years, Internet has rapidly become an extremely good source of information about the competitive environment of companies and has been reported by a Futures Group survey in 1997 to be one of the top five sources for CI professionals [3]. It is important to note that the Internet is quite different from traditional computer applications in that the Internet is inter-organizational and supports multiple business functions, from human communications to business transactions. By using Internet, a company can monitor (manually or by using intelligent agents) the presence, posture, products, and prices of other players in its industry. It can track the views of customers and seek out new ideas and expertise internationally. It can also draw upon files and databases from government agencies, foundations, universities, and research centres to broaden its thinking and help it be aware of the needs of the marketplace [11].

Internet provides these on-line sources [10]:

- Financial and credit information,
- Catalogues, company's indexes,

- Exchange reports,
- · Press releases and other intelligence,
- Reports describing markets, industrial branches,
- · Product information,
- · Intellectual property,
- · Juridical and legislative information,
- · Demographic information etc.

### **Grey Sources**

As noted above there exist also grey sources or "grey literature". These publications are not currently available, they are published on a small scale and it is difficult to get them. Typical grey sources are:

- · Research reports,
- · Technical reports,
- · Special analyses.
- Dissertations etc.

There is one special grey literature database in Europe. It is called SIGLE (System for Information on Grey Literature in Europe) and it provides lots of information coming from European information centres in several countries.

A plenty of these information contains Internet.

#### Databases

There are two basic types of online databases: bibliographic and fulltext. Bibliographic databases were the earliest of the commercial online databases available to the public. As the name indicates, they were basically lists of books and

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magazine articles, which were organized by title, author, and a subject.

Fulltext database offers immediate access to a complete article in which we may be interested, instead of just an abstract and a citation.

## 6. Problems with CI Implementa-

Implementation of the CI has lots of various aspects it is a multidisciplinary problem. To solve it we need the knowledge in these areas [2]:

- Management: the ability to coordinate all the participants in the process;
- Field of company's activity: the ability to determine company's information needs;
- Psychology: the ability to motivate, persuade and communicate with the people at different levels;
- Legislative: the ability to define the rules of the information gathering and exploitation (deontology);
- Information technologies: the ability to apply IT to support an effective information processing.

How well are CI professionals and units really doing? Actually according surveys, not very well. Survey after survey seems to indicate that, in spite of great strides, CI functions still face barriers. Over a decade of experience clearly indicates that the optimal distribution of effort (whether measured in terms of time, dollars, or some combination) among these four stages is approximately as follows [8]:

- Planning 20% of the time,
- · Data collection 30%.
- Data analysis 40%,
- Presentation and dissemination 10 %.

# 7. SCIP - Society of Competitive Intelligence Professionals

The Society of Competitive Intelligence Professionals is a global nonprofit membership organization for everyone involved in creating and managing business knowledge. Their mission is to enhance the skills of knowledge professionals in order to help their companies achieve and maintain a competitive advantage.

Established in 1986, today SCIP has over 50 chapters around the world, with individual members in more than 50 nations. In addition, SCIP has alliance partnerships with independent affiliate organizations in many countries.

More information about this society and its activities you can find on the web pages: www.scip.org. Of course there are lots of subjects interested in the CI - various marketing societies and associations, information-librarian societies etc. See the pages e.g.

- http://www.fuld.com
- http://www.cipher-sys.com/
- · http://www.academyci.com
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#### SHRNUTÍ

## KONKURENČNÍ ZPRAVODAJSTVÍ A KONKURENCESCHOPNOST PODNIKŮ

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Příspěvek se zabývá aktuální problematikou zajištění konkurenceschopnosti podniků. Je zde nastíněna metoda, která našla již hojné zastoupení v západních zemích, praktikována je také v evropských zemích a Japonsku. Pro tuto metodu, která v angličtině nese název "competitive intelligence" (akronym CI), se v naší zemi vžil pojem konkurenční zpravodajství. Podstatou metody je vytěžování veřejných informačních zdrojů za účelem získání informací o konkurenci. Konkurenční zpravodajství realizuje své výstupy také v oblasti strategického řízení, kde má vysokou přidanou hodnotu.

Doposud vznikly postupným vývojem 4 separované typy zpravodajství, které s CI souvisejí a lze je považovat za podmnožinu konkurenčního zpravodajství. Jsou to strategické zpravodajství, zpravodajství o konkurentech, technické zpravodajství a tržní zpravodajství. V rámci těchto typů zpravodajství probíhá tzv. zpravodajský cyklus, jenž flexibilně reaguje na informační potřeby podniku. Je tvořen čtyřmi fázemi: plánováním - identifikací informačních potřeb v návaznosti na formulaci zadání, sběrem informací a jejich verifikací, analýzou a distribucí spojenou s praktickou aplikací výsledků zpravodajství do podnikových procesů.

V rámci příspěvku je kladen důraz zejména na vyhledávání informačních zdrojů, které jsou pro potřeby této metody zásadně legální. Zhruba 80% informací pro potřeby zpravodajství je veřejně dosažitelných, a to buď v tištěné nebo elektronické formě. Ovšem častá zaměňování s průmyslovou špionáží vedlo informační profesionály k založení spolků hlásajících společnou etiku vyhledávání informací a dodržování pravidel, jimiž se podrobněji zabývá deontologie.

V závěru jsou zmíněny problémy, které doprovázejí podniky při zavádění CI - nevhodná specifikace informačních potřeb, neochota zaměstnanců sdílet informace, neefektivní informační toky v podniku a špatná komunikovatelnost informací.

Kličová slova: konkurenční zpravodajství, zpravodajský cyklus, konkurence, konkurenceschopnost, informační zdroje