

## Economic intelligence practice

### Case study of the Bejaia port company BPC

#### ممارسة الذكاء الاقتصادي

#### دراسة حالة شركة ميناء بجاية BPC

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#### Abstract:

The purpose of this article is to examine how economic intelligence (EI) is practiced within one of the national companies. If the Algerian scientific literature has given great interest to EI, it remains that the theoretical aspect dominates and prevails over the empirical studies. To contribute to the understanding of the practice of EI within local companies, a case study was carried out with the port company of Bejaia BPC. The study consisted of the analysis of qualitative data from eleven interviews conducted with the managers. The results of this analysis show the presence of some aspects of EI (collection, processing, and dissemination of information) having much more of a "spontaneous" character. However, the organisational aspects (coordination of activities and actors, staff qualification, etc.) and the mastery of the learning process as a whole are not practiced in this company.

**Keywords:** economic intelligence, information, knowledge management, coordination of activities and actors, Bejaia Port Company (BPC)

M2 ، M14،L2، ،D21 ، D8 :JELs تصنيف

#### ملخص:

الغرض من هذه المقالة هو دراسة كيفية ممارسة الذكاء الاقتصادي (EI) داخل إحدى الشركات الوطنية. إذا كانت الأدبيات العلمية الجزائرية قد أولت اهتماماً كبيراً بالذكاء الاقتصادي، فلا يزال الجانب النظري يهيمن ويسود على حساب الدراسات التجريبية. للمساهمة في فهم ممارسة الذكاء الاقتصادي داخل الشركات المحلية، تم إجراء دراسة حالة مع شركة ميناء بجاية BPC. اشتملت الدراسة على تحليل البيانات النوعية من إحدى عشرة مقابلة أجريت مع المديرين. تظهر نتائج هذا التحليل وجود بعض جوانب الذكاء الاقتصادي (جمع ومعالجة ونشر المعلومات) التي لها طابع "تلقائي". ومع ذلك، فإن الجوانب التنظيمية (تنسيق الأنشطة والجهات الفاعلة، وتأهيل الموظفين، وما إلى ذلك) وإتقان عملية التعلم ككل لا تمارس في هذه الشركة.

**الكلمات المفتاحية:** الذكاء الاقتصادي، المعلومات، إدارة المعرفة، تنسيق الأنشطة والجهات الفاعلة، شركة ميناء بجاية (BPC).  
JEL codes classifications : D8, D21, L2, M14, M2.

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## 1. Introduction: Context and issues

In a context of strong competition, absolute uncertainty, and an unstable environment on the one hand, and the emergence of the knowledge economy and the hypertrophy of ICTs on the other, the imperatives of reactivity and flexibility are becoming the essential strategies for companies, otherwise, their survival will be compromised. The deployment by companies of operational levers for monitoring and economic intelligence activities, in line with their strategies, has become essential for maintaining their performance and competitiveness.

The managerial practice of such monitoring activities is the signal not only of their awareness of the multiple issues generated by the movement of globalisation of exchanges but also the proof of their predisposition to enter into osmosis (in the systemic sense of the term) with their environment.

It is by this means that we will put our finger on one of the organisational aspects at the origin of the counter-performances recorded by Algerian companies. In other words, we will try to understand the mechanisms of integration of these companies of the collected information by questioning how they are implemented in the framework of economic intelligence. To verify this, the case of the public port management company Bejaia Port Company BPC was chosen.

First, we will identify the main dimensions of EI. Then, in the second step, we will define the main steps of the process (of the approach). Finally, the practice of EI will be verified in the case of the BPC company, using a qualitative approach through semi-directive interviews conducted with a group of company managers.

## 1. Review of the literature

Just as the practice of EI is plural, the literature on the subject is abundant and is approached according to the different levels of economic analysis (microeconomic, mesoeconomic, and macroeconomic). Our search in the ASJP national platform by the two keywords (economic intelligence and business intelligence) brings up about 80 publications in the fields of economics and management. Not to mention the thesis work and scientific events on the theme organised periodically since the beginning of the 2000s to date (Ministry of Industry, National Economic, Social and Environmental Council, University of Algiers, HEC Algiers, University of Continuing Education, University of Sidi Belabbas, etc.). This testifies to the interest shown in the subject by the national scientific community.

### 1.2. Definitions

The diversity of EI practices explains the abundance of definitions produced in the literature, according to different fields (marketing, management, strategy, economic development, defense...). However, in the Algerian context, it must be noted that the literature produced, particularly that consulted in the ASJP platform, is mostly theoretical (conceptual) and lacks empirical studies that could shed light on the extent to which Algerian companies practice EI.

The few empirical works identified are those carried out, for example, by (Hadjadj, 2019). In his thesis, which is interested in the impact of economic intelligence on the performance and competitiveness of the company in Algeria, a survey carried out on a sample of 204 companies, using the Partial least square-path modeling method, and which concluded that there was a "partial" effect of economic intelligence on the competitiveness of the companies surveyed and, by this means, on their performance. (khalfallah et al., 2022). In the same vein, the authors of the study by

the French Institute of Economic Studies (IES) observe the importance of economic intelligence in strengthening the competitiveness of companies. A sample of 240 managers of companies in the communication sector was selected and questioned. The analysis of the data revealed a strong correlation between the determinants of competitiveness (measured by their financial and economic performance) and the business intelligence system put in place by these companies (strategic intelligence and business environment conditions).

(Chalouli & kariche, 2022), in the case of SMEs, their study focused on the importance of cultural factors as key success factors for business intelligence in SMEs, intending to contribute to the management of information from the external environment. The verification was carried out through a qualitative survey (interviews) with the managers of the company "King diagnostics" which operates in the pharmaceutical industry in the city of Algiers.

Also, (Yabouche & Boukhatem, 2020) try to identify the contribution of business intelligence in improving the performance of companies. The case study of Henkel Algeria company is used. The main results state that business intelligence has a significant impact on business performance, especially in terms of cost reduction, revenue increase and improved customer satisfaction.

(Alkinai, 2019) studies the practice of EI among SMEs was carried out by a sample of 80 SMEs in the wilaya of Blida. By analysing the data through multiple regression, the study concludes that there is an awareness of the importance of EI for companies. However, they are not yet willing to implement EI approaches as recommended in the literature and practiced by successful companies. Finally, (Hamidou Benyelles & Tchouar, 2017) surveyed 50 companies in the wilaya of Tlemcen to verify the role of EI in the performance of local companies. The study of the responses shows the existence of an EI practice, particularly in the collection and use of information, but it is not organised and not formalised.

Given the lack of empirical work on EI practices in the Algerian context on the one hand, and the multiplicity of definitions which is explained by the complexity of the concept, on the other hand, we have chosen to retain the definitions of EI which emphasise the organisational aspects (knowledge management and organisational learning, coordination of activities, etc.). Some of these conceptions are listed in the following table:

**Table 1.** Definitions of economic intelligence

Authors	Definitions
<p><b>Wilensky H. 1967.</b>  <b>Organisational intelligence,</b>                      Quoted in Monino, J. (2013).                      Information at the heart of                      strategic business                      intelligence. <i>Market and                      Organizations</i>, 18, 25-39.  <a href="https://doi.org/10.3917/maorg.018.0025">https://doi.org/10.3917/maorg.018.0025</a></p>	<p>"Economic intelligence is an activity of knowledge production serving the economic and strategic goals of an organisation, gathered and produced in a legal context and from open sources.</p>
<p><b>Baumard Ph.</b>  <b>Strategy and monitoring of                      competitive environments,</b>  <i>Paris, Masson, 1991, P.32</i></p>	<p>"...an offensive and defensive practice of information. Its objective is to link several domains together to serve the tactical and strategic objectives of the company. It is a tool for connecting action and corporate knowledge."</p>

<p><b>The report for the French Commissariat Général du Plan, chaired by Henri Martre in 1994</b></p>	<p>"The set of coordinated actions of research, processing, and distribution, with a view to its exploitation, of information useful to economic actors. These various actions are carried out legally with all the guarantees of protection necessary for the preservation of the company's assets, under the best conditions of quality, deadlines, and cost. Cited by Moinet, N. et al (2006). <i>L'intelligence économique</i>, Edition ESKA, Paris, p85.</p>
<p><b>Definition of AFDIE [2001] (French Association for the Development of Economic Intelligence)</b></p>	<p>"Economic intelligence is the set of means which, organised in a knowledge management system, produces information useful for decision making in a perspective of performance and value creation for all stakeholders.</p>
<p><b>Bernard Besson, Jean-Claude Possin, <i>The economic intelligence audit, setting up and optimizing a coordinated collective intelligence system</i>, Dunod, 2002.</b></p>	<p>"Economic intelligence is the concerted control of information and the co-production of new knowledge. It is the art of detecting threats and opportunities by coordinating the collection, sorting, storage, validation, analysis, and dissemination of useful or strategic information to those who need it. It will involve protection adapted to all stages of its development: acquisition, processing, exploitation, and to the resulting heritage with particular attention to the premises (...). Essentially, economic intelligence is an information cycle whose purpose is to produce strategic and tactical intelligence with "high" added value.</p>

Within the different definitions, we can retain that a company's economic intelligence refers to the capacity to make better decisions by understanding the current and future economic environment. This gives the company new knowledge, enables them to anticipate and respond to changes in the market, which can have a significant impact on the bottom line.

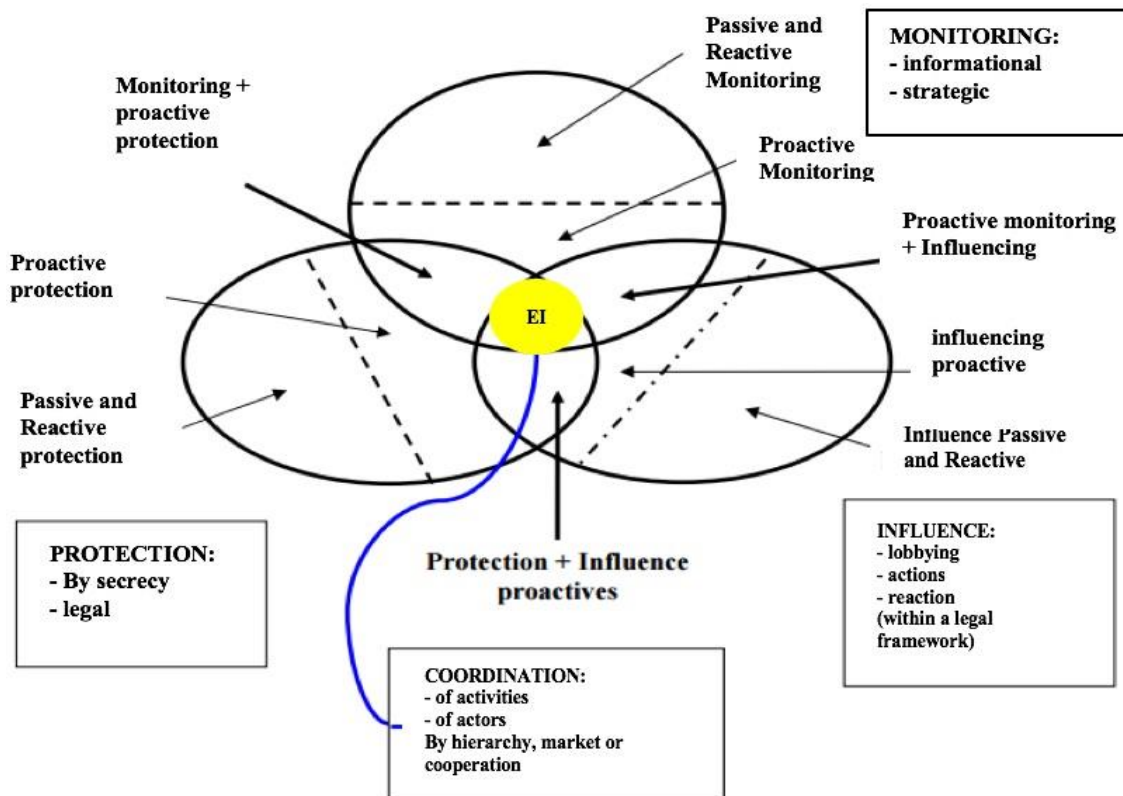
Intelligence economic dimensions and functions

The three dimensions of EI are :

1. Influence: acting on the environment influencing certain actors to influence the environment in one's favour;
2. Monitoring : it consists of researching, processing, and disseminating information with a view to its exploitation;
3. Security : is about protecting one's information from external risks and unintentional or malicious leaks.

However, from a systemic and organisational point of view (Ursăcescu & Cioc, 2012), these dimensions integrate and influence each other, depending on whether the company's attitude is passive or active. The coordination of activities in each of these dimensions reflects the active behaviour of the company in the management and control of information. This is what Paturel (2008) suggests in the following model:

**Fig.1.** Dimensions of business intelligence



IE = VIP + C, where V = Watch; I = Influence, P = Protection and C = Coordination of both actors and activities.

**Source:** Adapted from Paturel, 2008

### 1.3 The stages of the process of IE and their requirements

To master and add value to the information, it is necessary to account for the stages of the process and to know the requirements. In other words, the added value to be provided by EI, as a decision support tool, is conditioned (determined) by the requirements inherent in each of the stages of the EI process. But, before enumerating some of these conditions, it is necessary to note from the outset the impact that the structure of the organisation (level of hierarchy versus the level of transversality) has on the successful execution of the business intelligence approach in all its phases.

The process begins with the expression and clear identification of information needs concerning the objectives, which must also be identified and shared with the company's employees. Then comes the stage of organising the collection of information, considering the conditions of the relevance of the information and the quality of the sources with their diversity (internal and external, formal and informal...). During this collection phase, the monitoring of the environment and its organisation in networks (internal and external), but also the consideration of the constraints of costs, time, motivation, and qualification of the watchers, etc., must be considered to succeed in the next stage. The third stage of the process concerns the analysis of the information collected. This analysis has two sub-steps: first, the validation of the information, and then its enhancement. Analysis tools are available to the watchers to add value to the information (bibliometrics, SWOT analysis, Delphi method...). Once the synthesis of the information is achieved after its analysis, comes the penultimate step which is the memorization and security of the information. These tasks aim to facilitate access to potential users and to serve the decision-making process, particularly for

repetitive decisions. Particular security must be organised for information that is considered "sensitive". Finally, the process ends with the dissemination of the analysed information. Dissemination must be organised at the right time and with the right people, to ensure a better decision and develop a good strategy.

For more details about the different and many analysis tools available at each of the stages of the process, we can refer to Kislin P. (2007:219). The activities, methods and tools associated with different stages of economic intelligence process and the principal actor by stage (the decision-maker and the watcher) are resumed in the table below. We can also refer to Jakobiak (2009) who suggests in his book a series of EI techniques including the selection of areas to be monitored, information acquisition, dissemination and exploitation of EI.

**Table 2.** Activities, methods and tools associated with different stages of economic intelligence process

No.	Stages of economic intelligence process	Actors	Activities & Areas of expertise	Examples of tools
1.	Identification of the problems to solve in terms of threat, risk and danger	Decision-maker	- Knowledge of immediate and extended environment (Firm, sector of activity, markets, etc.)	- Analysis methods and tools: Pareto, SWOT, Ishikawa diagram, BCG matrix, MACTOR method, value analysis, Six Sigma, Business process, etc. - MEPD questionnaire - Business Plan, Project Management, Gantt, Pert, etc.
2.	Transformation of decision-problem into information search problem	Decision-maker and watcher	- Skills for decision problem analysis and informational problem projection - Translation and contextualization of demands, prior research and stored cases - Defining the basket of informational indicators - Monitoring and evaluating the translation process	Needs analysis and tools (MEPD, MEDESIE, UML, requirements engineering, etc) - Auditing method and tools, TQM, PDPA - Brainstorming tools and concept mapping - Computer Supported Cooperative Work, (Groupware tools, E-mail, E-conference, workflow) - Case-Based Reasoning Methods
3.	Identification of relevant information sources and validation of sources.	Watcher	- Search for formal and Informal sources; - Selection of appropriate sources for the decision problem, memorization, and information traceability	- Private networks - Databases, documentary software - Browsers, meta-browsers - Enterprise Information Portal (EIP) - Surveillance Software for sources
4.	Collection and validation of information	Watcher	- Valuation of the indicators by information retrieval - Crossing sources, procedures	- Alert agents - Intelligent agents - Specialized portals - Specialized browsers

			information. - Skills and abilities for information systems and documentary languages (thesaurus, query language, creation of queries)	- Documentation - Archives and other recording tools - Semantic Web
5.	Processing the collected information for the calculation of indicators	Watcher	- Intellectual and physical processing of documents (description, tracking, indexing, memorization, abstract, bibliography, synthesis, ...) - Linguistic processing and information mapping (translations, visual representations of information)	- Automatic abstracting and summarizing tools - Classification tools - Content extraction tools, concept mapping - Infometry, statistical methods and tools
6.	The adapted presentation of informational solutions	Watcher	- Elaborating a final format for presenting information (contingency tables, graphs, surveillance reports, synthesis notes, reporting)	- Birotics, PAO, - Collaboration tools, - Sharing tools - Dissemination tools
7.	Interpretation of the information.	Decision-maker	- Ability to analyze and interpret information	- Decision support systems (DSS), SIS, Data Warehouse, Data Mining
8.	Decision making for the resolution of the problem	Decision-maker	- Knowledge of decision-making process - Monitoring the informational indicators - Monitoring the indicators for decision-making	- Management tools, Scoreboard, decision matrix
* throughout the entire process	Protection of informational patrimony	Watcher and decision-maker	- Identifying, disseminating, storing, sharing and protecting knowledge - Selective dissemination of information	- Security software for systems and networks, firewalls, antivirus, cryptography and steganography - Patents, quality norms, brand image, etc. - Securization of LAN and PAN networks, Video Surveillance systems, - Intranet, virtual private networks, secured protocols and secured networks.

**Source:** adapted from (Kislin, 2007)

The organisational learning dimension is strongly linked to the mode of environmental scanning used in EI. This is highlighted by (Choo, 2001), in a theoretical contribution, where he proposes four environmental scanning, for scanning modes: undirected viewing, conditioned viewing, enacting, and searching. For each scanning mode, its characteristic information needs, information seeking and information using behaviour are identified. In addition, organisational learning processes are analysed by considering the meaning-making, knowledge creation and decision-making processes at work in each mode.

In another contribution, (Choo et al., 2006) considers that the company can develop an information strategy, or even an information culture that goes beyond the use and simple management of information. To argue for that, the authors present a case study of a large Canadian law firm with a distinctive information culture that is vigorously implementing an information management strategy. Our results suggest that information culture outweighs information management in its impact on information use outcomes. Thus, strongly held corporate information values and behaviors explain more than a third of the variance in information use outcomes. Employees perceived a high level of information management activity in the company, although information management played a smaller, perhaps indirect, role in explaining the information use scores. What can companies do to improve information use? This study suggests that organisations would do well to recognise that, in the rush to implement strategies and systems, information values and culture will always have a determining influence on how people share and use information.

Also (Arefin et al., 2015) identifies the influence of organisational strategy, structure, process and culture on organisational effectiveness and the possible mediating role of business intelligence (BI) systems among them. Data were collected from sample of 225 organisational units in Bangladesh and analysed using partial least squares method (structural equations). The results revealed that organisational factors, such as organisational strategy, structure, process and culture, positively affect the effectiveness of BI systems and organisational effectiveness. Furthermore, the effectiveness of BI systems partially mediates the impact of organisational strategy, structure, process and culture on organisational effectiveness.

## **2. The methodology of the survey**

To better understand and examine what type of economic intelligence practice is observed at the Port Enterprise of Bejaia BPC, the qualitative approach is chosen. It consists here, in the sense of Poisson (1983), in carrying out semi-directive interviews with the company's managers. This choice is justified by the sensitivity and complexity of the research topic, as well as the fact that qualitative methods are well suited to the study of opinions, behaviors, and practices of individuals, to identify and analyse the actions of the implementation of EI. Of course, quantitative studies are frequently used to investigate this issue.

### **2.1. The port company of Bejaia BPC**

The Bejaia Port Company was founded on 14 August 1982 by the provisions of decree number 82-282 published in the official journal number 33 and is placed under the supervision of the Ministry of Transport. Within the framework of the law on the autonomy of companies, it was transformed into an Anonymous society or joint-stock company (SPA) with a current share capital of one billion seven hundred million DZ.

In its website, the company displays its objectives of competitiveness and leadership in its field with a commitment to social and societal responsibility: "To maintain the Port of Bejaia as a high-performance port, a catalyst for the competitiveness of the national economy, a driving force for regional development and a key player in the national positioning as a dynamic logistics platform. It is in light of these ambitious objectives that we will try to examine whether the practice of EI in place is really in line with these announced objectives.

### **2.1 The choice of the survey tool**

Among the qualitative data collection instruments, the interview was used. Its content and implementation are summarized in the following:

#### **2.1.1 The interview**

For this survey, we chose to conduct semi-structured interviews with 11 managers from different departments of BPC. These interviews made it possible to obtain qualitative data (discourse).

The interview guide, which aims to reproduce the real image of the BPC's eligibility criteria for business intelligence, is divided into six parts covering the dimensions of business intelligence:

1. The first part is entitled "the perception of economic intelligence". It includes questions relating to the degree of understanding and interest of the interviewees in economic intelligence.



2. The second part, entitled "Needs identification and information gathering", aims to clarify how needs are identified and by which actor. It also discusses issues of collection and the sources used.
3. The third is concerned with "information processing and analysis".
4. The fourth looks at "storing and protecting information".
5. The fifth looks at the company's practices in terms of "dissemination of information and the means of ensuring this function".
6. The practice of influence actions in the field of economic intelligence was the subject of the last section.

### 2.1.2 The conditions under which the interviews were conducted

Eleven interviews were conducted, by the collaboration of two master students, with employees in different management positions within BPC. These interviews with the collaboration of two master students. The following table shows the respective times of the interviews with each of these managers.

**Table 3.** Interviewees by position held

Interviewees	Position held	The duration of the interview
M.	Head of the accounting department	45m
M.	Head of billing department (commercial)	30m
Ms.	Head of Legal Department	48m
M.	Port insurance	1h
M.	Director of Logistics Cross-functional management	1h 10m
M.	Director of Finance and Accounting	47m
Ms.	Head of Career Services	50m
Ms.	Head of Internal Audit	55m
M.	Assistant to the CEO in charge of the computer center	1h 30
Ms.	Marketing Research and Planning Department	1h
M.	Head of Budget Department	49m

The interviewees expressed themselves freely on the subject and answered all the interview questions clearly. The interviewee first gave us some general information about the company, then answered the questions in the guide (see appendices), sometimes reworded to obtain the maximum amount of information. The time given to us by each of the interviewees allowed us to transcribe as much information as possible in the form of note-taking, since we could not record it in verbatim form, due to the sensitivity of the subject, as we have argued below.

### 2.2 Method of processing data

As a tool for processing the interviews, we used the summary method (Y. Poisson 1983), which consists of summarising the answers of the interviewees for each question asked. As recommended by Bardin (1980), the combination of two methods of content analysis (thematic analysis and discourse analysis) makes it possible to carry out two types of processing of our data: qualitative processing and quantitative processing.

### 3. Results and interpretations

#### 3.1 Processing of responses

Following the processing of the answers obtained from the interviews with BPC employees, we report the following main results by theme:

#### Theme 01: Perception of business intelligence

Question	Result and interpretation
Do you have any idea about the concept of economic intelligence ?	Out of 11 employees interviewed, Slightly more than half (57%) consider business intelligence to be the research, collection of important information, and the necessary tools that can help the company to anticipate and foresee potential developments that will enable it to cope with the competition, the technological environment, customer requirements and the evolution and changes in the various standards. The remaining 43% have no idea about the concept of EI.
Who has a global vision of the information cycle at the company level?	Unanimously, 100% of the interviewees affirmed that it is the CEO, in his capacity as manager and decision-maker, who has all the information at his disposal and transmits it to the parties concerned.
Is there a structured information retrieval practice in your company?	Only 07% (or one-tenth) of the interviewees were aware of an information research practice, namely the SWOT analysis method of the 5 years before and 5 years ahead under the marketing department to detect threats, opportunities, strengths, and weaknesses. The remaining 93% are satisfied with the information available to them.
What do you think of the idea of setting up a business intelligence unit within your company?	78% of the interviewees think that the idea of setting up an economic intelligence unit is a positive point for the company to involve them in the practice of research to take economic decisions.

The Port Enterprise of Bejaia has become aware of the importance of the impact of economic intelligence. All the interviewees agree on this point. They are aware of the interest and the role of information for the survival of the company in a globalised and changing environment. However, they diverge on the organisation of research, hence the difficulty of setting up an appropriate economic intelligence structure and the absence of an organisation around this structure.

#### Theme 02: Needs assessment and information gathering

Question	Result and interpretation
How are the company's information needs detected?	All the interviewees say that the detection of the company's information needs is done administratively. Except the marketing and IT departments, which carry out a diagnosis of the internal and external environment to detect the company's needs.

Do you have information-gathering tools? What sources do you use?	All the interviewees from the company say that the tools for collecting information are: registers, IT (the port information system SIP), posters, e-mail, employees, customers, suppliers, the press, the Internet, newsletters, and archiving.
How is the data collected? What sources do you use?	40% of the answers to this question remain unclear. Respondents say that collection is done on an occasional basis. While the remaining 60% said that it is done through customer surveys, passenger surveys, and relationship building. The sources used are the SIP, the press, the internet, internal newspapers, trade fairs, customers, employees, posters, word of mouth, etc.
Are you developing an information culture in your company?	We are in Algeria in a context of strong explicit recognition. It is difficult in terms of communication to convey information effectively. The interviewees say that the information culture within the company is occasional.

In this area, a huge contradiction is noted in the answers between the interviewed employees. Those who say that the detection of needs has no procedure and no action plan are established beforehand and no software is used for the collection of information. Each facility director defines his or her information needs by assigning one of his or her staff to collect it if the information exists at the facility level, otherwise, he or she expresses it to the hierarchical structure to which he or she is attached. Others say that strategic methods are used to detect information needs, such as surveys, customer surveys, fairs, exhibitions, and relational contacts. The sources used for collecting information are formal (registers, computer, regular newsletters, press, internet) and informal (contacts, customers, seminars). According to the responses obtained, staff awareness is occasional, and information culture is almost absent.

### Theme 03: Information processing and analysis

Question	Result and interpretation
How can useful information be extracted from a huge amount of information?	The collection, extraction and exploitation of information remain problematic. Finding useful information is often difficult. This is due to the fact that the company is content with classic and rudimentary means in its document management (bulletins, Internet documents, registers, linking sheets, reports, notes, etc.). This makes it difficult to extract and use the information.
How are they analysed? Do you use computer software or expert networks?	All the interviewees say that the information is analysed in a raw way without technological means. The information is subject to human exploitation with the corollary that it cannot meet a need.

The study shows that the BPC does not use scientific tools to analyse and interpret the raw information collected. It makes do with classic and rudimentary means (newsletters, internet, register, liaison sheet, report, notes) and human exploitation in the framework of working meetings.

**Theme 04: Information storage and protection**

Question	Result and interpretation
How is information stored? Where is the company's memory located and who is responsible for it?	All the respondents state that the memory of the organisation remains at the level of the top management where the most strategic information is stored. The responsibility lies directly with the top manager appointed by the board of directors.
What measures do you use to protect your company's information assets?	The majority of interviewees say that the company's internal information is stored in a SIP port information system which is accessible to all personnel. But strategic - external information is not available in the SIP. To protect information in the company, there are only access codes for PCs. For the moment, the traditional systems are used for confidential information, but the BPC has planned to be more vigilant in order to avoid exposing itself to risks since it has the means to protect itself.

The storage media used are paper and electronic files accessible to all company staff. However, strategic information remains stored at the level of general management, which, through its competence, designates the person responsible for this information.

For protective measures at the company level, there are access codes for PCs in addition to a documentation on the rules to be followed and which contain information of a confidential nature.

**Theme 05: Information dissemination**

Question	Result and interpretation
Is there a culture of information sharing across the different departments of the company?	90% of the interviewees say that information is shared depending on its nature and degree of sensitivity within the company. Information is only disseminated to the interested party.
What tools do you use to disseminate information in your company? within your company?	Orally during meetings, seminars, or interviews, Internet via e-mail, the Port Information System (PIS), dashboards, social networks, electronic journals, newsletters...

At the BPC level, there is no quality of know-how. It is not developed among all staff. Dissemination is done for each entity according to its needs and according to its activity, in the form of paper or electronic files. In most cases, the information processed is intended for managers, using the following channels depending on the degree of sensitivity of the information

- Orally in meetings, seminars, or interviews;
- Internet : by e-mail ;
- In internal journals or newsletters.

Information is shared according to the information needs of each directorate. Information sharing is therefore limited.

**Theme 06: Influence**

Question	Result and interpretation
	<p><b>100%</b> of the interviewees said that the company uses a range of means, particularly networks: maintaining close relations with the media and the local press (radio, local newspapers, etc.) to prevent rumours. The company participates in events and sponsorships to maintain its image.</p> <p><b>7%</b> of the interviewees added that the BPC does everything, including gifts, to preserve its interests.</p>
Does your company have the means to influence government decisions (laws, standards, or regulations)?	For this question, all respondents gave the same answer as the previous question (no answer)

In terms of influence, and safeguarding its interests, BPC uses various means: the media, the press, the company's general assemblies, diplomatic representations, the events it organises, one-off events, seminars, etc.

In summary of this case study, the practice of EI by BPC is far from being in line with the approaches proposed (organisational learning, information culture) in the scientific literature cited above. Below, we propose a SWOT diagnosis of the practice of EI by the company BPC Bejaia.

**3.2 Establishment of a SWOT analysis for BPC concerning economic intelligence**

Based on the information gathered through documentary research within the BPC and the interviews carried out within the same organisation, we will try to detect the strong and weak points of the company and even detect the threats and opportunities in terms of economic intelligence:

**Table 4. SWOT analysis for BPC concerning economic intelligence**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Awareness of the importance of business intelligence in general management;</li> <li>- Establishment of the company of qualified personnel: academics, qualified practitioners, and provision of financial means.</li> <li>- Various training courses have been undertaken in various disciplines including project management and information systems engineering, marketing, IT, organisation and prevention of business information systems, and business information system security.</li> <li>- The organisation of archives is done at the initiative of each structure that manages</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of monitoring tools (software for collecting, processing, and protecting information), the company uses classic and archaic tools;</li> <li>- Lack of an information-sharing culture within the organisation ;</li> <li>- No action is taken to raise staff awareness of the value of information;</li> <li>- Staff not qualified in business intelligence and training (theoretical or practical) undertaken by the company is insufficient.</li> <li>- The staff does not also have qualifications in information protection.</li> </ul>

and organises its documents.

Opportunities	Threats
<ul style="list-style-type: none"> <li>- The BPC has a perfect knowledge of its environment due to its creation several years ago and also thanks to its activities and experience in the field.</li> <li>- Access to some information is not expensive, especially the use of the Internet.</li> <li>- The development of technologies and in particular communication and information techniques.</li> <li>- Several training and awareness-raising seminars on economic intelligence have been organised in recent years by various public (including universities) and private institutions.</li> </ul>	<ul style="list-style-type: none"> <li>- The non-existence of a national policy and an institutional or even organisational framework for the promotion of economic intelligence in Algeria.</li> <li>- There are no institutions (public or private) specialised in the production of information in all fields;</li> <li>- The risk of piracy is becoming increasingly important (many national public companies have already been targeted);</li> <li>- The non-existence of consultancy and support firms in the field of economic intelligence in Algeria.</li> <li>- The environment is becoming increasingly uncertain due to regulatory changes.</li> <li>- Economic, financial, health, and security hazards on a global scale (the 2015 maritime traffic crisis, the Covid-19 pandemic, the war in Ukraine, etc.).</li> </ul>

Source: produced by the authors

### 3.3 Proposals for an intelligence approach

Because of the results of the interviews conducted and the SWOT matrix generated, a few proposals can be put forward to deal with the various dysfunctions observed. These proposals are likely to help in the implementation of an economic intelligence approach that is in line with the company's strategic objectives. However, it is necessary to emphasize that the case study that has just been carried out can in no way replace an audit to be carried out with experts in the field.

Moreover, given that the human factor occupies a predominant and unavoidable place in the economic intelligence process, the implementation of such an approach, therefore, requires the participation of all employees. The aim of raising staff awareness is to ensure that everyone adheres to the process (to the approach). It can be done through notes explaining the importance and the stakes of economic intelligence, through the publication of articles "popularising" economic intelligence in the company's newspaper, and through the organisation, within the BPC, of training courses and internal conferences in the field to train staff in the implementation of this approach. Although these actions are costly at the outset, they are nevertheless necessary.

In addition, transversality between the different levels of responsibility (general management, sales management, marketing and communication management, financial and accounting management, human resources management, and medium-sized companies) would make it possible to define the strategic line to be pursued and the best way to help the decision-maker make the most relevant choices at the right time.

To this end, we propose the designation of a unit in charge of the various functions of economic intelligence, which will include

### **The Business Intelligence Officer**

It is necessary to appoint a general manager for economic intelligence within the BPC who must be a senior executive with experience within this company and have specialized training in economic intelligence therefore he must have the qualities (motivated, open, cultured, team player, leader.....) to ensure the execution of all stages of the process of setting up a serious approach to economic intelligence.

This person, who has been delegated general authority, is responsible for leading, coordinating, and organising the tasks of the watchdogs, analysts, and networks to assist the organisation's decision-making, influence, performance, and protection. The manager is also responsible for the maintenance of internal and external networks and for auditing the functioning of business intelligence within the BPC.

### **The watchers**

Or observers who are specialists in documentation, information gathering, and research. They must have a perfect knowledge of the sources of information. Therefore, there are two categories of watchers:

1. Those who deal with documentary information will be in contact with formal sources (databases, documentation centers, Internet...) and using computer tools;
2. Those who deal with informal information and therefore will be in direct contact with customers, suppliers, partners, etc. at trade fairs, conferences, etc.

### **Analysts or experts**

- They are responsible for validating, interpreting, and analysing the information provided by the watchdog (formatting, classifying, and graphically representing it, etc.) and thus providing the decision-maker with indicators (reporting, dashboards, etc.) as a basis for decision-making.
- They can be employees of the company who are specialists in a specific field or actors from outside the company (accountants, lawyers, etc.).
- Designation of a person responsible for the protection of information assets;
- Creation of a network of contacts that will be called upon whenever the company needs to answer specific questions, mainly of a strategic nature.

### **Conclusion**

The objective of this study was to see to what extent the port enterprise of Bejaia practices economic intelligence. The analysis of the interviews shows that the company practices it intuitively or spontaneously (the existence of a certain awareness among the managers) but without aligning it with its strategic objectives. Interviews with the managers of the company's main functions allow us to deduce the low level of coordination between these functions. The company's hierarchical-functional structure hurts the implementation of transversality between departments.

Consequently, the dimension underlying the practice of EI, namely organisational learning, is the weak link and the major challenge that the company's managers must face if they want to improve their competitive position, starting with the recommendations suggested above.

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## **Appendix: the interview guide**

### **Perception of business intelligence**

- Do you have any ideas about the concept of business intelligence?
- What importance do you attach to information in your company? 3-Who has an overall view of the information cycle at the company level?
- Is there a structured information retrieval practice in your company?
- What do you think of the idea of setting up a business intelligence unit within your company?

### **Detection of needs and collection of information**

- How are the company's information needs detected?
- How is the data collected? What sources do you use?
- Do you have the tools to collect information? What sources do you use?
- Are you developing an information culture in your company?

### **Information processing and analysis**

- How can useful information be extracted from the vast amount of information?
- How are they analysed?
- Do you use IT tools, expert networks?

### **Storage and protection of information**

- How is information stored? Where is the company's memory located and who is responsible for it?
- What measures do you use to protect your company's information assets?

### **Dissemination of information**

- Is there a culture of information sharing across different departments in your company?
- What tools do you use to disseminate information within your company?

### **The influence**

- Do you use lobbying to protect your company's interests?
- Does your company have the means to influence the decisions of public authorities (laws, standards, regulations)?