

Recent events in Competitive Intelligence

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Abstract

In a context of progress and development in a common area and environment, the elements that participate in the dynamic interaction of this environment (individuals, groups or associations, organizations, companies, societies, etc.) correlate unfailingly in terms of competition. The survival and vital expansion of these actors depends in good part on the skilful treatment that they do with information about the factors that influence their relationship with the environment: information on resources, trends, risks, advantages, etc. Ultimately, the global process of every activity converges fundamentally on the urgency of a strategy.

1. Concept: The intelligence of the criteria of progress

The criteria of evolutionary progress "increasing the capacity to acquire and process information about the environment" (Ayala, 1974), is taken into consideration as it contributes to the evolutionary success of organizations¹. This increase "is not a general feature of the evolution of life," while we are exposed to specific requirements, the need to experiment, to fail, etc, it constitutes "an acceptable criterion of progress (Dobzhansky, 1983).

The following deductions have been made:

- a) Intelligence is defined as "power or ability (...) to understand the world of relationships and awareness, in order to resolve new situations or to learn how to do something";² therefore, intelligence is the main criteria for progress.
- b) Currently, we have technologies available to increase the capacity to collect and process information analytically. Progress, through the need to systematically structure the processes of intelligent information processing that is removed from reality as a global environment for domain.
- c) Organisations, such as elements or structured sets of reality based on an internal functionality and targets aim their activities within the framework of a strategy³, which, scientific, practical and organisational discipline that objectively integrate the systematic process of information for strategic use, is an intelligence⁴ briefing in competition. With these terms to define intelligence, a practice that will become the indispensable support for the key to progress of the organizations in which, theorized in discipline, we devote the present investigation.

Intelligence is defined as the systematic treatment of information geared to the advancement of organizations. Integrates three key dimensions as procedural:

system - information - strategy

which are in their relationship status to raise an organizational mode of intelligence

Table 1: Defining the elements of intelligence

¹ We adapt the reference to 'bodies' of organisations. The orientation of our thesis is based on this.). Dobzhansky states: "This capability is useful in organisms, it is understood as a criterion of progress, as it gives birth to some of the characteristics of the evolution of life"

² Great dictionarie of Catalan <http://www.grec.net/cgi-bin/lexicx.pgm>) Bcn: Catalan Encyclopedia ,1999. From now on: Gdlc.

³ The strategy defined as: " the art of coordinating actions and manoeuvres to achieve a purpose" (Ddlc), incorporates all skills, the art, which directs the activity of any organism, and is applicable to any element or organisation.

⁴ Intelligence is defined as: "power or ability (...) to understand the world of relationships and awareness, in order to resolve new situations or to learn how to do something " (Gdlc).Based on what has been explained, if you attach the reference to competition, we do nothing more than place it in the evolutionary line that drives progress.

2. The origin of competitive intelligence

Human intelligence as organisational practice has always existed and has been more or less conscious and intense since the industrial revolution. The need for continuity and success of the organizational activity has been traditionally associated with the need to develop an attitude and / or monitoring⁵, primarily of businesses and governments. This has resulted in different areas of worth: (1) Marketing surveillance, (2) Competition surveillance (3) Technology surveillance.⁶

However, it would be wrong to link the emergence of the IC solely to the interest aroused by any of these three types of surveillance. A more thorough analysis requires us to consider each of the patrols now integrated to IC's origin as long, medium and short term factors. It also sheds light on the latest progress of the IC, through practice, through discipline and the existence of key events, useful to achieve success.

These are key events in the calendar of the last two decades, though we can go back to the 60's to find the most distant background:

- 1960: The beginning of the spread of mass production.
- 1967: First approximation of background to the concepts of environmental monitoring and Organizational Intelligence: Aguilar published: *Scanning the business environment* and Wilensky *Organizational intelligence: Knowledge and policy in government and industry*.
- 1980: Porter published *Competitive Strategy: Techniques for Analyzing Industries and Competitors*".
- 1986: Foundation of SCIP: *Society of Competitor Intelligence Professionals* subsequently renamed: *Society of Competitive Intelligence Professionals*.
- End of the 80's: development of disciplinary VT techniques according to Maspons (2002)
- 1990: Change of marketing model according to Cartier (1999): new economy - TIC.
- 1994: Year from which there is a rapid growing interest in the field of bibliometrics studies of IC according to Walker (1994 b).

There are three groups of dates that determine a before and after in the evolution of the IC. These groups can be ordered according to the dates correspond to the registration of changes in:

- Economic environment [1960-1990]: changes in systems of production
- The scientific environment [1967-1980-1994]: early history - Porter's competitive strategy - bibliographic production outbreak date

⁵ surveillance, from the latin *vigilare* ["to watch] is defined as: "to be attentive to what someone or something can do, or what might happen or has to happen, especially to avoid danger(...)" (Gdlc)

⁶ Henceforth VM, VC and VT respectively

- Business environment: [1986 y end of the 80's]: The foundation of SCIP by a group of business men. Also it was this period that began registering the techniques of developing VT in business.

It was not until the last decades of the last century, during the new economy, when revolutions in the field of information technology and communication emerged. This rose up the concept of competition and resulting from its relationship with intelligence (active) bound in terms of discipline and determined organizational function. The sense that focused redefining the concept of competition has been to contemplate where it resolves the organization's radical pro-survival strategy. Which has encouraged the emergence of IC as a discipline and activity, (Cronin and Crawford, 1999a, b 1999, Shapiro and Varian, 1999, Von Krogh, Ichijo and Nonaka, 2000) in key effective information management: "An organization must develop processes and support the effective management of information and knowledge, such as IC, in order to promote interaction between negotiating forces, so it can achieve its strategic objectives" (Bergeron y Hiller, 2002).

This new context has led to the creation of new strategic models developed based on creativity and innovation (Von Krogh, Ichijo and Nonaka, 2000). Obviously, incorporating these factors in the business has attracted interest for their potential application to business and industrial production in all sectors and not just in the technologies. This has forced an urgent revision of the traditional types of surveillance and their relationship.

VT in overall strategic surveillance has led to the content of this review and has enjoyed special consideration and particular development in the field of scientific research, determining a particular trend in the consolidation of IC practice business and scientific discipline⁷.

In the evolution of this consolidation are relevant conclusions from Scientometrics studies on monitoring carried out by Cohen (2000), which determined three phases, highlighted in English and French monitoring the environment of the organisations in recent decades. Sited:

"...nous avons observé trois périodes dans l'évolution de la notion de surveillance: une phase d'émergence, une phase de maturation et une phase de consolidation dont les dates et les durées diffèrent d'un pays à l'autre – d'une entreprise à l'autre. Cela explique donc qu'il peut y avoir un décalage de phases entre les pays – entre les entreprises"

⁷ As an example of the guidance given to IC and it has taken over the inter-relationship between the monitoring (information) and VE highlights the sense defined by the "Groupe de Projet Intelligence Economique" constituted July 1995 at the initiative of ADBS, L'Association des professionnels de l'information et de la documentation: *"L'intelligence économique est constituée par l'ensemble des concepts, des outils, des méthodologies et des pratiques permettant de mettre en relation, de façon pertinente, différentes connaissances et informations dans la perspective de la maîtrise et du développement de la dynamique économique. Cette mise en relation implique en particulier: - une mobilisation des hommes ; - un traitement et une analyse de l'information et de la connaissance orientés vers une finalité opérationnelle ; - une circulation efficace des informations et des connaissances au sein des organisations concernées"*.

	From the observation and analysis of the Anglo-Saxon Publications	From the observation and analysis of the French Publications
Emergency phase	De 1967 a 1980	De 1970 a 1990
Maturity phase	De 1981 a 1990	De 1991 a 2000
Consolidation phase	De 1991 a 2000	A partir de 2000

Table 1: Evolutionary phases of the concept of surveillance of Organisations
Source: Cohen (2000)

The following section will try to realize this trend recognising definitions given to IC from its beginning to the present.

3. Analysis of the definitions of competitive intelligence

A collection of definitions that have been more significant than the competitive intelligence and its derivative forms have helped discover and select the course of our investigation and report on the evolution of the concept in recent decades:

DEFINITIONS OF COMPETITIVE INTELLIGENCE (IC) and derivative forms				
No.	Author	Year	Concepts	Definition
1	Aguilar	1967	ES	The exploration of the environment (Environmental scanning) is the acquisition and use of information on events, trends and relationships in the external environment of an organization, knowledge of which will assist management in planning the future course
2	Porter	1980	CI	The objective of the competitor intelligence (<i>Competitor Intelligence=CI</i>) is to develop a representation of the probable strategic changes of each competitor. The likely response of each competitor's strategic movements of competition and the likely response of each competitor to changes in the industry and the environment. The CI focuses on the actions, behaviours and choices made by any one or more potential competitors
3	Berenguer	1982	BI	Business intelligence units (Business Intelligence) are small interdependent functional bodies, which include internal and external information of the company, they deal intellectually and spread to other functional units and the hierarchy of the company
4	Shrivastava y Grant	1985	IC	IC is the system of learning skills and behaviours of current and potential competitors to assist stakeholders in strategic decision-making
5	Sutton	1988	IC	IC refers to the analysis of as well as competitive conditions in particular industries or regions
6	SCIP	1988	IC	IC is the process of monitoring the competitive environment that allows the managers of companies of all sizes make informed decisions especially in regards to marketing, R & D, and tactical strategies to invest long-term business
7	Gilad and Gilad	1988	BI /IC	Business intelligence has been described as the activity of monitoring the external environment of the company to obtain information that is relevant to the decision making process. In practice, BI is often concentrated in current competitors in IC, but may also include areas such as analysis of acquisitions, mergers and potential charges of risk in countries
8	Baumard	1991	IE	Economic intelligence isn't only observation but a practice in offensive and defensive information. Its aim is to link different areas to serve the strategic and tactical objectives of the company. It is a tool that connects the knowledge of the company with the action
9	Gilad	1992	IC	IC is the access to knowledge and information relevant to the different stages of decision making
10	Kokubo	1992	IT	Technological intelligence for R & D is primarily the collection of technical information, the distribution of information acquired in the right people and analytical work to the decision process

11	Choo and Auster	1993	ES	The exploration of the environment (Environmental scanning) is the acquisition and use of information on events, trends and relationships in the external environment of an organization, knowledge of which will assist management in planning the future conduct. / Organizations scan the environment in order to understand external forces of change in order to develop effective responses to improve their own position in the future. / The exploration covers not only competitors, suppliers and customers but also includes technology, economic conditions, political and social trends and demographics.
12	Choo	1998a		
13	Heiser	1994	IT	Technological intelligence is to monitor or scan and strategic analysis of the progress of science and technology. This is not to obtain information and make reports but to support organizations in technology management to take right decisions at the right time
14	Martre	1994	IE	Economic Intelligence (IE) integrates the results of surveillance in different areas: scientific and technological competence, financial, legal and regulatory
15	Rouach	1996		
16	Degoul	2000		
17	Groupe de Projet Intelligence Economique	1995	IE	Economic intelligence consists of the set of concepts, tools, methodologies and practices that link a different knowledge and information relevant in the context of the domain and the development of economic dynamics. This link includes in particular: to mobilize human, treatment and analysis of information and knowledge-oriented operational purposes, an effective flow of information and knowledge within the organizations involved
18	Ashton i Stacey	1995	IT	Technological Intelligence is the process of research, analysis and use of better information about developments, events and trends in the scientific and technological environment
19	Ettorre	1995	IC	IC is the process by which organizations obtain useful information about their competitors they use in their short and long term plans
20	Gibbons i Prescott	1996	IC	IC is the process of collection, analysis, interpretation and dissemination of strategic information on the industry and competitors, which is transmitted to those responsible for making decisions at the opportune moment
21	Ashton i Klavans	1997	IT	Technological Intelligence is the research, detection, analysis and reporting to company directors of information aimed at decision-making opportunities, threats, trends or developments in the field of science and technology that may affect the company's competitive structure
22	Cottril	1998	IC	IC is the legal and ethical collection, analysis and distribution of information on the competitive environment, including the strengths and weaknesses as well as the intentions of competitors
23	Rodríguez	1999	IC	The difference in intelligence surveillance is that is not confined to the mere acquisition of information but also emphasizes the selection of this information, in its analysis and its presentation in an appropriate way for managers to make decisions. (...) Intelligence provides more sophisticated information, which better prepares for making decisions

24	Nordey	1999	IE	Technological surveillance contributes to economic intelligence, but not enough to complete economic intelligence. The intelligence at the same time integrates: documentation, monitoring documents, the surveillance (or sectoral) and strategic monitoring
25	Bergeron and Hiller	2002	IC	IC is the collection, transmission, analysis and dissemination of relevant information publicly available, ethically and legally obtained as a means to produce actionable knowledge to improve decision making and corporate actions
26	Cavaller	2003	IES	Strategic intelligence is the systematic management of information strategically oriented to the progress of the organizations. Incorporates the three fundamental procedure dimensions: system - information - strategy which is the necessary condition for raising an organizational mode of intelligence. Integrated in order to implement the following six types of surveillance: environmental, organizational, competitive, economic, technological, strategic

*Table 2: Some definitions of competitive intelligence and derivative forms
Mainly from 1980-2002*

In reference to this collection of definitions can make the following order of considerations:

4. The Determination of the concept of competitive intelligence

The evolution of the concept of IC, as to its recognition as a unique discipline, has been subject to the key events mentioned above and throughout this period has been defined in many ways and with different terminologies in many cases showed the same global or partial process with different nuances. The most common terms in English to refer to the IC have been *competitive intelligence, business intelligence, competitor intelligence, and environmental scanning* (Bergeron y Hiller, 2002)⁸. Our collection includes some conceptual definitions of these forms of English precedents, synonymous or complementary to the IC, the French intelligence économique (IE), and a formulation of the type of intelligence that is limited to technology, intelligence technology (IT).⁹

The multitude of definitions given to IC has not been due to its complexity, but its multidisciplinary status, evolutionary adaptation to its recent coverage of the numerous sections of the intelligence and the interest aroused and focused from different business areas and scientific areas. These trends and the fact that the types of monitoring have been planned on many other types of intelligence, along its genealogy has increased the powers of intelligence, so far as to point out the reference to a "total intelligence" (Pollard, 1999).

Given the amount of terminology, there have been attempts to establish a conceptual internal order in different senses:

⁸ These authors describe the concept of IC, from the analysis carried out in terms of literature review as "multifaceted and fuzzy" (...). Aid to the confusion of terms of the quantity and variety of definitions of those terms. They refer to eg defining Fahey, 1999, p. 5 Fuld, 1995, p. 23 Fuld, 2000a; McGonagle & Vella, 1998, p. 149; Pollard, 1999, p. 205 Society of Competitive Intelligence Professionals [<http://www.scip.org>] and Ghoshal and Westney, 1994, p. 430.

⁹ In English, *Competitive Technical Intelligence* (Escorsa and Maspons, 2002)

- a) Proposing a final unification of terminology under IC¹⁰ (for SCRIP);
- b) Maintaining the terminological differentiation integral patterns which refer to a single body. For example, Choo (1998^a) proposed a continuation of: *Competitor Intelligence - Competitive Intelligence - Business Intelligence - Environmental Scanning - Social Intelligence*, ordered because of the term and its application and scope of coverage;
- c) Identifying a historical development of the concept. Prescott (1995) suggests four stages in the evolution of IC
 - (1) before 1980. Reunion data competitiveness;
 - (2) 1980-87. Analysis of industry and competitor (1980-1987);
 - (3) 1988-present, Prescott, 1995.
 - (4) a final stage, which appoints "IC core capability (core capability)."

An updated proposal was made five years later by Cohen (2000), already mentioned above, according to which surveillance or intelligence have experienced an emergency phase (1967 to 1970 or 1980 or 1990 seconds in the case of North America or French respectively), followed by a maturation until the current phase of consolidation (see Table 3).

¹⁰ Bergeron and Hiller (2002) remiten a Barndt (2000)

5. Literature on Production

Although we can incorporate the definition of Aguilar (1967), that is quoted in Choo (1999)¹¹ in the scientific literature that is found in relatively recent history of the awakening the attention on the role of intelligence in strategic management in organizations. Even so, Bergeron and Hiller (2002) go back to the '60s Wilensky reported indications that the 1967 writes: *Organizational intelligence: Knowledge and policy in government and industry*, noting the absence of solid research on the theory, practice and significance of the role of intelligence in government and industry.

From 1960 to 1990 each case was determined by a mode of production driven too much by markets based on supply and stable product portfolios, not given the opportunity to approach a production-driven strategy emerged as a necessity, starting in 1990 faced the challenges of market globalization, the rapid development of products that promotes competitiveness, etc ...

Porter (1980) at the time incorporated the intelligence-competition strategy and systematized the classical structure of the five analysis forces for the identification of factors that may influence the degree of competition in an industry. We can say that the shift towards the so-called Era of Knowledge and Learning (Cartier, 1999) characterized by the importance of innovation, the value of companies, the revolution in information technology and communications, and in part was announced as the founding history of the strategic management of organizations in the 80s as a discipline. . The merit of this advertisement is to say Michael Porter¹² (Sutton, 1988, Prescott 1995) that at present remains the highest authority on competitive strategy, competitiveness and economic development of nations, states and regions.¹³

It's convenient that the study of the IC itself broke with this name in the mid-nineties (1) from the interest aroused in the field of strategic management of firms to the 80 (i Bergeron Hiller, 2002) and (2) the development of techniques for VT in business emerging from the end of the decade (Maspons, 2002). Specifically it has been located in 1994, opening date of the competitive intelligence function as a scientific discipline and organizations. Studies on the production based on the literature analysis of bibliometrics indicators (number of publications, conferences, seminars, consultants, government programs, university courses, etc.) detected from this year a growth of interest in the field of competitive intelligence.

For example, in terms of literature production, the period January 1987 to June 1994, Walker (1994b) found 212 records with the term competitive intelligence in the database ABI /

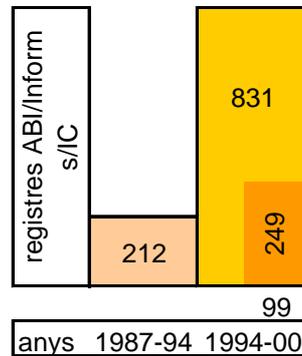
¹¹ The Art of Scanning the Environment, ASIS Bulletin 25, no. 3: 13-19, special issue on information seeking.

¹² In 1980 Porter published "Competitive Strategy: Techniques for Analyzing Industries and Competitors" and in 1985 "Competitive Advantage: Creating and Sustaining Superior Performance" To capture the influence of these works you just have to say that the first has been translated into 17 languages and printed 58 times, while the second has been translated 34 times. On the figure of M. Porter quote the biographical note found on the website of Harvard Business School: "*Michael E. Porter is the Bishop William Lawrence University Professor, based at Harvard Business School. A University professorship is the highest professional recognition that can be given to a Harvard faculty member. Professor Porter is the fourth faculty member in Harvard Business School history to earn this distinction, and is one of about 15 current University Professors at Harvard.*

Pfr. Porter is a leading authority on competitive strategy and the competitiveness and economic development of nations, states, and regions". Available in:
http://dor.hbs.edu/fi_redirect.jhtml?facInfo=bio&facEmId=mporter

¹³ Michael Porter directed since 2001, the year of its inception, *The Institute for Strategy and Competitiveness* jointly established forla *Harvard Business School* and la *Harvard University*.

Inform. The same term in the period between 1994 and April 2000 appears 831 times in the same database. And only the year 1999 it appears 249 times (Bergeron and Hiller, 2002).



font: Walker (1994b)

Figure 1: the competitive intelligence literature in production according to Walker, 1994 and Bergeron and Hiller, 2002 In 1987-2000

Findings from other sources relating to the use of the term and its use in the recent literature (Favier, 1998; Cohen, 2000), despite its upgrade, the announcement confirms the observations of Walker and set 1994 as the year of the tax net for competitive intelligence on top of each other on the concept of surveillance, highlighting the consolidation dates. By doing this, we can move forward or backwards depending on whether we are in an Anglo-Saxon or French cultural context.

Moreover, despite the interest in the beginning of the 80's also has its origin to the phenomenon of the emergence of an increasingly popular works, presented in order to provide basic tools of strategic management for product design and commercialization of innovative targeted formulas with the aim of ensuring an unambiguous good economic performance to the company. This phenomenon, as an indicator of demand, was accompanied by a lack of solid scientific studies on IC and an emerging awareness of the need for a systematic investigation, and constant updates on this area (Lesco 1994 Pinkerton, 1996 , Prescott, 1995).

This growing interest in IC has been driven, in part circumstantial, for the real needs of organizations in the new economy, the centrality of its application to various disciplines and in part by the proactive involvement of the Society of Competitive Intelligence Professionals (SCIPAS) founded in 1986 with headquarters in Virginia (USA).¹⁴

¹⁴ SCIP was founded in 1986 and called *Society of Competitor Intelligence Professionals* and was renamed *Society of Competitive Intelligence Professionals*. SCIP offers opportunities for training and retraining of professionals in a domain that is experiencing a very rapid evolution. The fields of interest are quite varied: legal and ethical aspects of information retrieval, analysis of information regarding the strengths, weaknesses and intentions of competitors. Many members of SCIP have a company in market research, of strategy and analysis and science and technology. This broad framework of activities has facilitated its expansion to the point that today SCIP has 50 branches in over 50 countries. SCIP en: <http://www.scip.org/>

6. New guidance: Strategic intelligence

It shows a lack of uniformity and agreement in the scientific community on a clear concept of IC. The framework of this research announced a formal foundation of the concept, which will converge in a systematic manner, all those who have disciplines completely guided in reference to what we have defined as strategic intelligence and systematic processing of global information within the organizations.

At present, recent conceptual developments suggest that the concept of IC is to be framed in IES.

We agree to define strategic intelligence as the systematic management of information geared to the progress of the organizations formed by the process of seeking, processing, analysis, interpretation and dissemination of information to the strategic direction of all organizational activity; and yet, as a discipline that combines the study of techniques for systematic analysis of information from the practice of that procedure has been formalized.

- a. Management refers to managing the following processes: (1) search, (2) design and synthesis of indicators, (3) processing and analysis, (4) representation, (5) interpretation and (6) communication-dissemination.
- b. Refers to the systematic management and structuring technical and methodological processes sequentially progressive and retro
- c. Report refers to the representation of reality in the form of data that are grouped constancy of relations, which provides knowledge process analysis.
- d. Oriented progress refers mainly to the sense of strategic management.
- e. Organization refers to the universality of the activity of the agent that processes aim.

Based on the architecture of the surveillance system for deriving the different types of intelligence that integrates the whole strategic intelligence we agree to define the form of strategic intelligence, competitive intelligence. This focuses on aspects of innovation and technical advantages and technology involved in the goals of the strategic intelligence.

Table 2: Definition and element for the determination of strategic and competitive intelligence

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