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## Best Practices in Brazilian Companies

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### Abstract

Competitive intelligence (CI) is a systematic and ethical collection, analysis, dissemination and management of information about the external environment that may affect the plans, decisions and operations of the organization. Knowledge management (KM) can be seen as a tool to promote organizational knowledge through the use of activities designed to identify, create, store, share and use knowledge. Companies face a challenge in the era of knowledge, it is the extraction and management of knowledge produced by people in the organization. CI and KM combined generates organizational intelligence. The exploratory study, based on literature and multicase study, we sought to identify best practices in processes of CI and KM in Brazilian companies. We identified practices related to the CI design process, the stages of the CI, the use of networks, and knowledge management. We also identified, points of attention on the internal/external organizational environment.

**Keywords:** competitive intelligence; knowledge management; organizational intelligence; brazilian companies.

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## Introduction

The competitive environment that settled in Brazil since the 90s drove the organizations who worked in the country to adopt best management practices, among them Competitive Intelligence (CI) and Knowledge Management (KM), which showed higher growth from the beginning of this century (Marcial, 2007).

The Brazilian Association of Competitive Intelligence Analyst - ABRAIC understands the intelligence activity as an informational process proactive and systematic that aims to identify the actors and the forces that govern the activities of the organization, reduce risk and drive better decision maker position themselves in their environment, and protect the knowledge generated. In turn, the CI is understood as the intelligence activity focused on the business world, ie, to the competitive environment in which the main objective is to maintain or develop a competitive advantage over competitors (ABRAIC, 2010).

The Brazilian Society of Knowledge Management - SBGC Ikujiro notes that researchers as Nonaka (Japan), Thomas Davenport (USA) and Karl Sveiby (Sweden) contributed many of the concepts that today are the basis of KM and that the system has gained great momentum, from the 90s, with the increasing importance of knowledge as a strategic resource for the generation of value-added products, services and processes. Today, its dissemination in Brazilian companies is critical to the development and competitiveness of the country. Among the benefits of good KM practices are: increased productivity, greater innovation, agility, efficiency, profitability, competitiveness and sustainability (SBGC, 2011).

The institutionalization of CI and KM practices in enterprises is a reality that results from the confluence of different forces, both external and internal, and it plays an important role in the constant surveillance of the movements of the market and competitors, technological trends and other variables environmental issues related to current business or future business. It is a growing need in a business world increasingly globalized and competitive (Santos, 2009).

Considering the above facts and also the growing interest in the topic, this study seeks from multicase study and literature, presenting some of the best practices highlighted in processes of CI and KM in Brazilian companies. The paper is organized as follows: in the second section presents the research methodology in the third section the theoretical foundation, in multicase study the fourth section and the fifth and last section of the final considerations.

## Method

The study included literature review, multicase study and qualitative approach. This method allowed us to investigate some of the best practices highlighted in processes of CI and KM in Brazilian companies. The criteria used to select the companies studied were those suggested by Machado (2010). The results presented are the results of analyzes from a case study in three Brazilian companies, one located in the southern region and two others in the Midwest, operating in different sectors.

Case 1 - This is a large industrial company with more than 16.000 employees, of which 94.7% are in Brazil. It operates in four segments of the market, with a global base of customers and partners worldwide. It is among one of the largest companies in the world industry. Has held the top spot as the largest Brazilian exporter in two years and the second largest exporter for three consecutive years. With 40 years of experience in designing, manufacturing, marketing and after-sales service, the company today has presence in 88 countries on five continents.

Case 2 - Company world leader in its market, has factories in Brazil, Europe and Asia. In the 70s and became an exporter in the next decade has marketed its products on all continents. In the 1990s, anticipating the globalization of the economy, the company began the process of opening production bases outside Brazil and hence the expansion of its global sales structure. Thus, soon came to world leadership. Directly employs about 9.600 people and has a team of about 400 engineers and technicians. The company has established itself as a supplier of excellence, providing a solution to the world's leading manufacturers. Its products have been sold in more than 80 countries. It is among the companies that have obtained patents from the National Institute of Industrial Property (INPI) in Brazil in recent years.

Case 3 - The company is an entity of private law. Aims to promote the integrated development of their sector, and related sectors within scientific institutions and companies. Provide project management services, imports for research, business development, competitive intelligence industry, consulting and training.

## Apparatus

The survey research happened in person in each of the companies and was conducted in May 2010. Given issues of ethics and confidentiality agreement with the companies, they will be referred to in this article only as case 1, case 2 and case 3. It is also noteworthy, that will not show any data that characterizes the companies concerned.

## Theoretical framework

### Procedure for Competitive Intelligence (CI)

At first there is nothing new in the IC process, which basically consists of gathering information about the external environment, analyze information and apply the results in decision-making. However, it is necessary to highlight the importance of systematizing activities, making the CI process continuing in business (Abreu et al., 2008).

According to Rodriguez (2004), world-class companies identified in the process of CI, which provides a mechanism to better understand the business environment in which the organization operates. Besides being a great way to add value to the decision making process, ie decision making from the viewing scenarios and future trends, which allows to maintain or achieve competitiveness.

The development of intelligence products happens in the analysis phase of information collected. Among these products, the highlights are the alerts that the information must anticipate and be communicated to decision makers in time to articulate these actions which may influence the course of events. Perform certain actions against a future scenario can lead to transformation of a potential threat into an opportunity (Hohhof, 2007). The CI products must be tailored to the specific needs of decision makers. Therefore, the CI team needs to understand organizational goals and the nature of decision-making at different levels (APQC, 1999).

All stages of the CI can be implemented entirely in-house, can be outsourced, or can be operationalized in a mixed, with some steps in the company and other contractors. It is the company assess and decide how best to deploy the process. As regards the structure of the CI process, some authors suggest four or five steps.

Regardless of the number or name given to each of the stages of the CI fits emphasize two important points regarding the form and effectiveness of the process. The first concerns the conduct of the CI process should be systematic; collection or monitoring should be continuous. The second point relates to the incorporation of results in decision-making and action, making or correcting strategies, which makes up the complete cycle of organizational intelligence. Besides the way the process is structured, Bensoussan and Fleisher (2008) draw attention to the effort that will be involved in: carefully select relevant information and verify the reliability of the information, summarize the results to reduce the volume of information, analyze the results, gathering, integrating, comparing among others, and interpret the meaning for the company or department.

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### Typical steps of CI Process

The following is a description of the steps that are usually common in different proposals for structuring the CI process: identifying information needs, planning and direction, collection, analysis, dissemination and evaluation.

#### Identification of information needs

Independent of the structure, the first step is to identify what needs to be researched, the information needs of decision makers of the company. This step defines the specific needs of the enterprise intelligence represented in the vision of its executives. In the literature found two instruments proposed by two authors, Herring (1999) propose that the KITs and Abreu et al. (2008) suggests that the strategy map information.

Herring (1999) suggests that KITs are defined based on meetings and interviews with decision makers. From KITs defined and organized intelligence activities can be planned. This planning includes as all process steps are performed. The KITs guide the collection and analysis of data, from which new knowledge is generated, making them the products of intelligence that allows us to understand the external environment, providing the necessary support to decision makers. For people involved in the CI, the KITs organize and structure the management needs that require intelligence, besides being a way to survey and prioritization of these needs (Eriksson, 2008).

To set the strategic map proposed information in Abreu et al. (2008) recommended that the needs are identified and organized in two levels, strategic, tactical and operational. In addition to tow each identified need a direction, for example, a critical success factor, one of the strategic objectives, an opportunity or threat, among others. Once created the map, it becomes a reference document for the deployment and

operation of the CI process. The composition of it is based on the view that managers have company at a given instant of time. Finally, it is worth noting that, regardless of which instrument is chosen to identify information needs, KITs or strategic map information, it is essential to assess whether the information needs identified are lined with products that managers expect to receive at the end of the process.

### **Planning and direction**

This step is to define the goals and specific collection, which sources most likely to find this information. Also define which resources human, technological, financial and time that the company has to be used (Marceau; Sawka, 1999).

### **Collection**

It consists in collecting information, feedstock to generate the products. The vast majority of the information is public domain, found in sources such as magazines, annual reports, books, databases, journals, and other. It is important to use different sources of information, as a way of confronting the gathered information. It is understood by different information sources, and primary and secondary sources. The treatment involves collection of information to be stored in a format that enables access and analysis later (Kahaner, 1996).

### **Analysis**

Generally considered the most difficult stage of the process of CI (Krisan, 1999; Kahaner, 1996; Sawka, 2006; Fleisher; Bensoussan, 2000, 2002, 2008; Bensoussan, 2003; Fleisher, 2003; Melo, 2007; Abreu et al, 2008 ). The analysis requires skills because the analyst must evaluate the information, identify patterns, visualize scenarios based on the information he has. Although the analysis is based on logic, the information available, analysts do not always have all the information they need, in this case need to fill these gaps and work with assumptions (Kahaner, 1996).

Sawka (2006) draws attention to the fact that the analysis can not be understood as a function that receives a request and returns a response. We need people who will make use of intelligence, and analysts work together in defining intelligence issues, discuss about the information collected and judgments about them, and an action plan to target. According Bouthillier and Shearer (2003), is in the phase of analysis that creates a meaning to the information collected, it is necessary to classify, organize and store them.

### **Dissemination**

In various dissemination mechanisms should be created to distribute the products of intelligence generated from the

analysis work. These mechanisms may be occasional meetings to present results, e-mail summary and links to the material full disclosure in the local area of each user in the intranet, workshop pre-defined on a few dates in the year. Products must be in a format, language and frequency appropriate to the needs of the people will receive. According to Gomes and Braga (2004), the spread can be focused or general. Dissemination focused when it comes to specific information and general dissemination, when information is disseminated throughout the company. Regardless of the type of dissemination, Kahaner (1996) highlights the importance of distributing it to everyone in the company that can make use of the information and intelligence products.

According to Weiss (2002) these products should be used as input for strategic planning, benchmarking, investment, product planning, marketing, sales process in other aspects related to the external environment that requires business information for decision and action.

### **Evaluation**

This step occurs after the generation of CI products. Being indispensable for the improvement and survival of CI process. The use of a CI process is only justified if the results are incorporated in the actions and decisions of the company, consolidating the intelligence and adding value to the process.

The evaluation may be performed with two purposes. First, regarding the process, refers to all phases, that is, if needs have been well defined, the sources used were sufficient if the best analytical methods were used. Second, under the aspect of the products with respect to the content, if they met the need for information and were used in practice (Gomes; Braga, 2004). At this stage it is important to assess whether the CI process is seen as a corporate function. Everyone in the company should feel part of the process. Decision makers, which effectively make use of the results must work together with the team of CI (Sawka, 2006). It is difficult to measure the gain when using a CI process. Gomes and Braga (2004) suggest the creation of a process memory and defining indicators to account for which actual results (productivity, cost reduction, return on investment and innovation) is achieved by making use of CI products.

Execution of the activities envisaged in the steps defined in a CI process can be distributed among the people who make up the team or CI, are part of the intelligence network. Following the definition of roles and responsibilities undertaken by a team of CI.

### Performance Professional IC area

According to Amaral et al. (2005) the people who are part of CI staff need to be empowered to carry out the activities of the CI process, as shown in Table 1.

Was added to the role manager for the purpose of management of the CI (Abreu et al. 2008). Although each member may serve more than one role, Amaral et al. (2005) emphasizes that no individual has all the attributes related to the roles of CI. So it must be done in a work team.

However the definition of roles and responsibilities in a network of intelligence alone does not guarantee the success of the process. Given the fact that it is necessary competence of staff to carry the demands of a CI process. According Ruzzarin (2002) competence can be defined as knowledge (know), skills (know how) and attitudes (how to be). Amaral (2006) highlights six skills necessary for CI: interpersonal skills, analytical skills, information gathering, communication, teamwork, organization and process management. For example competence, analytical capacity, implies sistematicamente evaluate and interpret the data, with the goal of finding relevant facts, establish relationships that lead to useful conclusions decision making (Amaral, 2006, 2010).

A set of competencies (which implies the attributes of knowledge, skills and attitudes) necessary for a team of CI in a given context of action, may not be applicable to other CI team in another context. Considering that CI teams and their contexts of operation have specifics. From this observation Amaral et al. (2008) proposes a model of competence mapping allows you to adjust lists of attributes and skills to these particular realities, allowing for a more precise and functional mapping. And yet, it can be used for the creation and development of CI teams, from the perspective of continuous improvement. This model is supported by a computational tool, a reference base to support the mapping of skills in CI, a glossary of competence attributes of CI. This model takes into account the mission, vision, values and strategies unique to each company (Aamaral; Garcia; Aliprandini, 2008).

In view of Valentim et al. (2003) and Marcial (2006), a professional wishing to work in the field of CI, must possess skills and knowledge related to the following skills: communication, observation, creativity, insight, intuition, critical thinking, persistence, cunning, self-education, capacity synthesis and analysis, entrepreneurship, investigative spirit, oral and written skills, ethical behavior, knowing add value and planning, knowledge of tools of information technology and com-

Role	Responsibility
Manager	Responsible for defining information needs to be monitored in the CI process. Who makes decisions within the company is also called the manager and may receive reports from the monitoring information.
Coordinator	Responsible for team. Its activities range from organizing work teams to control the execution of tasks, through the allocation of resources required to perform the activities and the planning of actions and policies of the group.
Analyst	It is the central figure for the CI, and can be considered the cornerstone of the entire intelligence effort. The essential role of the analyst is to transform collected information into useful intelligence to decision making. This clearly required a range of skills ranging from the ability to interview people, even the ability to predict trends and observe the strategic implications of the events expressed by the data.
Collector	The collector seeking the raw material through which intelligence will be produced, and therefore a truly strategic role in any team CI. This professional must also possess a range of skills such as strong knowledge in Information Technology and collect data from several sources.

Table 1 - Roles of competitive intelligence team

Source Adaptato de Amaral et al. (2005)



knowledge	Ability	Attitude
<ul style="list-style-type: none"> <li>- Organizational Strategy</li> <li>- Organizational Structure</li> <li>- Scientific Methodology</li> <li>- Methods, techniques and analysis tools</li> <li>- Organization of information</li> <li>- Industrial Sector</li> <li>- Information Technology</li> <li>- Terminology sector</li> </ul>	<ul style="list-style-type: none"> <li>- Learning from experience</li> <li>- Presentation of results</li> <li>- Capacity synthesis</li> <li>- Discernment</li> <li>- Extract relevant data</li> <li>- Extract strategic implications</li> <li>- Generate consistent explanations the facts</li> <li>- Identify trends, patterns and relationships among the key data collected</li> <li>- Generate recommendations according to analysis</li> <li>- Interpretation of data, intuition</li> <li>- Trial</li> <li>- Dealing with ambiguities, conflicts and incomplete data</li> <li>- Organize information</li> <li>- Analytical Thinking</li> <li>- Perspicacity</li> <li>- Strategic reasoning</li> <li>- Logical reasoning</li> <li>- Problem solving</li> <li>- Knowing when to stop the analysis</li> <li>- Working under pressure</li> <li>- Working without frustration with intangible results</li> <li>- Vision of the future</li> <li>- Global vision</li> </ul>	<ul style="list-style-type: none"> <li>- Agility</li> <li>- Trustworthiness</li> <li>- Being constantly mindful information</li> <li>- Ethics</li> <li>- Creativity</li> <li>- Curiosity</li> <li>- Discretion</li> <li>- Meticulousness</li> <li>- Observation</li> <li>- Organization</li> <li>- Perception</li> <li>- Perfectionism</li> <li>- Perseverance</li> <li>- Proactivity</li> <li>- Security</li> <li>- Critical sense</li> <li>- Seriousness</li> </ul>
Table 2 - Competence analytical capacity Source: Amaral (2006)		

munication, information sources, methods of accessing data and information, knowledge of the industry and its specific terminology, and environment, organizational structure and culture.

Gomes and Braga (2004) to discuss what is needed for a professional who intends to act CI, highlight that this professional should: be present and within all activities performed in the organization and be attentive to information technology; understand the business organization performance; anticipate market demand; support the decision-making to be proactive, find information and bring it to the organizational environment.

According to Santos and Serzedello (2006) that the professional will act in the CI process should dominate the business of the organization, know the market, customers, suppliers, habits and customs that form the culture of the organization, and be able to anticipate the organization's needs. Each

team member must have the IC course, what is your role, and what are the activities that need to play in the process. When teams set to participate in processes of CI Junior Cardoso (2005) and Abreu et al. (2008) draw attention to the importance of networks of personal contact, which can be used to support different stages of HF. The establishment of these networks can be an excellent communication channel to meet demands of gathering information from primary sources and qualitative information, besides being a source of expertise on certain subjects. And a way to disseminate information faster.

It is observed that there are many knowledge, skills and attitudes necessary for performance of professionals in the field of intelligence. Therefore, it is worth noting that there is a work to be performed by one person, requires the structuring of a multidisciplinary team in order to meet a wider range of expertise in the group. And yet, the team composition CI should consider the particularities of each company.

The methodology presented in Abreu et al. (2008) assumes the intelligence activity supported by a network of experts, in order to gather a larger number of skills. It is the team responsible for the company in the process of CI, CI generate products or intelligence products, which are presented in sequence.

## Products CI

In execution of a CI process, which adds value to the process are the analyzes performed and the products generated. These products are created from the findings, insights, impact assessment, etc. recommendations. Directs that the products are unique and brief to meet the needs for which it was requested.

The CI products have some points that should be taken into consideration so that they can be effectively used (Bernhardt, 2003; Sawka, 2006): decision makers who will receive the products must be involved throughout the process. Since the definition of needs to the evaluation of the product received, the content should be appropriate responsibilities which it exercises, or should not be made recommendations on which the person has no power to act within the firm, the content should be predictive rather than passive, the results of reflections and evaluations regarding the impact to the company must be clear; recommendations should be made from the monitoring of the main conclusions.

The research to be conducted regarding the scope, amount and depth of material on the subject, should be sufficient to meet the needs identified early in the process (Krisan, 1999). Bernhardt (2003) classifies CI products generated, depending on the type of content in categories of intelligence: current, estimated, alert, and scientific and technological research.

Tyson (1998) and Abreu et al. (2008) suggest some formats for intelligence products can be generated:

**Newsletter:** can be used for both strategic and tactical information. Its main purpose is to warn about what is happening in the environment and does not necessarily involve analysis. Its target audience, people involved in sales, marketing management, other managers, advisory. The frequency should be established between weekly or monthly;

**Draft strategic impact:** similar to the newsletter, but add up events that can bring strategic or tactical impact for the company. Its target audience manages the commercial and other managers, and the frequency of transmission is suggested to be monthly. This type of product requires analysis work;

**Situation analysis:** is the consolidation of two other intelli-

gence products mentioned above. Summarize key strategic issues and includes a more detailed analysis. This product is focused on addressing the top management. The periodicity of this product is suggested bimonthly;

**Competitive Evolution:** aims to seek competitive developments in terms of quantitative variables of innovation, verifying significant changes and strategic implications in addition to the main operating market;

**Analysis report of project or product:** must meet the specific demands occurring during the product planning. With competitive information, monitoring news on the market or in the environment that may endanger the product launch. In addition to other information that may impact on the product.

In addition to these models, the company can draw others to meet their needs, or adapt existing reports to meet the needs of CI. It is worth mentioning the importance of alignment of intelligence products strategic issues and tactics of each company.

## Process of Knowledge Management (KM)

One of the challenges faced by companies in the knowledge era, is knowing extract and manage knowledge over the years built by a person or team.

However, you can not speak without speaking KM data, information and knowledge. Then the difference between data, information, and knowledge. Given: may have different meaning depending on the context used (easily structured, easily obtained by machines, often quantified and easily transferable). Information: it is interpreted data endowed with relevance and purpose (requires analysis unit, requires consensus on the meaning, necessarily require human mediation). Knowledge: Built from different information (including reflection, synthesis, context, structuring difficult, difficult to capture on machines, often tacit, difficult to transfer).

**Knowledge** it is a combination of data and information on which is added expert opinion, skills and experience, resulting in a valuable resource that can be used to assist decision making (CEN, 2004).

According Bose (2008), from the viewpoint of the CI process, data and information require some type of analysis to generate knowledge and be transformed into products of intelligence.

According Schreiber et al. (2002), knowledge is a set of information used by organizations or individuals to perform actions in order to accomplish tasks and create new information.



According Nonaka and Takeushi (1997), human knowledge can be classified into explicit knowledge and tacit knowledge. Tacit knowledge refers to skills, insights, personal experiences, insights, personal beliefs, personal knowledge. It is an excellent source to generate competition between companies, but it is difficult to be translated into a formal language. Have explicit knowledge is one that is formalized, for example, mathematical expressions, specifications, manuals, diagrams, statements.

It is a knowledge that can be transmitted easily between people. The integration between these two types of knowledge leads the company to generate knowledge. However, for this to occur it is necessary to supplement the knowledge spiral. The spiral of knowledge can be interpreted as follows: from the sharing of experiences (tacit knowledge to tacit) knowledge these are explained, systematize the concepts (explicit to explicit knowledge) and this generated knowledge is internalized and can generate new experiments.

For Choo (2003), knowledge creation and innovation causes generates organizational capabilities that expand the horizon of possible choices in the process of decision making.

Then comes the beginning of the 90s, the concept of KM, seen as strategic for companies (SVEIBY, 1998). With the objective to identify and manage knowledge.

According Santos (2001), KM is a systematic process to identify, create, renew and apply knowledge strategically to generate continuous innovation and competitive advantage. Must be a business process, focusing on business strategy, involving management skills, intellectual capital management, organizational learning, business intelligence and corporate education. This is one of the company's assets and, therefore, need to be managed.

In view of Terra (2001), you can apply KM in any company, regardless of size or nationality. However, there is need to create new models with organizational structures, processes, management systems and new leadership positions, so you can tackle any existing barrier in the transformation processes.

The KM can be seen as a tool to promote organizational knowledge, providing organizations able to map a more precise information, manage them and measure their ex-

Structuring the process of CI	<ul style="list-style-type: none"> <li>- decentralize and specialize intelligence activity;</li> <li>- structure the process of CI decentralized way;</li> <li>- establish networks to support the CI process;</li> <li>- set the necessary infrastructure support.</li> </ul>
Identification of information needs	<ul style="list-style-type: none"> <li>- aligning information needs of clients in the process of CI with strategic planning;</li> <li>- identify the main concerns of managers;</li> <li>- identify which decisions need support of intelligence.</li> </ul>
Collection	<ul style="list-style-type: none"> <li>- capture information of employees who are in contact with customers, suppliers, technical assistance, through the intelligence network;</li> <li>- using various sources (primary and secondary).</li> </ul>
Analysis	<ul style="list-style-type: none"> <li>- adapt and combine analysis tools;</li> <li>- define the criteria for analysis;</li> <li>- involve the knowledge of experts in the analyzes;</li> <li>- point in the content analysis of suitable alternatives to the reality of companies;</li> <li>- adjust the quantity and density of the products generated for the same analysis item;</li> <li>- language and format to fit the customer profile of intelligence;</li> <li>- show, if possible, the results of the analysis, projections of earnings or losses of each recommendation;</li> <li>- classify the types of intelligence products, such as continuous monitoring, alerts or specific demands.</li> </ul>
Dissemination	<ul style="list-style-type: none"> <li>- evaluating how best to deliver the intelligence generated;</li> <li>- meetings to define strategic discussions;</li> <li>- deliver the products of intelligence before the strategy meetings.</li> </ul>
Evaluation	<ul style="list-style-type: none"> <li>- evaluating customer satisfaction for products generated by the process of CI;</li> <li>- review questions the targeting the CI process.</li> </ul>
Table 3 - Best practices in the operation and management of the processes of CI and KM.	
Source: Research data.	

isting knowledge, thus strengthening its competitive advantages (Alvarenga Neto, 2005 ). Drucker (1999), understands the KM as an evolution of data processing and information management.

CEN (2004) lists five activities for KM:

**Identify knowledge:** should include an analysis to identify which is the gap between existing knowledge and knowledge still needed. Applies at the organizational level and at the individual level. At the organizational level to identify strategic needs and at the individual level, as a way to improve the execution of their tasks;

**create new knowledge:** there are many ways to create new knowledge, is often the result of social interactions, such as skills, problem solving together, exchange ideas, work in groups, communities of practice;

**Store knowledge:** from interactions between people, knowledge is stored and is available for reuse, but this knowledge with people. Another form of storage is explicit knowledge, which involves activities of organization, categorization and updated. The computational tools can facilitate this process; **Share knowledge:** can be shared through databases or documents, which can be accessed by others. One way is to transfer from person to person through collaboration, workshops, discussions, and using knowledge: knowledge only creates value action when used in the enterprise. However often the knowledge is not used, due to ignorance, or is underutilized. For each activity to be performed, has the necessary knowledge associated. This should serve as a basis for creating, armazenas and share knowledge.

Not having KM practices is a concern for many companies especially those with knowledge as the foundation for business success. And this knowledge is only in people's heads, if these people are disconnected from the company can take part of the company's capital, knowledge. In this sense it is essential to have a process KM, adopting practices that lead to identify, create, store, share, and use knowledge generated.

## Study multicase

### Best practices highlighted in the process of CI and KM

Whatever type of company, sector of activity, culture, available resources, many practices adopted in the operation and management of the processes of CI and KM can be implemented respecting the particularities of each company. Table 3 shows the best practices in the operation and management of the processes of CI and KM. Table 4 shows the best practices observed in the structure of networks of collaborators to support the process of CI and KM. Table 5 shows the best practices of knowledge management in the process of CI.

This research has shown in practice how companies perform the CI process. Based on analyzes of data collected and observations, it is possible to make some comments. When designing the CI process in the company, you need to: define the structure needed to operationalize the process: human, technological and financial resources, process management, information architecture, information access policies; identify the knowledge essential to the process decision-making; what managers need information to support decision making and to identify the internal and external relationships existing in the company.

It can be seen through this reflection that there are three stages to be considered by those responsible for implementing an CI process in the company. The first is related to the structure needed to operate the process efficiently. Raise what are the human, technological and financial resources that the company will make available for the activities contemplated in the CI process.

Regarding the management of the process can be organized: Decentralized: each area or business unit can define how you will direct and manage the intelligence generated; Centralized: without support networks, the core CI directs, performs and manages the intelligence generated; Central-

Networks	<ul style="list-style-type: none"> <li>- identify the people within the company or forming part of the network of relationships which can be consulted on specific issues;</li> <li>- define roles and responsibilities;</li> <li>- defining the communication channel;</li> <li>- make everyone in the network to understand their importance to the collective construction of knowledge.</li> </ul>
<p align="center"><b>Table 4 - Best practices in structuring networks of collaborators.</b></p> <p align="center">Source: Research data.</p>	

Knowledge management in the process of CI	<ul style="list-style-type: none"> <li>- define the format for the storage and retrieval of information;</li> <li>organize meetings with key stakeholders to gather opinions;</li> <li>- define mechanisms for information management and the generation of new knowledge;</li> <li>- systematizing the tacit knowledge identified and new knowledge generated;</li> <li>- create categories and terms to unify the terminology used across the network;</li> <li>- conduct training on topics of interest in the network;</li> <li>- promote discussions on topics of interest of the network to promote the exchange of information and increase integration;</li> <li>- participate in strategic meetings;</li> <li>- define formats for recording knowledge;</li> <li>- build a collective intelligence products;</li> <li>- define infrastructure of Information Technology that facilitates the exchange and access information.</li> </ul>
<p align="center"><b>Table 5 - Best practices in knowledge management CI process.</b></p> <p align="center"><b>Source: Research data.</b></p>	

ized network support: the nucleus of CI directs and manages the network, and the process execution is supported by the network, and Mixed: the process is decentralized, but there is a core process for exchanging information between all participants in the network.

Another relevant point is about the information architecture. In view of the CI process generates a large amount of information must be considered will be treated as the storage and retrieval of information. And yet, what is the access policy to be adopted to promote the KM among the employees of the company, taking into account that some information is strategic and therefore with access restricted to a particular user profile.

The second point is the definition of the information that managers need for decision making. The CI process aims to monitor the external environment in order to identify opportunities, anticipate competitors' moves, identify signals in the environment, assisting managers in decision making. However, defining what information monitor is not something simple, implies knowing the company internally, its capabilities, its culture, its strategic direction, who are the makers of the company, what skills the company, know the products, map the main competitors. This knowledge is built based on the survey of existing internal information and contact with key people in the company.

Finally, the last point relates to the identification of the network of relationships existing in the company, both as regards the internal network about their connections to outside the company. For example, contacts with research institutes, partners, customers, suppliers, technical assistance, among others.

This knowledge base facilitates the work of the core CI characterization of what may be configured as an opportunity or a threat to the company and contribute in defining the focus of monitoring weak signals from the external environment, creating intelligence products type of alert, with content on the presumed situations that may happen. Thus, the evidence leads to the conclusion that operationalize a process in CI implies a planned company with a vision of short, medium and long term. However, should not be included in the scope of the intelligence process support all business decisions. In this sense, we must select from the listed demands which must be met by the intelligence process. Others may be directed to specific areas within the company.

The result of the intelligence process should contribute to the strategic management as more indicative of the force and the use of information and knowledge with a view to maximize the competitiveness and achievement of business objectives. However, the perceived value of the results generated by the CI process is related to the first step of the

process, identifying information needs. As Herring (1999), called kits or as Abreu et al. (2008), codified in a document called strategic map reference information.

As noted in the literature and verified in the cases studied, the analysis stage is the central activity of the CI process responsible for the generation of value of intelligence products. However, as the feature already elencada it is a task dynamic, non-linear, specialized, or can not make use of specific techniques, requires different levels of reflection, may have a systematic character or possible, meets a specific demand. Understanding these characteristics can help the work of analysts who are starting in the area of intelligence. The result of the analysis stage is systematized shaped product intelligence. Your content should be appropriate to the profile manager, has a clear and an appropriate format to transmit the knowledge generated. In relation to the practices adopted by companies, may serve as examples and are translated into other sectors, respecting the particularities, culture and available resources in each company.

## Discussion

It is observed that the CI process has some critical points that tend to be diminished with experience in performing the procedure. For example, the definition of information needs, analysis, dissemination and measurement of results.

To the first point, the effort is tied and the result of the process is therefore essential to define correctly the information that must be monitored. Once correctly set the items and information collected, you need to filter the data, using reliable sources, consult experts analyze the various opinions and build a multidisciplinary results. After the results generated, the nucleus of CI must assess how should communicate the results, looking for the most effective way. The results should generate action to complete the intelligence cycle, otherwise there is no reason to maintain the process. Finally, measurement of results, ie, how to measure the tangible and intangible results that the CI process brings to the company or industry. This is a gap both in literature and in real cases. In the cases studied did not demonstrate a methodology for measuring results. Perform some specific actions in order to disseminate the results to the company perceived by the nucleus of CI.

Everyone in the company that somehow, directly or indirectly, are involved in the process of CI need to be informed about the information that is available, how and where to retrieve them, and be aware of how to store and who communicate new information. Considering that the CI process generates a large amount of information, there is a preoccupation with how they will be managed. The knowledge generated in the process of CI needs to be transferred to the organization, this being the basis for the generation of new knowledge, promoting a culture focused on knowledge management.

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