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## MASTER'S DISSERTATION

Submitted in partial fulfilment of the requirement for a master's degree in

### “STRATEGIC MANAGEMENT AND INFORMATION SYSTEM”

#### THE INTEGRATION OF COMPETITIVE INTELLIGENCE IN AN ORGANIZATION'S DECISIONAL SYSTEM

CASE: SAA

**Elaborated by:**

HAMDI PACHA Ayet Ahlem

**Supervised by:**

Dr.LADJOUZI Soumiya

**Presented on June 13th 2023, in front of a jury composed of:**

**FERROUKHI Amine**

Senior lecturer, ENSM

President of the jury

**TOUMI Djamila**

Lecturer, ENSM

Examiner

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## ABSTRACT

Organizations have been increasingly recognizing the value of competitive intelligence in enabling informed and proactive decision-making. By integrating competitive intelligence within their decisional system, organizations can enhance their ability to anticipate market changes, identify opportunities, and mitigate risks. This integration involves incorporating strategic intelligence practices, tools, and methodologies into the organization's decision-making processes and workflows of the organizations.

The main objective of our study is to unfold and highlight the importance and impact of integrating competitive intelligence in the decision making process within the SAA. To do that we conducted two qualitative studies; the first addressed the practice and place of competitive intelligence in the SAA, meanwhile the second tackled the decision-making process and how CI contributes in optimizing it. Both studies were conducted via semi-directive interviews with SAA's managers and CI operators.

Results showed that the integration of competitive intelligence in an organization's decisional system enables decision-makers to access reliable and valid information that informs their choices. It supports the generation of key performance indicators (KPIs) and the development of interactive dashboards, facilitating performance monitoring and evaluation. This integration empowers decision-makers to make data-driven decisions, track progress, and make necessary adjustments to achieve strategic objectives.

**Key words:** information, competitive intelligence, decision-making, SAA.

## Résumé

Les organisations reconnaissent de plus en plus la valeur de la veille stratégique pour permettre une prise de décision éclairée et proactive. En intégrant la veille stratégique au sein de leur système décisionnel, les organisations peuvent améliorer leur capacité à anticiper les changements du marché, identifier les opportunités et atténuer les risques. Cette intégration implique d'incorporer les pratiques, les outils et les processus de la veille stratégique dans le processus décisionnel de l'entreprise.

L'objectif principal de notre étude est de mettre en lumière l'importance et l'impact de l'intégration de la veille stratégique dans le processus de prise de décision au sein de la SAA.. Pour ce faire, nous avons mené deux études qualitatives ; la première a porté sur la pratique et la place de la veille stratégique au sein de la SAA, tandis que la deuxième a abordé le processus décisionnel et la contribution de la VS à son optimisation. Les deux études ont été menées via des entretiens semi-directifs auprès des veilleurs et des managers de la SAA.

Les résultats ont montré que l'intégration de la veille stratégique dans le système décisionnel d'une organisation permet aux décideurs d'accéder à des informations fiables et valides qui éclairent leurs choix. Elle soutient la génération d'indicateurs clés de performance (KPI) et le développement de tableaux de bord interactifs, facilitant le suivi et l'évaluation des performances. Cette intégration permet aux décideurs de prendre des décisions fondées sur des données obtenues à partir de sources fiables et dignes de confiance, de suivre les progrès et d'apporter les ajustements nécessaires pour atteindre les objectifs stratégiques de la SAA.

**Mot clés :** l'information, veille stratégique, prise de décision, SAA.

## ملخص

تعترف المؤسسات بشكل متزايد بقيمة اليقظة الاستراتيجية في تمكين عملية صنع القرار المطلعة والاستباقية. من خلال دمج اليقظة الاستراتيجية ضمن نظامها القراري، يمكن للمؤسسات تعزيز قدرتها على التنبؤ بتغيرات السوق وتحديد الفرص والتخفيف من المخاطر. يشمل هذا التكامل إدماج ممارسات وأدوات ومنهجيات الاستخبارات الاستراتيجية في عمليات صنع القرار وسير العمل داخل المؤسسة.

الهدف الرئيسي لدراسة البحث هو الكشف عن أهمية وتأثير دمج اليقظة الاستراتيجية في عملية صنع القرار داخل شركة التأمين. لتحقيق ذلك، أجرينا دراستين نوعيتين؛ الأولى تتناول ممارسة ومكان اليقظة الاستراتيجية في الشركة، في حين تتناول الثانية عملية صنع القرار وكيفية مساهمة اليقظة الاستراتيجية في تحسينها. تم إجراء كلتا الدراستين من خلال مقابلات شبه موجهة مع مجموعة بين صانعي القرار ومشغلي اليقظة الاستراتيجية في شركة التأمين الوطنية.

أظهرت النتائج أن دمج اليقظة الاستراتيجية في نظام صنع القرار داخل المؤسسة يتيح لصانعي القرار الوصول إلى معلومات موثوقة وصحيحة تدعم اختياراتهم. يدعم ذلك إنشاء مؤشرات الأداء الرئيسية وتطوير لوحات التحكم التفاعلية، مما يسهل مراقبة الأداء والتقييم. يمكّن هذا التكامل صانعي القرار من اتخاذ القرارات المستندة إلى البيانات، وتتبع التقدم، وإجراء التعديلات اللازمة لتحقيق الأهداف الاستراتيجية.

**الكلمات المفتاحية:** المعلومات، اليقظة الاستراتيجية، صنع القرار، شركة التأمين الوطنية.

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## **LIST OF ABBREVIATIONS**

**CI: competitive intelligence**

**BI: business intelligence**

**IS : information system**

**SAA : national insurance company « Société Nationale de l'Assurance »**

**KPI : Key performance indicator**

# **INTRODUCTION**

## 1. Research context

The business and economic world is in constant and hasty evolution, consequently, organizations and companies are always under pressure to adapt to this rapid and growing rivalry, and taking part in this development can prove to be a hassle for them. Consequently, organizations in the business world constantly try to maintain their performance level steady; some even try to exceed it to stay ahead of the challenging business game (GERUNGAN, KINDANGEN, & SAERANG, 2022, pp. 791-799)

New products and services are constantly introduced to the market, and an organization needs to keep up with changes in the market. To grow and innovate in a competitive global economy, managers need to make quick and effective decisions. The growth and survival of an organization depends on valuable information that leads to effective decision making. (KATEBI, EHDAIE, & JALILIAN, 2022, pp. 354-376)

And in a time where information is considered to be one of the key resources for an organization, and a source of distinction and superiority, it became a paramount priority to understand what happens within the company's outer and inner environment, and with the revolution in information and communication technologies, it became undeniably crucial to keep up-to-date with the constant changing and evolution to take the maximum advantage of the positives of these alternations while avoiding the risks and downsides (SIHAMDI & BELAACHI, 2022, p. 294)

Therefore it became a necessity that a wide range of reliable and accurate information is needed in order to optimize the quality of the decision-making process and its results (KATEBI, EHDAIE, & JALILIAN, 2022, p. 355), to obtain said information in an adequate manner, some tools and equipment are installed to keep track on the needs of information expressed by decision makers, one of these tools being competitive intelligence CI which its goal is to gather all sorts of data and convert them into strategic information and knowledge to assist in optimizing the decision making process (Stefanikova, Rypakova, & Moravcikova, 2015, pp. 209-214)

So with competitive world and economy, organizations became prone to making quick and rapid decisions in the hopes of maintaining a position in their respective versatile markets. The

end goal of these decisions being the hope of obtaining a competitive advantage to differentiate them from their competition, such a goal can only be realized through making continuous valid and good decisions, in which information is one of the most important key assets. Hence the importance of CI which allows companies to master the art of managing these information and extracting the most value out of them in ideal timings to match the forever changing needs for decision makers. (KATEBI, EHDAIE, & JALILIAN, 2022, pp. 355-356)

## **2. Research objective**

The primary objectives of this research are:

- Introducing both concepts of competitive intelligence and decision making.
- Positioning competitive intelligence in the decision making process.

By fulfilling these objectives we will be able to attain the main objective of this study which is:

**Unfolding the effect of competitive intelligence on the decision making process in the Algerian insurance company SAA**

## **3. Research question**

Since decision making became the main axis of importance to many organizations, this calls for the research on the factors that contribute in achieving the best quality of decisions and better results and outcomes.

For this reason, this study was dedicated to identifying the link between CI and the DMP, and following previous research that was conducted on this topic, we formed our research question like so:

**How can competitive intelligence contribute in the decision making process in the Algerian insurance company SAA?**

To provide answers to the main research question it is deemed necessary to ask secondary questions;

- What is the importance given to CI within the SAA?
- What the operating stratus of CI within the SAA?
- How is CI integrated into the decision-making process of the SAA?

#### **4. Research hypotheses**

To answer our research question and basing on previous studies ([HAMIDI & BELAID, 2021](#); [AALOUT & MOUAIN, 2022](#); [KERKOUB & LADJOUZI, 2007](#)), we put in place the following hypotheses;

H1→ CI contributes in decision making in the SAA as a key source of information.

H2→ CI is an important practice that is overlooked by decision makers and not used to its full extent.

#### **5. Research relevance**

Competitive intelligence in the insurance and banking sectors is still a relatively new concept so there haven't been a lot of studies dedicated to analysing its utility and how it is integrated into the decision making process in this specific field of work.

But now with information becoming more and more important it became crucial that the light is spot on this topic to highlight its importance.

#### **6. Research structure**

This research is organized like so:

An *introduction* to help in giving a general view of our research, including the context, the objectives and the relevance of this study.

*Chapter 1* represents the theoretical fragment of our research, divided into two sections; (1) our literature review and (2) our theoretical framework.

*Chapter 2* includes (1) the methodology used to conduct our study.

*Chapter 3* represents the showcase of our research results, as well as the discussion of said results.

Lastly, a *conclusion* that resumes what was elaborated in our research and our main results, and the contribution of these results, as well as a description of the limitations that faced us and recommendations for possible future research.

**CHAPTER I: LITERATURE REVIEW  
AND CONCEPTUAL FRAMEWORK**

## **Section 01: literature review**

The purpose of this literature review is to go through different research and studies conducted on our topic from over the years.

The world of information and technologies is always in constant and rapid changing, and it is within the main interest of organizations to stay up to date with these changes in order to maintain a position in the market and preserve their competitive advantage. (BENDJELLOULI & BENDI, 2017, p. 190)

To achieve that, said organizations must maintain a ceaseless flow of reliable, pertinent information to ensure that the decisions are made based on dependable facts. There are many methods which can be used to attain the information needed, however competitive intelligence is arguably one of the most consistent and secure technique to use. (Fariza, 2016, pp. 1-4)

To achieve better understanding, we will divide the topic in hand into many concepts.

### **1.1. Competitive intelligence in the organization**

The topic of competitive intelligence has been the spotlight of many studies and research throughout the years, its functioning and degree of integration into organizations differs from one entity to another but it has undeniably become one of the most important tools of acquiring competitive advantages and an indispensable tool to achieve business intelligence.

Fariza NANECHÉ (2016, pp. 1-16) conducted a study on the role and impact of competitive intelligence in many different fields in the organization, mentioning how vital it became for enterprises to invest in the field of information to reduce uncertainty and risks when it comes to strategic and managerial activities and decision making, the study was concluded by stating that competitive intelligence is tailored made for each business separately, as each organization has a different strategic view and different goals; so the practice of competitive intelligence, while it might bear similarities from one business to another, is not a process to be standardized.

And in a similar study, Drouazi Yasmine (2019, pp. 1-14) had very similar findings to (NANECHÉ, 2016, pp. 1-16) where she found that competitive intelligence became a crucial tool to obtain a competitive advantage and good decision making while minimizing risks in ambiguity the process, this study also stated that for a business to implement such a vital

process into its organization, each aspect of the procedure has to be carefully accomplished because it can be very time consuming and pricey.

The lack of standardization when it comes to CI can lead to many difficulties when it comes to managing it, GHOMRANI Narimene& BOUROUBI Mustapha (2022, pp. 868-887) concluded from their diagnostic of a CI dispositive, that even though CI generates a trustworthy and reliable source of information that can be used to optimize decision making, minimize risks, and acquire awareness of the outer and inner environments of an organization, it can still be challenging to manage it as there are no universal guides or rules to aid in doing it, its complexity and difficulty to manage are the outcome of key factors that can both result in either definite success or definite failure; which, according to the results of the qualitative inquiry conducted on the managers of “SOPT Constantine”, can be summarized into 3 key categories:

- Factors related to human resources: skills and expertise; training and forming; motivation...
- Tangible and intangible material: tools of communication, stocking and sharing information; data bases...
- Organizational factors: centralization; processes; formalization...

Another systematic research, accomplished by Shujahat, M., Hussain, S., Javed, S., Malik, M.I., Thurasamy, R. and Ali, J. (2019 , pp. 2-8), deduced from analysing past works that CI can be used as an offensive tool to obtain competitive advantages, and combined with knowledge management as a defensive tool for information security, the combination of both procedures was found to be very beneficial from a strategic point of view.

BOUKRIF Moussa & BENABDESLAM Chafiaa(2020, pp. 222-229) conducted a study on a group of Algerian businesses that specialize in exportation, the main goal of this study was to test and observe the influence of information obtained via CI on their competitiveness, the quantitative research results obtained after interviewing a sample of 33 enterprises showcased that there is an undeniable positive link between the degree of the use of information obtained

through CI and what turned out to be profitable and good decisions that resulted in the gain of a competitive intelligence.

In another research, Soumiya LADJOUZI (2020, pp. 43-51) conducted a research on the practice of CI in one of the most competitive fields in the Algerian market, the telecommunication and mobile operators market which has a very fierce rivalry and a high degree of risks and uncertainty, this qualitative research derived that even though the operator of Mobilis had acquired a CI cell it was still neglected and not used to its full extent, meanwhile it was operating mainly as a benchmark tool to conduct competitive analysis with its competitors, these holdbacks were found to be the result of a variety of factors all leading to the results obtained by CI not being compatible with the process of decision making and strategic choices made by the organization which a crucial alteration they have to reverse if they want to sustain their position a leading competitor in this market.

To summarize, the vast majority of articles and studies handling the topic of CI resulted in almost identical results which state that CI is one of the best tools organizations can use to obtain competitive advantages especially now that the business worlds are in constant change and turbulence where reliable information helping decision making processes became vital and a must.

To further deepen our research, our second scope will be the use of CI in the banking and insurance sectors.

## **1.2. Competitive intelligence in the banking and insurance sectors**

Ambiguity, fierce competition, constant changing clientele, essentiality of constant risk management and severe control, ceaseless turbulence, there are only a few of the traits that define the global market of banking and insurance. To say that it is a competitive field would be an understatement, the better the management and decision-making processes, the better chances of surviving enterprises have. (Ubiparipović & Đurković, 2011, pp. 023-030)

### **1.2.1. Competitive intelligence in banks and insurances on the global scale**

When it comes to this field, information is key and power, and whoever has the ability to get hold of the most reliable and dependable information conquers. (Ubiparipović & Đurković, 2011, pp. 023-030), there is a vast bank of research and studies dedicated to this notion and how crucial it became for an ultimate risk and uncertainty diminution and good decision making.

The table underneath encapsulates previous studies that highlight the use and impact of competitive intelligence CI on the global scope.

**Table 1 : CI practice in banks and insurances in the world**

No table of figures entries found.	The study	Country	Method	Findings
(SEYYED AMIRI, SHIRKAVAND, CHALAK, & REZAEI, 2017, pp. 173-194)	Competitive intelligence and developing sustainable competitive advantage.	Iran	Analysis of data obtained via a questionnaire survey on a sample of 123 managers working in an Iranian insurance company	Results showed that competitive intelligence had a positive effect on creation of competitive advantage which can be obtained via establishing a strategic unit to collect, analyse and share intelligent information derived from internal and external environments.
(HANIF, ARSHED, & FARID, 2022, pp. 52-75)	Competitive intelligence process and strategic performance of the banking sector.	Pakistan	A quantitative research based on the data gained by a questionnaire answered by 200 banking officials	This study concluded a positive significant impact of CI process on strategic

				performance of banks.
(HAMMADY, ABD JASSIM, & MUBARAK, 2019, pp. 177-195)	The effect of competitive intelligence on the banking performance Survey research sample of private banks.	Iraq, the Gulf, Iran.	A quantitative research conducted on 90 workers of 3 banks from 3 different regions.	The results show that there is a close relationship and a strong impact between competitive intelligence and raising banking performance.
(XU, HAN, & WANG, 2019, p. 9)	Research on the Development Path of Competitive Intelligence System of Commercial Banks Based on SCP.	China	Structure Conduct Performance (SCP) analysis on Chinese commercial banks.	Results show that competitive intelligence is still relatively new in the banking industry in comparison to other businesses where it is considered nearly perfect.
(WRIGHT, FLEISHER, & EID, 2009, p. 11)	Empirical Study of Competitive Intelligence Practice: Evidence from UK Retail Banking.	United Kingdom	Qualitative research via interviewing banking executives from the 7 biggest retail banks in the UK	It appeared that the concept of CI is an area that is gradually being acknowledged in the financial services industry in general and banking in

				particular. Even though the basic foundations of CI have existed for a long time, the management and implementation framework is still in need of improvement
(HATEM, ZURAIDAH, THOO, NORNAJIHAH, & MONIR, 2022, pp. 361–375)	Advancing Competitive Intelligence as a Correlation of Competitive Advantage in Iraqi Banking Industry.	Iraq	Quantitative research via a self-report questionnaire answered by Iraqi banks managers and executives.	this study contributes in practical guidance to banks on the judicious utilisation of banks' internal and external information (competitive intelligence) gathered by middle and high-level banking officers that could be used to attain competitive advantage and hence better performance.

***Source:** a synthesis elaborated by the researcher*

As we can see from the table above, competitive intelligence, even if it might face some holdbacks and struggles, it is still considered one of the most important assets an organization can obtain, and if it used to its full extent, the degree of its contribution in enhancing performance.

### 1.2.2. Competitive intelligence in banks and insurances in Africa

The table below represents a summary of previous research the focalized on the practice of CI in banks and insurance companies in different African countries.

**Table 2: CI practice in banks and insurances in Africa**

Author & year	The study	Country	Method	The findings
(SEWDASS & TOI, 2014, pp. 185-190)	Current state of competitive intelligence in South Africa	South Africa	Quantitative research conducted via a questionnaire answered by 24 CI experts.	The results indicate that CI is still relatively under-developed in south Africa and it was highly recommended to adopt it more frequently in business to make the country's market world thrive.
(WAITHAKA, 2016, pp. 107-126)	Competitive Intelligence Practices And Performance Of Firms Listed On The Nairobi Securities Exchange,	Kenya	A descriptive and explanatory research based on the results of a survey on all the 60 companies listed on the Nairobi	It was found that strategic-oriented competitive intelligence is highly positive and has a significant

	Kenya		securities exchange. (banks and insurances included)	impact on the competitiveness between organizations in the same domain.
(PELLISSIER & KRUGER, 2011, p. 13)	Understanding the use of strategic intelligence as a strategic management tool in the long-term insurance industry in South Africa	South Africa	Quantitative survey on the 82 long-term insurance companies in south Africa.	Results show that even though there was a substantial difference in the conformity and usage of CI between the 82 companies, it was still a combined result that CI had positive impact on decision making and performance.
(MAUNE, 2014, pp. 81-95)	Competitive intelligence as an important contributor to the growth of banks: a Zimbabwean perspective	Zimbabwe	Quantitative & qualitative research based on surveys and interviews conducted on 57 banking officials.	The paper found that most Zimbabwean banks have took on CI in one way or another for strategic planning and better understanding the competitive

				business environment and competitors.
(UZOAMAKA, ANIGBOGU, & CHIDIMMA, 2017, pp. 105-122)	Competitive Intelligence and Organizational Performance in Selected Deposit Money Banks in South-East, Nigeria.	Nigeria	Empirical study based on a questionnaire answered by 90 banking officials dispersed over the 10 most popular banks in south-east Nigeria.	For banks to endure the competitiveness, CI departments became indispensable. This is because CI is a prerequisite for the survival of the Nigerian Banking Industry characterized by intense competition, high technological innovation, powerful customers with diverse requirements, and continuous regulatory policies among other factors.
(DU TOIT, 2013, pp. 30-39)	Comparative Study of Competitive		Quantitative study via An e-mail survey in a	The results on the south African level

	Intelligence Practices between Two Retail Banks in Brazil and South Africa	South Africa (and Brazil)	sample of 2550 employees in a retail bank in Brazil and 847 employees in a retail bank in South Africa.	showed that CI is not used to its full extent in banks.
(MALAININE & BOURASS, 2020, pp. 175-192)	Business Intelligence and Financial Enterprise Performance: Econometric evaluation based on financial data from the “Capital Gestion Group”	Morocco	An empirical study of quantified data obtained from CGG Morocco.	The data analysis resulted in confirmation on the importance and efficiency of CI practices within the financial sector with focalization on the aspects that regenerate the most revenue for businesses.

*Source: a synthesis elaborated by the researcher*

As we can see from the previous results, CI is still considered a paramount tool for organizations but its importance and degree of usage relatively decreased in the African financial sector.

To further contextualize our research, we will be summarizing previous studies and research conducted on this topic within the Algerian market.

### **1.2.3. Competitive intelligence in banks and insurances in Algeria**

The world is living in a phase characterized by great reliance on information in all fields, and this is due to the intensification of competition and rapid technological developments.

Algerian economic institutions have become required to integrate strategic vigilance into their management system in order to cope. (HAMIDI & BELAID, 2021, p. 2)

CI is considered one of the key tools that businesses can use to lessen the degree of uncertainty and risks and even though it is still considered a relatively new concept that is still in continuous development, the first official appearance of this concept in Algeria was in 2005 where it was introduced in an international seminar titled “From competitive intelligence to business intelligence” (Fenni, 2020, pp. 408-425) and slowly after that the concept started gaining more and more recognition where businesses started recognizing the rising importance of the vitality on managing information and started embracing CI into their practices. (Fenni, 2020, pp. 408-425)

In a recent study, HAMIDI Marwa & BELAID Mohamed (2021, pp. 203-212), conducted a research to find out the realities of CI practices within Algerian insurance companies through a quantitative research on 40 executives of the Algerian insurance company “SALAMA”, overall the results were very positive that indicated that the information obtained via CI practiced are heavily implemented in the process of decision making.

Both authors collaborated again in (2023, pp. 171-181) to perform a similar study on a different insurance company, after questioning 49 employees via a survey, results led to positive responses in the regards of CI, It was deployed to gather intel on various fields (technological; competitive; juridical...), furthermore it gave decision-makers a systemic vision on inner and outer environments which helped optimise DM processes.

In another study, after analysing the data obtained after surveying 35 workers from the “BADR” bank in Algeria, KOUBA fatma & MOUSSERATI khaoula (2022, pp. 181-197) found that this bank dedicated a team to conduct CI operations and the information attained through it is used in decision-making regarding competitiveness and especially technological aspects.

However, despite its significance, CI is still not implemented throughout all financial facilities, HATHAT Elmehdi & MESSAOUDI Abd El Karim proved this in their recent study (2020, pp. 171-196) deduced, after a quantitative approach via a survey on 88 banking officers from 3 different Algerian banks, that even though information is crucial to survive in a fierce market like the banking one, some facilities are still not investing in CI while facing higher risks and not making optimal decisions in oppositions to those who invested in CI. The

paper was concluded by mentioning that the lack of CI awareness in banking facilities especially the public ones is related mainly to human resources reasons; both when it comes to higher-ups and vital decision makers who don't acknowledge the concepts of BI and CI; and the lack of the personnel capable of operating this mission.

On a similar note, RAFAA Nadia and KACHI Khaled (2015, pp. 113-134) found that, after gathering and analysing the results of a quantitative approach via a questionnaire responded to by 20 workers from the SALAMA bank varying in ages and experience, that this bank uses CI in an informal matter, where intelligence is conducted based on the need of information and not on a regular basis due to HR and budgetary purposes.

To summarize, CI is still a relatively new concept in the Algerian banking and insurance sector, the degree of its mastery and implementation varies from an organization to another for a variety of reasons ranging from management culture; budgeting; lack of personnel or simple the ignorance to the importance of Intel to optimise decision making and have a better control over risks and uncertain danger in such a competitive field.

The one repetitive common ground that was found in all of the above research, was the how CI is an optimisation tool for decision-making, even if the degree of its implementation varies; it was still a linking factor to all of the findings.

In the next segment of our research, we will spot the light on the role CI plays in DM and how it is integrated into its process.

## **2. CI's role in the decision making process**

In modern days, CI is considered one of the most important strategic assets for organizations; it increases the levels of awareness and knowledge for managers through acquiring and analysing data from the outer and inner environments and therefore improves the process of strategic decision making. (NASIRI & MOZAFARI, 2015, pp. 2-9)

However, despite its importance, CI is still not fully appreciated by some organizations, for example; the findings of RAHMANI Zakaria(2021, pp. 19-37) which were obtained after applying a quantitative study on a sample of 46 employees from MOBILIS, led to believe that CI is a notion that is still given importance to and that the company still depends on more traditional outdated means when it comes to gathering intel to base decisions off of.

On an opposite hand, and according to the research of SIHAMDI imad& BELAACHI AbdElmalek(2022, pp. 293-309) the quality of decisions made depends on the Information on which the decisions were made based on, after gathering the data from the responses of 85 employees on the managing levels of ATC to a questionnaire and applying a quantitative analysis; results showed that employees heavily depended on reliable information to make strategic and managerial decisions to choose between alternatives.

In another study in the same organization as the previous study but a different branch, BENYOUCEF Ahmed & MESNOUA Ahmed (2022, pp. 252-291) came to similar results after conducting a survey on a sample of 55 employees. It was found that the role of CI was amplified during the process of the diagnostic of different alternatives in order to make the most optimal decisions possible.

A descriptive study elaborated by AALOUT Fatiha& MOUAIN Amine (2022, pp. 195-209) discussed another front of the importance of CI, which consists of its capability to anticipate and predict problems and issues before they occur, allowing decision makers to have the information needed to make flexible decisions faster and more efficiently.

Similar results were found in (AKTI & BENWADEH, 2017, pp. 143-159), they showed that CI can be used as a tool to help organization be proactive instead on reactive when facing competitiveness and risks, by maintaining a constant lookout on the business's ecosystem.

Another study conducted on the matter is that of KERKOUB Ibrahim Azzedine& LADJOUZI Soumiya(2007, pp. 123-143) where they elaborated a study on the utility of CI in decision making in SONALGAZ through a double qualitative study reviewing both the CI operators and the decision makers, decision makers considered information to be a vital strategic asset, and with the organization operating both on the national and international scopes, there was still a shortage on this informational asset due to the lack of harmony and co-operation between these 2 structures.

To summarize all of the results of the studies above we can say that strategic CI is a concept that has been around for ages but it is still relatively new in the Algerian market and its degree of implementation and importance in the process of decision making varies drastically from an organization to another for a variety of reason.

## Section 2: Conceptual framework

Our objective in this section of our research is to identify the key concepts of our topic from a theoretical approach.

### 2.1. Information: key resource to CI

Information is the core of modern management, its ability to demine risks and degrees of uncertainty (KERKOUB & LADJOUZI, 2007, p. 129) all while enhancing decision-making procedures and stimulating innovations makes it one of the most important strategic assets organizations should invest in. (BENDJELLOULI & BENDI, 2017, p. 190)

#### 2.1.1. Definition

Throughout the years there have been many different definitions to this concept; we will mention some of them in the table below.

**Table 3: definitions of information**

Author	The definition
(AURIAC & BOUGAUL, 1995, p. 87)	A set of useful raw data that is transmitted via a communication system that transforms the data into information and facts directly understandable by its users.
(REIX, B., KALIKA, & ROWE, 2016, p. 16)	Everything that gives us knowledge and allows us to change our vision of things and alleviates our confusion.
(CHARRON & SÉPARI, 2004, p. 315)	Any element capable of reducing the uncertainty and complexity of any action.
(BIZOT.E, CHIMISANAS.M, & PIAU.J, 2016, p. 321)	The quantitative measure of the uncertainty of a message according to the degree of probability of each signal composing this message.

***Source:** elaborated by the researcher*

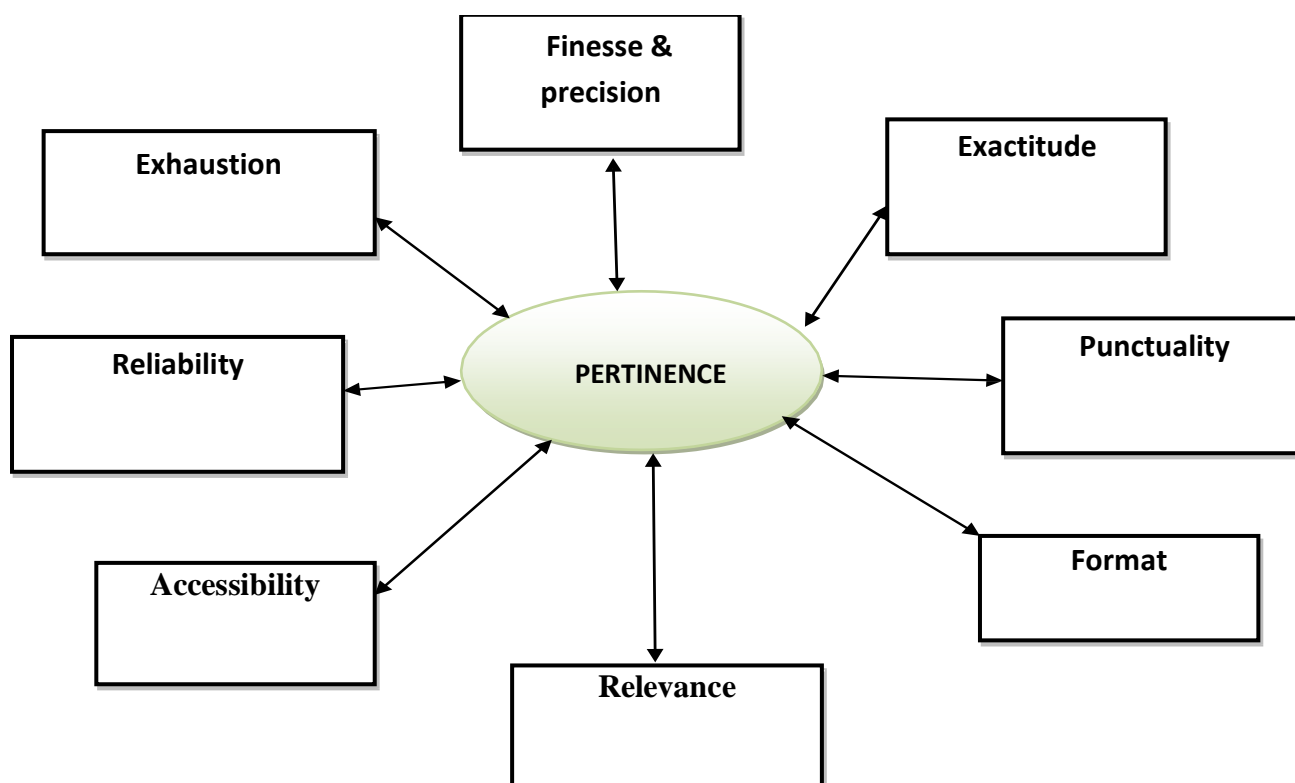
As a summary, we can say that information is the end result of operations conducted on sets of raw data translated in manners to extract knowledge out of them to be used in various things such as decision making.

According to (REIX, B., KALIKA, & ROWE, 2016, p. 20), the pertinence of information is directly related to its use, its quality and the context in which it is used. Information can be labelled as pertinent if it answered to some characteristics.

### 2.1.2. Characteristics of information

The diagram below will summarize the key traits of pertinent information.

**Figure 1: Characteristics of pertinent information**



Source: (REIX, B., KALIKA, & ROWE, 2016, p. 27)

### 2.1.3. Types of information

Throughout literature, there have been different ways the identify different types of information, according to (ROUIBAH, ROUIBAH, & OULD-ALI, 2000, pp. 139-156) information is classified based on its degree of accessibility where they recognized 3 different categories: white information, grey information, and black information.

- **White information**

They represent 75% of available information, they are very easily and lawfully accessible and can be obtained via open sources such as the internet and the press, and they are not the subject of any type of protection and are accessible publicly.

- **Grey information**

They represent around 20% of available information, they are found in somewhat restrained sources (intranet, databases...), protected by different procedures (passcodes, payment, authorisation, access codes...), their access and diffusion can be either legal or illegal. (PELLETIER.A & CUENOT.P, 2013, pp. 161-165)

- **Black information**

They are almost non-existent (5%) and inaccessible, trying to access it is considered espionage, thus it is not profitable as obtaining it involves a very high risk. (COSTA, 2008, p. 25)

**Table 4: information within organizations**

Information	White	Grey	Black
<b>Type</b>	Technology,commercial,juridic,financial,strategic,etc.		
<b>Level</b>	Tactice,operationnal,strategic		
<b>Operating Area</b>	Documentary,situation,alertes,crisis		
<b>Interest</b>	Useful,pertinent	useful,pertinent, critical	Critic
<b>Access</b>	Public	Restreint	Strictlylimited
<b>Classification</b>	Non-protected	Restreint Diffusion	Confidentiel-Secret
<b>Availability</b>	75%	20%	5%
<b>Acquisition-Exploitation</b>	Legal subject to respecting property rights	Legal area not clearly defined. Legalrisks	Illegal. The acquisition is espionage. Very high risks.
<b>Sources</b>	Open	Authorized-Closed	Clandestines
<b>Cost</b>	Weak	weakto elavated	Elevated
<b>Profitability</b>	weakto elavated	Veryelevated	Elevated

Source: (PELLETIER.A & CUENOT.P, 2013, p. 103)

#### 2.1.4. Sources of information

According to Corinne Cohen (COHEN, 2008, p. 159) the information that organizations collect can be from a variety of different sources.

- **According to its availability and interest**

- ✓ **Formal sources**

Formalized sources are materialized in several documentary, audio-visual or computer forms, easily accessible and open. They are generally presented in a given medium (physical or computer), such as: the press, books and other media such as television, radio, etc.

- ✓ **Informal sources**

Informal sources are sources external to the company; they are not materialized and are represented either orally or visually. They are rather closed and more or less accessible. This kind of information concerns competitors, customers, suppliers, distributors.

The advantage of this source of information is relatively the confidentiality that lies in its value compared to published information, known by everyone.

- **According to its nature**

- ✓ **Internal information**

They are information that circulates within a company without an intermediate to avoid any deformities; they can be categorized into 3 segments:

- ❖ **Descending information:** which is transmitted from a superior to a subordinate, this type of information generally corresponds to strategic and operational decisions.

- ❖ **Ascending information:** which is transmitted from a subordinate to a superior, this information must go up to the general management so that the latter can take into account criticisms, observations which come directly from the field.

- ❖ **Lateral information:** This is the information that is transmitted between workers of the same hierarchical rank.

✓ **External information**

They are all the information that comes from third parties who have direct or indirect relations with the company and which may be numerous, useless, old and redundant. This is why it is necessary to sort out the relevant information.

**2.1.5. Information systems**

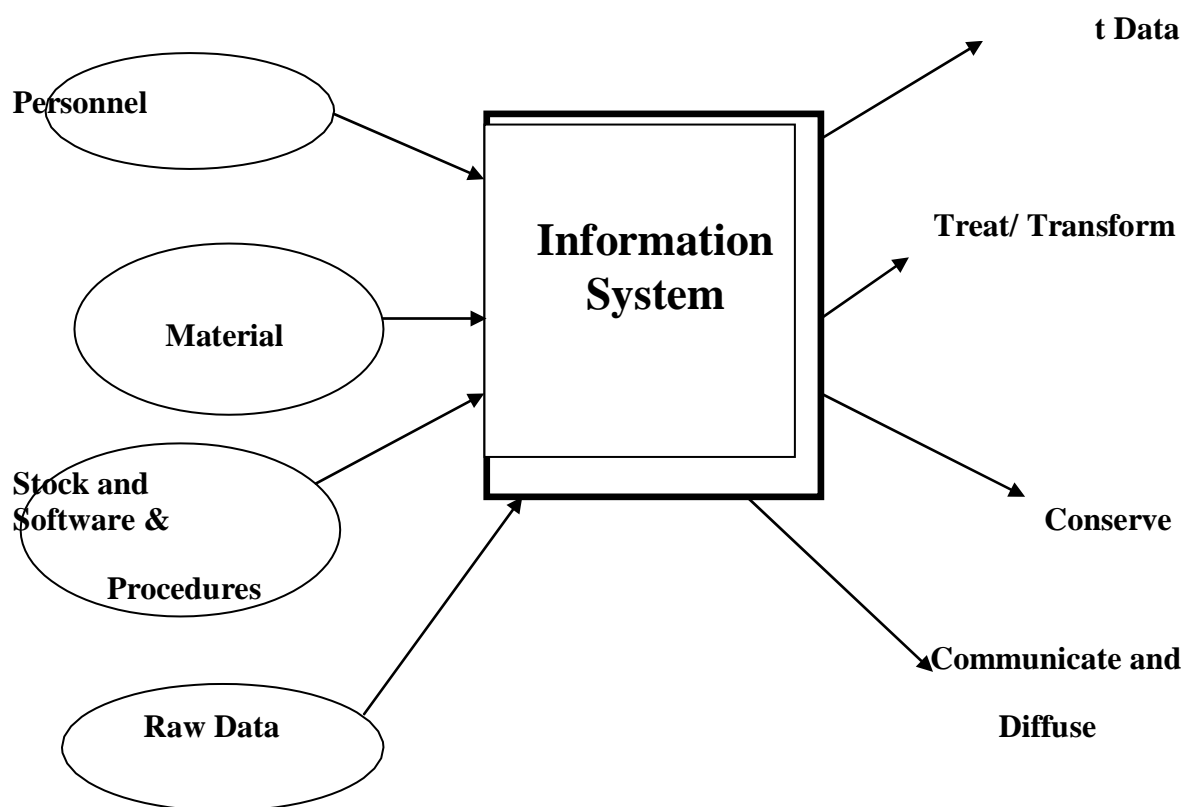
The former process that we mentioned that consists of collecting data and transforming them into information can be further detailed. The full process is called information systems.

There are many definition for the concept of IS; H.LESCA defines it as “the interdependent set of people, organizational structures, information technologies (hardware and software), procedures and methods that should allow the company to have the information needed for its current operation and for its evolution just in time”. (LESCA, 1989, p. 13)

For Robert REIX, an information system is an organized set of resources: hardware, software, personnel, data, and procedures, making it possible to acquire, process, store, and communicate information (in the form of data, texts, images, sounds, etc.) in and between organizations”(REIX, B., KALIKA, & ROWE, 2016, p. 03)

The diagram below will summarize the dynamic of IS within organizations and its outputs.

**Figure 2: Information system functioning**



Source: (REIX, B., KALIKA, & ROWE, 2016, p. 04)

## 2.2. Competitive intelligence

as we already mentioned above, information has become one of the most important strategic assets in modern management, be it is insufficient to just obtain it or put in place an effective IS, the challenge is how to manage it and how to deduce which information holds the most importance, this challenge can only be conquered by competitive intelligence. (CHARTRAND, 2003, pp. 1-16)

### 2.2.1. Definition

Competitive intelligence is still a relatively new concept in the business world dating back to the 80's, it is often considered to be a key component in defining strategies, but its role does not stop there.

According to GUERY & DELBES, CI is a system of research and concerted exploitation, with a view to action, of information external to the company, likely to exert a significant influence on its future, in the short or long term. (COSTA, 2008, p. 49)

In a report elaborated by the “CIGREF”, competitive intelligence was defined as “a continuous and largely iterative activity aimed at actively monitoring the technological, commercial, etc. environment, to anticipate developments in order to remain vigilant and competitive and to monitor it on a permanent basis in order to detect threats and take advantage of opportunities.”(1998, p. 7)

### **2.2.2. Origin & history of CI**

Competitive intelligence has been a topic in constant development for centuries; the concept has always been present ever since the ancient times and it dates back to military origins especially in china which operated its armies based on tactical decisions and analysing their opponents, proofs of that date back to thousands of years from the Chinese general’s “sun Tzu” book “the Art of War” which is considered one of the manuals for strategies till this day.

Documentation related to the use of competitive intelligence outside of the military context is very rare to find in the old times, but with the advancement of markets and the business world, organizations were no longer able to deny the Indispensable role of information and how important it is to know how to manage it and use it to its full extent. (BENDJELLOULI & BENDI, 2017)

In the contemporary world, this strategic use of information, referred to as "information warfare", has reached its peak with the East-West confrontation during the Cold War. (DIAKHATE, 2011)

Today, in the context of tougher economic competition at the global, national and regional levels, companies are confronted with new "combat" techniques in which the mastery, control and dissemination of information (real or retouched) are used not only as a vector of knowledge and anticipation, but as an offensive weapon.

In some modern States, intelligence is no longer only subject to military or security needs but also to the search for new markets, new clients and the creation of added value. (DIAKHATE, 2011)

The key phases for CI’s development throughout the years can be summarized in the table below, it must be noted that CI’s progress is relatively recent and can be perceived differently in different regions of the world. (CHARTRAND.M, 2003)

**Table 5; Key phases of the evolution of competitive intelligence**

Period	Phase	Competitive intelligence key factors				
		Mode	Orientation	Analyse	Link with decisions	Staff
<b>Before 1960</b>	Military research	Informal	Tactic	Quantitative et Qualitative	Strong	Military personnel
<b>1960-1970</b>	Data research on competitors	Informal	Tactic	Some or no analysis	Weak	Marketing
<b>1970-1980</b>	Research on competitors and industries	Formal	Tactic	Quantitative analysis	Intermediate	Marketing/planning
<b>1990-Nowadays</b>	Enterprise intelligence for strategic decisions	Formal	Tactic and strategic	Quantitative and qualitative	Elevated	Marketing/ planning/ competitive intelligence cell

*Source:* (BROUAR.F, 2002)

Due to this growing interest in CI, it became often mistaken to be on par with business intelligence itself, but they are not to be confounded with one another since CI is actually a key component for business intelligence but it does not represent it to the fullest. (NATOU, 2020, pp. 2-4)

Many studies and analytics have been dedicated to this specific topic as it has become very easy to confuse the two topics together, researcher Par MandackGueye(2017, pp. 2-11)conducted a study on this topic and has found that CI is a techno-managerial tool which is used for the end goal of achieving business intelligence.

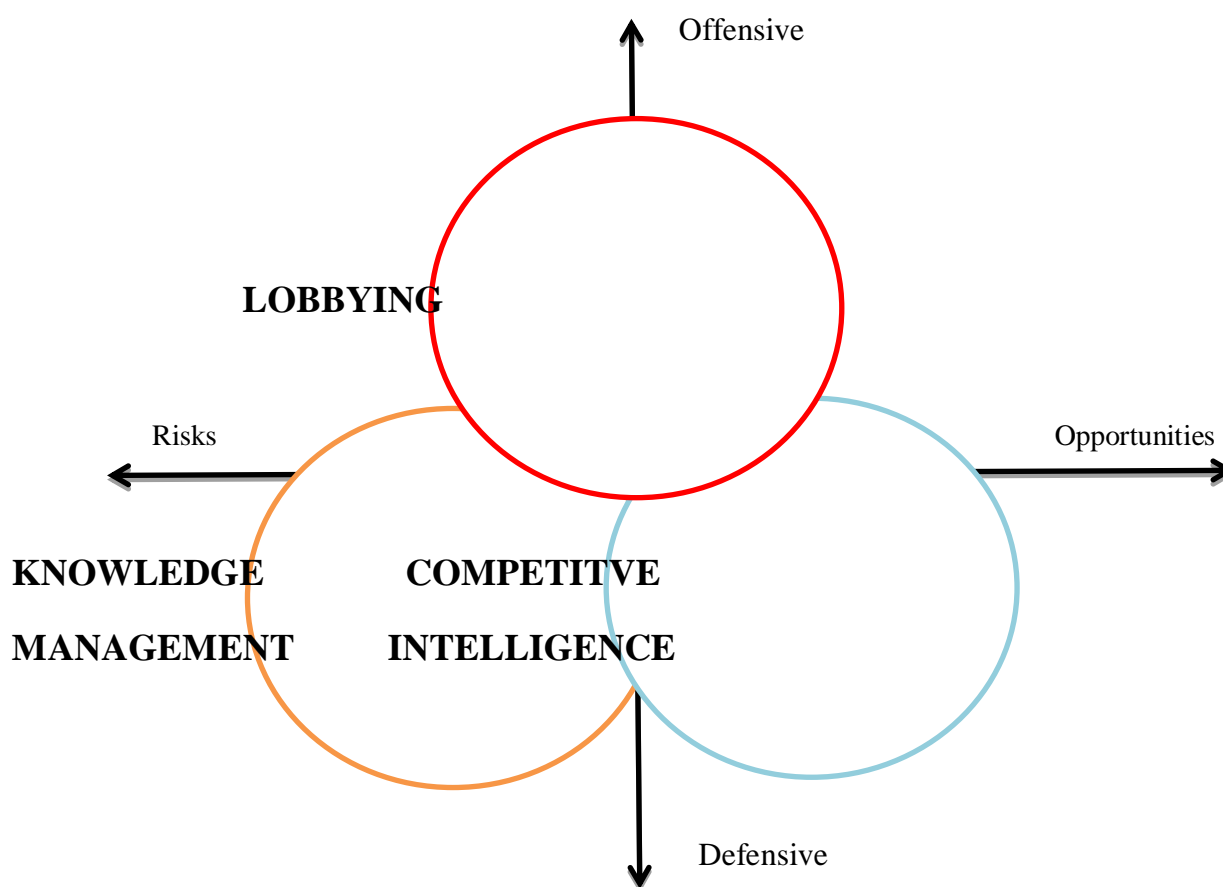
Its development is materialized by the succession of a set of tasks or actions intended to transform the data of the company's environment into creative and strategic knowledge.

BI is therefore the purpose of monitoring. It can thus be explained as the ability of a company to activate knowledge obtained through the implementation ofStrategic information acquisition activities, such as monitoring, to obtain or amplify a competitive advantage. The BI refers to the cycle of the evolution of raw data into decisive information and then into knowledge capable of reducing uncertainty in strategic decision-making or stimulating creativity. (Gueye, 2017, p. 11)

There are many others researches who mentioned the distinction of both concepts in their studies, amongst them is Dr. HATHAT Elmehdi(2013, pp. 6-10)who stated that BI is the end result of three main phases, first of them is CI which he considered to be the process of observing and analysing all what happens throughout the outer and inner environments of the organization; the second main aspect is information security or what it is often referred to as “knowledge management” which consists of securing the company from its competitors’ attempts of business espionage. The final phase of BI is what is lobbying, it indicates to power groups that use their influence in specific fields to pressure mainly governments into making policies and decisions to work in their favour (HATHAT E. , 2013, p. 7)

The latter three key axes of BI can be summarized as following:

**Figure 3: business intelligence axes**



Source:(CLERC, 2012, p. 5)

There is no specific way to implement CI within an organization, the difference lies in the structure to be put in place, which will be of a different nature, i.e. size, sector concerned, means and maturity in relation to monitoring. So, the company chooses one structure to another according to its sector of activity and according to its competitors. (HERMEL, 2001, p. 21)

Establishing CI can be done through 2 different structures (HATHAT E. , 2013, p. 19):

❖ **Centralized Structure**

This is a cell that includes several people who concentrate full-time on information gathering and with few problems of information flow and communication.

❖ **Decentralized structure**

It is a monitoring structure that is carried out on the basis of a network of correspondents and led by a full-time manager.

And according to LUDOVIC.F & LEVY.J (2001, pp. 3-24), we can distinguish 2 types of CI formats:

❖ **Active CI**

It refers to a targeted watch that aims to search for targeted information. In this type of monitoring, the company knows exactly what it is looking for

❖ **Passive CI**

It is a watch that is done day by day, without a specific goal.

It refers to the fact of always being attentive to one's environment. This watch is carried out without any effort on the part of the watchmen. In this kind of monitoring, the information collected is carried out through the press, conferences, etc.

### 2.2.3. The process of competitive intelligence

CI allows us to obtain information that facilitate decision making, these information undergo transformations during the process of CI and they allow decision-makers to choose between alternatives and diminish risks and uncertainty, this process can be separated into the following phases: (LADJOUZI, 2020, pp. 35-36)&(DEROUET & LEPOIVRE, 2005, pp. 9-11)

✓ **Preliminary phase: Notify the collaborators**

This is a very important, even essential phase. Its purpose is to inform and train all collaborators and CI operators on the issues and methods used.

✓ **Phase 1: Establish the needed information**

This phase consists of defining the perimeter of CI while taking into consideration the strategic needs and objectives of the organization, this phase allows to formalize the needs and expectations of collaborators through after analysing the strategic domains of activities and key success factors of an enterprise.

✓ **Phase 2: Identify the sources of information**

The volume and nature of information sources are constantly scaling. The value of these sources is very alternating and their relevance depends on the type of information sought. It is important to evaluate the sources of information to assess their reliability, their usefulness and their veracity. If there is any doubt about the veracity of the information found (which is very

common with the Internet), it is necessary to cross-check the sources of information.

✓ **Phase 3: Researching and collecting information**

This phase is also called the hunt-down or tracking information, CI operators track down useful information through the sources they identified in the previous phase, an initial selection of information is executed in terms of their veracity and utility.

✓ **Phase 4: Information treatment**

The true added value of the CI process appears during this phase. The raw information collected is analysed, synthesized and formatted.

✓ **Phase 5: Information storage**

The information from CI is not always used in real time and a more or less long period of time may elapse between its collection and its use. The establishment of an information storage procedure can be done in different forms such as databases and data warehouses.

✓ **Phase 6: Diffusion and distribution**

The information is disseminated to the actors responsible for using it in concrete actions. Each actor must only receive the information when needed and via secure channels of communication to avoid overflows of unused information and obstacles.

✓ **Phase 7: Using the information**

After all the phases above are achieved, the useful information that has been collected, treated, stored, and communicated to the designated actors, the information now has to be used. The use of this information is considered the justification and the reason of the existence of CI within an organization.

✓ **Phase 8: Feedback**

This phase which is often neglected but is essential and critical to the success of CI, this feedback provides CI operators with details regarding the utility and relevance of diffused data.

✓ **Phase 9: Control**

Rarely practised yet highly effective, this phase is done using dashboards that include qualitative, quantitative, and financial indicators.

#### 2.2.4. The types of CI

Every domain of activity and every enterprise within it disposes of different needs and expectations from CI, so there are a variety of different types of intelligence that can be conducted. (SAOUDI, RABHI, & SADOU, 2015, pp. 39-42)

##### ❖ **Technological monitoring**

According to Jacobiak: "Technology watch is the observation and analysis of the scientific, technical and technological environment and of present and future economic impacts, in order to deduce the threats and opportunities for development"(COSTA, 2008, p. 61)

In this technical, technological and scientific environment, it is of course essential to be informed every day of today's discoveries without neglecting to know those of yesterday.

It is the activity by which the company identifies the techniques or technologies implemented by its customers, its suppliers, its partners and its competitors, within the framework of its field of activity, to follow the evolutions which can influence not only its future but also that of the latter, and put in place protective measures.

Above all, the company must monitor the technological sectors, relating to its sectors of activity, in order to be constantly able to trigger defensive or offensive actions.(MALANG, 2001, p. 9)

##### ❖ **Commercial monitoring**

This type of intelligence mainly focuses on the customers and suppliers, Customer monitoring is common to the marketing and sales departments. Supplier monitoring concerns more the Marketing and purchasing. It aims to collect information relating to the commercial environment of the company. More specifically, it is a question of monitoring its customers (their news, their financial health, calls for tenders issued, etc.), its prospects and its suppliers (release of new products in particular). (VAN LEATHEM, 2005, p. 130)

##### ❖ **Marketing monitoring**

Marketing intelligence complements commercial intelligence in the sense that it concerns information relating to the company's markets. It consists in monitoring the evolution of its market, the image of the company, the behaviour of consumers, the axes of communication of competitors.

This type of monitoring makes it possible to identify new markets, offer new products to customers and support the launch of a new product. (MIAUX, 2012, p. 15)

❖ **Competitive monitoring**

It focuses on current or potential competitors and new market entrants. It is at the crossroads of technological intelligence and commercial intelligence. It will be closer to technological monitoring if we are more particularly interested in products and commercial monitoring if we analyse the competitor's customers more closely. (GLOAGUEN.P, 2002, p. 22)

❖ **Regulatory and legal monitoring**

It consists of following the evolution of laws or regulations. This requires regular monitoring of bills or legal texts. The way in which the texts are discussed or the delays they take in their application also give indications on the stakes or the present influences of such or such pressure groups. (MIAUX, 2012, p. 15)

❖ **Social monitoring**

It brings together the study of cultural, political, social, historical factors, institutional and political actors (the State, administrations, local authorities, and unions) and the public opinion of employees, etc. (HATHAT E. , 2013, p. 10)

❖ **Environmental monitoring**

The environmental monitoring approach makes it possible to analyse the risks linked to the sector of activity and to take measures that will reduce or cancel the impact on the company. Threats are outside of technology, competition or commerce; they are related to the political and cultural environment. (LAHLOU, 2011, p. 27)

❖ **Global monitoring/ Strategic intelligence**

This type of monitoring is what we refer to as competitive intelligence, it englobes all the types of intelligence within an organization, It designates the effort made by the company to listen prospectively to its environment by collecting anticipatory information. It is oriented towards listening to the environment to monitor, discover, learn, or anticipate its evolutions.

(KHELASSI.R, 2011, p. 454)

**2.2.5. CI operators** CI operators, also referred to as “trackers” or “watchers”, are members of the department or team in charge of conducting CI operations, according to (COSTA, 2008, p. 71), they can be divided into different categories depending on their activities:

**Table 6: CI Operators**

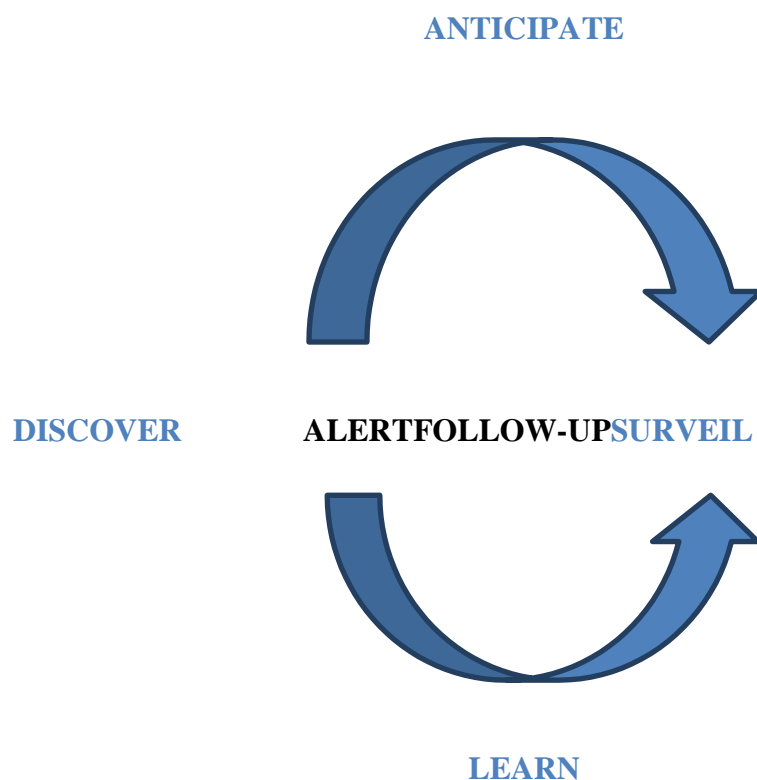
The « Warriors »	Constantly in action, they are in a state of mind of economic war.
Offensive Watchers	They have significant means, professional techniques, are in a military state of mind.
Active watchers	They have limited means; they develop competitive monitoring.
Reactive Watchers	They only react to attacks.
Sleepers	No CIactivity.

*Source:*([COSTA, 2008, p. 71](#))

### 2.2.6. The role and functions of CI

According to ([LINDREVIE, LEVY, & LINDON, 2009, p. 191](#)), CI allows organizations to fulfil 4 key functions which can be elaborated through the following figure:

**Figure 4: The key functions of CI**



*Source:*([LINDREVIE, LEVY, & LINDON, 2009, p. 191](#))

- ✓ **Anticipation** : Anticipating actions of competitors or changes in customers and the environment;
- ✓ **Discovery**: Discover new or potential competitors, who maybe acquired or with which a partnership could be developed, market opportunities;
- ✓ **Surveillance**: Monitor the evolution of the product offer on the market, the evolution of technologies or production processes that affect the activity, regulations that modify the context;
- ✓ **Learning**: Learn about the characteristics of new markets, mistakes and successes of other companies to reassess projects, implement new management practices or build a community of views among leaders.

### 2.2.7. CI and Benchmarking

Competitive intelligence and benchmarking are two concepts that are always confused for one another, they bore some similarities but they are 2 different concepts.

Benchmarking consists of a comparative study of a product, service or process with a comparable activity with a better reputation, with the aim of setting improvement objectives.

It is a technique used in strategic intelligence, especially its competitive part, so the comparison of this operation is carried out in order to evaluate their practices and, from the differences observed, set objectives to become and remain among the best, in a short period of time. Thus, benchmarking can be a complementary technique to strategic intelligence. (HATHAT & MESSAOUDI, 2020, p. 22)

### 2.2.8. The challenges CI faces

Holding such a paramount importance, CI is bound to face challenges and obstacles that might tackle its effectiveness (LEVEUGLE & SAUTREAU, 2008, pp. 9-14)

#### 1. Infobesity

Considered one of the most likely challenges CI can face, Infobesity is a term that signifies an overflow of collected information that can make it really difficult to distinguish between what is useful and what is not. The way to conquer this challenge is to set clear boundaries and perimeters for CI operations so that only the information needed is collected.

#### 2. Reliability

With the appearance and blow-up of internet, social Medias became one of the most important sources of information, but proving the truthfulness and reliability of information gathered can prove to be such a challenging task for CI operators.

### 3. **Legality**

The line between what is legal and illegal can be very thin when it comes to CI, the difference between “grey information” and ‘black information” can be very subtle so CI operators are prone to conduct industrial espionage without their awareness.

### 4. **Information security**

The main role of CI is to collect useful data and information, and then diffuse them to the concerned collaborators, but one of the most important challenges that have to be overcome is that information security, making sure that the information reaches its destination without being altered or tampered with is crucial and vital for the success of CI missions.

## **2.3. Decision making**

While some decisions may seem intuitive, some others are very tricky to make for reasons such as intuition, available information and degree of risk, so it is a must to take appropriate measures to ensure optimal decision making for each circumstance. (AALOUT & MOUAIN, 2022, p. 203)

### **2.3.1. Definition**

Simply put, decision making is the process of making a choice between a set of alternatives to solve a given problem, but when put into an organizational context, it can be a very complicated and challenging mission (AALOUT & MOUAIN, 2022, pp. 203-204)

### **2.3.2. The process of decision making**

Decision making processes differ from a research to another, but in general the majority of researchers agreed to the following process: (AALOUT & MOUAIN, 2022, pp. 204-206)

#### **1. Defining the problem**

It is often said that defining the problem is half the solution and that the person who properly diagnoses the problem can solve it. Problems are known in the field of decision-making as a deviations in performance from the predetermined goal, so in order to identify the problem, there must be awareness of the existence of an issue (indicating the attention of the decision-maker to the problems around him) and then

diagnosing it (accurate identification of the defect or situation undesirable or deviation), and in order to accurately define the problem and determine its dimensions, the necessary information must be collected and the help of experts, whether from inside or outside the organization.

## **2. Analysing the problem**

Once the problem is diagnosed, the second phase begins with identifying the reasons that led to its emergence, and this is done by collecting data and information, analysing it, and studying it in depth and accuracy. Analysing the problem includes evaluating the factors of the internal environment affecting the activities of the organization to identify strengths and weaknesses, following up the factors of the external environment affecting the activities of the organization at the general and operational levels, determining the size of the strategic gap between the opportunities and risks prevailing in the external environment, and stating the goals of the organization and each of its activities. A common mistake often occurs, which is skipping this stage and developing alternatives before exploring the causes of the problem in depth.

## **3. Defining the alternatives**

After identifying the problem and finding out the reasons for its occurrence, the decision-maker works to search and identify a number of alternatives that could be a solution to the problem or the reasons for its treatment, and this is after the collection of the necessary information to ensure that no mistakes are done and chooses the appropriate alternative, so the alternative must be working to achieve results In light of the resources available to the decision-maker, alternatives are then arranged according to priorities.

## **4. Evaluating the alternatives**

In this phase, the decision makers evaluate all the possible alternatives that they reached to during the previous stage;they also predict the after-math of each possible alternative on different parts of the organization.

## **5. Choosing the appropriate alternative**

Upon completion of the evaluation phase, the decision-maker has a set of possible solutions, after which the strengths and weaknesses of each available alternative are identified. Accordingly, the decision-maker can choose the best alternative that may achieve the greatest return, the least loss, the lowest cost...etc.

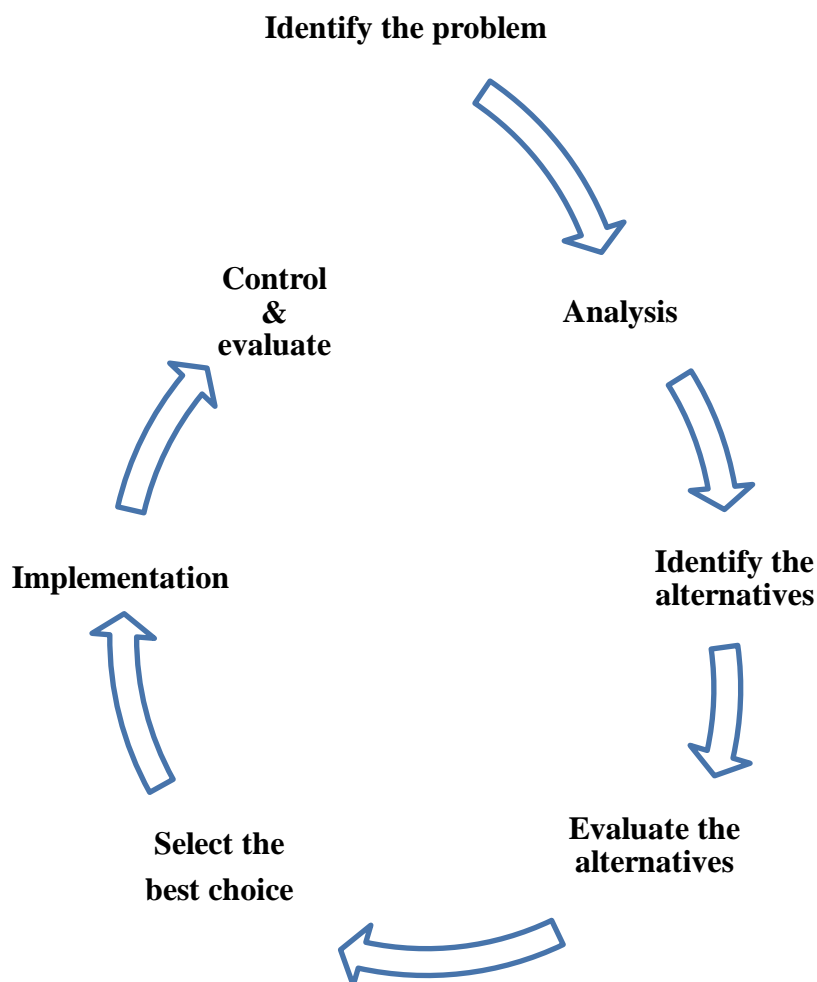
## **6. Final decision making**

After evaluating all the pros and cons of each of the alternatives, a final decision is made and then put into action.

### 7. Control and follow-up

During this phase, the results from implementing the decided alternative are analysed and control just in case there are defects or issues to be fixed and to have a form of feedback on the success of the decision making process.

**Figure 5: The decision making process**



*Source: Elaborated by the researcher*

### 2.3.3. CI's strategic role in decision making

CI is considered to be one of the most important tools that can be used to aid the decision making process, its role can really show through: (AALOUT & MOUAIN, 2022, pp. 204-207)

- **Seizing opportunities and avoiding threats**

CI depends mainly on strategic information, and the decision-maker works by proactively monitoring events and extrapolating potential behaviours to detect possible opportunities and threats. CI information also helps the decision-maker to understand what is happening in the environment in terms of shifts, and thus highlight the offensive side in how to seize opportunities, and the defensive side by detecting threats and risks.

- **Anticipating the future and preparing in advance**

The decision-maker often resorts to the modelling method, in order to simplify reality and evoke most of the possible realizations that he creates in his description of the dynamic processes, whether they are observed or simulated, and then interpreted mentally, and putting forward possible hypotheses in the future.

The decision to enter a new market, launch a new product, or withdraw from a specific sector is only made on the basis of a set of assumptions, which are formulated beforehand.

- **Managing ambiguity and dealing with complexity**

Seeing the future with its expectations and estimates is a relative issue that raises doubts, and when the latter appears, we are faced with a state of uncertainty. The deeper the vision, and the deeper the expectation extends in time in order to anticipate the distant future, the more ambiguous and complex the situations become, and at that time the danger indicator rises. All of this has repercussions for the decision-maker. Therefore, vigilance works like the sensors of a reconnaissance device in a living organism in monitoring, following up, and giving alert signals about any upcoming danger or favourable opportunity. From it, the importance of the strategic role can be determined through the previous indications, compared to what was spent on collection, processing, preservation and retrieval operations, and to the extent that it contributes to reducing the level of uncertainty and ambiguity that may surround the decision-maker, especially in cases of complex circumstances and situations.

#### **2.3.3.1. CI's role in the decision making process**

CI and the information it produces can be helpful in every single phase of the decision making process, it can be explained as follows: (AALOUT & MOUAIN, 2022, p. 207)

- **Identifying and analysing the problem**

The information provided by the various areas of CI helps in identifying the problem. Permanent monitoring of the environment contributes to sensing obstacles and gaps, and thus identifying the problem that is imminent and analysing it according to the formulation to which it belongs. Be it technological, competitive, and commercial, etc.

- **Defining and evaluating the alternatives**

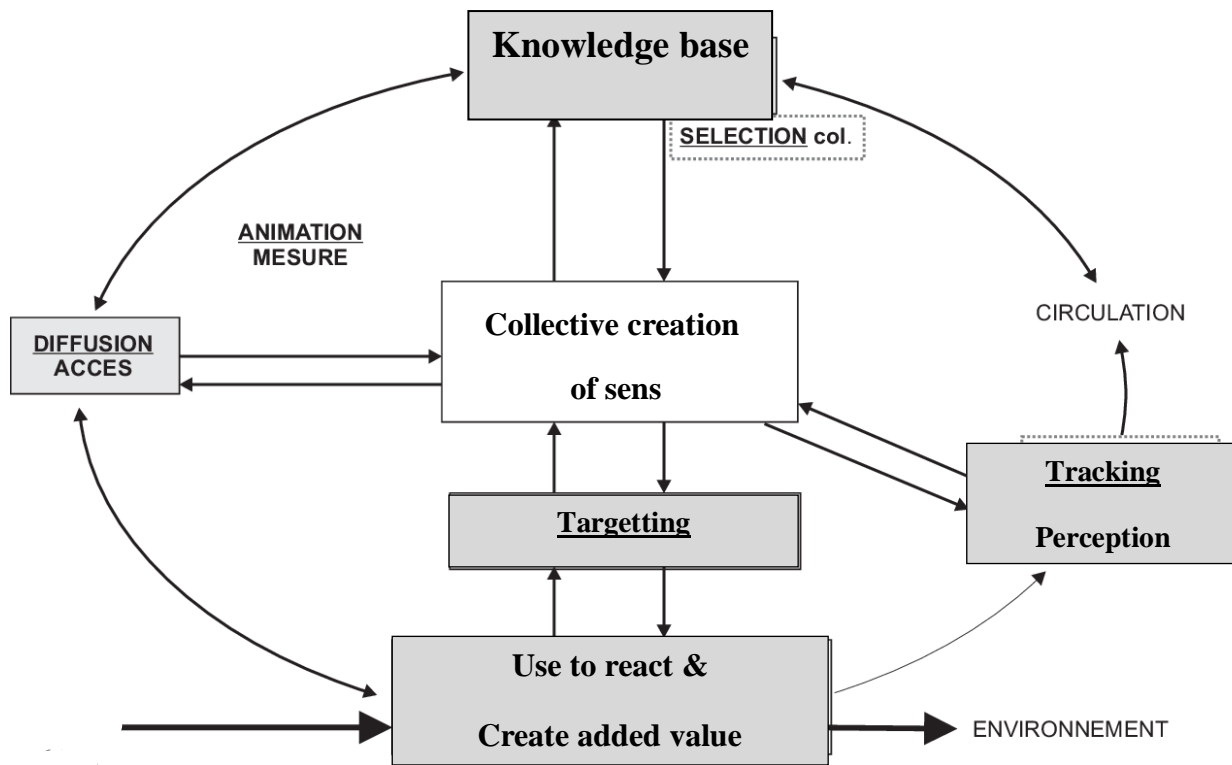
The areas of vigilance work to identify the important factors that directly affect the problem, such as the time required solving it and the effort expended for that, in addition to the costs, and all of this would affect the process of identifying and choosing an alternative without another.

- **Choosing an alternative and implementing it**

The information provided by the areas of vigilance works to determine the best possible alternatives and what is the appropriate alternative to solve the problem (whether it is related to a technological, competitive, scientific, commercial or social problem). The information provided affects the implementation of the chosen alternations, and its lack may result in an error during the choosing phase which can ultimately lead to an aggravated situation. After making the decision according to the latter, the official must carry out a process of monitoring and evaluating the implementation of the decision, and this falls within the framework of the CI process to ensure that the most optimal choice has been made and that the best alternative has been implemented.

The connection that exists between competitive intelligence and decision making can be conveyed via the figure below:

**Figure 6: referential model of the L.E.Scanning method**



Source: (LESCA, veille strategique la methode l.e.scanning, 2003, p. 28)

## **CHAPTER II: RESEARCH METHODOLOGY**

The following chapter describes the methodology we used to analyse and find answers on how CI contributes in the decision making process in the national Algerian insurance company SAA.

*«In scientific life, problems do not arise by themselves. It is precisely this sense of the problem which gives the mark of the true scientific spirit. For a scientist, all knowledge is an answer to a question. If there has been no question, there can be no scientific knowledge. Nothing is taken for granted, nothing is given. Everything is built.»* (MHENNA & JAMAL, 2020, pp. 1-12)

All management research presupposes questioning, selecting and describing one's "approach". If the objective of the research is to generate "valid" knowledge, it is necessary to specify the justifications, classically through epistemic, methodological and ethical questions, characterizing the epistemological framework and also the role of the researcher in the scientific knowledge production process. (MHENNA & JAMAL, 2020, pp. 1-12)

First of all, we will present the epistemological position in which we place our research theme. We then present the method and tools used for data collection and analysis.

### **3. Epistemological position and methodological approach**

#### **3.1. Epistemological position**

Epistemology is still a relatively new concept that appeared in the 20<sup>th</sup> century, it is the study of theories and knowledge principals.

Epistemology is "a branch of the science philosophy that critically studies the scientific method, the logical forms and modes of inference used in science, as well as the principles, fundamental concepts, theories and results of various sciences in order to determine their logical origin, their value and their objective scope." (Nadeau, 1999)

According to Piaget (1967), epistemology is the study of valid construction by answering three fundamental questions:

- What is the nature of the knowledge produced?
- How is knowledge generated?
- What is the value and status of knowledge?

The questions posed above help researchers to establish an epistemological paradigm and to acquire the knowledge necessary to justify their research work. They are not just a simple methodological reflection.

There are different frameworks for epistemological paradigms; our research work must necessarily fit into an appropriate epistemological framework. This association strongly envelops the methodological approach carried out by the researchers. It is a benchmark on which the process of conducting the work is described.

As a result, our research work falls within an epistemological positivism paradigm which aims to explain reality by giving it its own essence. Because we will study a real objective independently of us, therefore, we will remain neutral; we will study it without affecting it and without being affected by the subject.

### **3.2. Research method**

To observe and analyse a phenomenon or an object, the researcher must use a research method that allows him to obtain the right knowledge.

Usually, inquiry methods are divided into two courses: quantitative methods and qualitative methods. The first are dedicated to the study of an objective reality following a hypothetical-deductive logic and the second to understand it through the actors who are part of it, following an exploratory inductive logic. (AIT TEJAN, 2019)

For the purposes of our research, we opted for a **qualitative approach** to conduct our research and arrive to an answer for our research problem in the best way possible.

The purpose of qualitative research is the development of concepts that help us understand social phenomena in natural (rather than experimental) contexts, giving due emphasis to the meanings, experiences and opinions of all participants.

A qualitative approach is optimal in our case because it allows to gather data about how CI is implemented into the decision making process and just how it contributes to its optimization through the opinions and experience from CI operators and its clients which helps us obtain valid data to answer our research question.

### **3.3. Data collection and analysis**

Data collection is one of the most important steps in conducting research. Data collection is a very demanding job that requires careful planning, hard work, patience and diligence to do the job well. Data collection begins with determining the type of data required, followed by selecting a sample from a certain population. After that, you need to use a certain instrument to collect data from the selected sample.

Data collection is the process of gathering and measuring information about variables of interest, which helps to answer stated research questions, test hypotheses, and evaluate results. Research data collection methods are common to all fields of study, including physical and social sciences, humanities, business, etc. Although the methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same. The goal of any data collection is to capture quality evidence which then translates into rich data analysis and enables the construction of a compelling and credible answer to the questions that have been asked. Regardless of the field of study or preference for data definition (quantitative, qualitative), collecting accurate data is critical to maintaining research integrity. Selection of appropriate data collection methods (existing, modified or newly developed) and clearly defined instructions for their correct use reduces the likelihood of errors.

To collect the data we need, we used the following methods;

- Observation;
- semi-structured interviews;
- Documental research.

### **3.3.1. Observation**

Observation must somehow be selective. We are constantly circulated by huge amounts of information. Human beings are good at selectively attending to what is perceived to be most useful to us. Observation exploits this ability; Systematic observation involves careful planning of what we want to observe. Second, in order to make the sighting "public", what we see or hear must be recorded in some way to allow analysis and interpretation of the information. Observation is a systematic approach to collecting data.

### **3.3.2. Semi-structured interviews**

The primary source of data collection in our research was interviews, our research was divided into two different sets of interviews; the first set was conducted with CI operators

within the SAA, and the second set with decision makers who are the clients and users of the information obtained via CI.

### 3.3.2.1. Preparation of interviews and development of the interview guide

As part of our research, and in order to collect as much information as possible, we used semi-structured individual interviews using an interview guide.

An interview guide is a document that brings together all the questions to be asked in a logical order and under different axes. It helps structure the discussion during the interview.

Semi-structured interviews are structured in three phases, preparation for the interview, conducting the interview, transcription and the report of the interview. As a result, we conducted four interviews with competitive intelligence operators and three with decision makers, as part of our research, supported by an interview guide in order to have the information necessary to answer our problem.

Regarding the development of the interview guide, we followed the following sequence of steps:

- Define the objective of the interview: to have as much information as possible to help us answer the research questions;
- Draw up the list of information to be collected: identify the specific aspects to be explored further by referring to the conceptual framework;
- Define the different axes of the guide: by ordering the major themes to be addressed;
- Formulate the questions: clear and neutral questions.

The first set of interviews that were conducted with the operators of CI consisted of a total of 11 questions divided into 2 different axes as follows:

**Table 7; the thematic axes of the first interview guide.**

N°	The axe	Brief description
1	The place of CI within the SAA	Questions related to the organizational and hierarchical position of competitive intelligence in the SAA.
2	The practice of CI within the SAA	Question regarding the activity, process, tools and deliverables of CI operations.

*Source: elaborated by the researcher*

The second set of interview was conducted on decision makers of different departments consisting of 8 questions all leading to find out the role of CI in the decision making process in the SAA.

### 3.3.2.2. Conduct of interviews

Conducting a semi-structured interview generally involves three main steps, which are:

- Quick presentation of the research work: present the subject of the interview and briefly recall the theme;
- Interaction around the interview: sequence of questions/answers in addition to argumentation.
- Transcription of the interview: voice recording or note taking.

### 3.3.2.3. The interviewees

**Table 8: list of the interviewees and their functions.**

N°	Function	Method
1	CI responsible	face to face
2	CI responsible	face to face
3	Data analyst	face to face
4	Data analyst	face to face
5	vice director of studies and analysis of technical activity	face to face
6	director of strategic intelligence and planning	face to face
7	head of finance and accounting department	face to face
8	director of studies and analysis of technical activity	face to face

*Source: elaborated by the researcher*

### 3.3.3. Documental research

Documentary research is essentially a search for references of documents that correspond to a documentary question. The objective is to make the state of the art on the subject of work, to identify what we already know, what has already been said and what has already been done, points of agreement and disagreement before undertaking original work. Desk research can also be useful in identifying specialists in the field. (Pochet, 2018)

This identification of information is an essential step in any synthesis of knowledge and literature review in all fields through informational methods such as reading lists and bibliographies of articles. This approach has enabled us to gather as much useful information as possible by scanning books, scientific articles, guides, repositories, theses, websites or publications, which have a direct or indirect link with our problem, which have been collected from Internet and print search engines. This is the basis on which we started our research work. It is essentially a search for references and documents that correspond to our research question, for the development of the theme, the writing of the literature review and the conceptualization of the theoretical framework.

#### **3.4. Evaluation and interpretation of results**

After gathering all the data we needed via the previously mentioned methods, we used a combination of interview interpretation and qualitative analysis with the aid of the “NVIVO” software.

It is from these interpretations and these conclusions that we will propose recommendations to our host company concerning the results that answer our research questions concerning the role of competitive intelligence in the decision-making process.

## **Results and discussion**

In this chapter we will begin by giving a presentation our internship site followed by a diagnosis on the role of CI in the decision making process in the SAA.

#### **4. Presentation of the host organization and diagnosis of the role of competitive intelligence in the decision-making process**

##### **4.1. Presentation of the national insurance company SAA**

The Algerian Insurance Company is a public economic company governed by Decree No. 85-80 of April 30, 1985 which sets its statutes; it is endowed with financial autonomy. The S.A.A has the state monopoly on insurance operations, and it is responsible for carrying them out directly. However, a decree issued on the basis of a report from the Minister of Finance may exclusively empower organizations that have carried out insurance activity, and which are not aimed at profit, to carry out insurance operations. The same decree will specify the conditions and motives for carrying out the insurance activity.

SAA was created after independence (December 12, 1963) as a joint Algerian-Egyptian company (61%-39%). In December 1963, the first point of sale opened its doors in Algiers-centre, under the SAA assurance brand. It developed over the years to form a strong network of 520 agencies covering the entire national territory. In May 1966, the State instituted a monopoly on insurance operations. Then, the SAA specialized in the branch of simple risks in January 1976. On May 27, 1975 it was decided by the public authorities that the SAA operates motor insurance, simple risks and personal insurance.

February 21, 1983, marked the transition to autonomy, within the framework of economic reforms, the date on which SAA was transformed into a public joint-stock company, with a capital of 5 billion dinars, operating in competition with the other companies in the sector such as: CIAR; CAAT; CNMA, etc.

##### **4.2. branches of activity**

**SAA** insurance has a very wide variety of products and services that they provide which are:

- Miscellaneous risk insurance
- Industrial risk insurance
- Engineering and construction insurance
- Personal insurance
- Transport insurance

- Agricultural risk insurance
- Car insurance
- Simple risk insurance for individuals and professionals
- Agricultural risk insurance
- Natural catastrophe insurance

### **4.3. Competitive intelligence in the SAA**

#### **4.3.1. History and development**

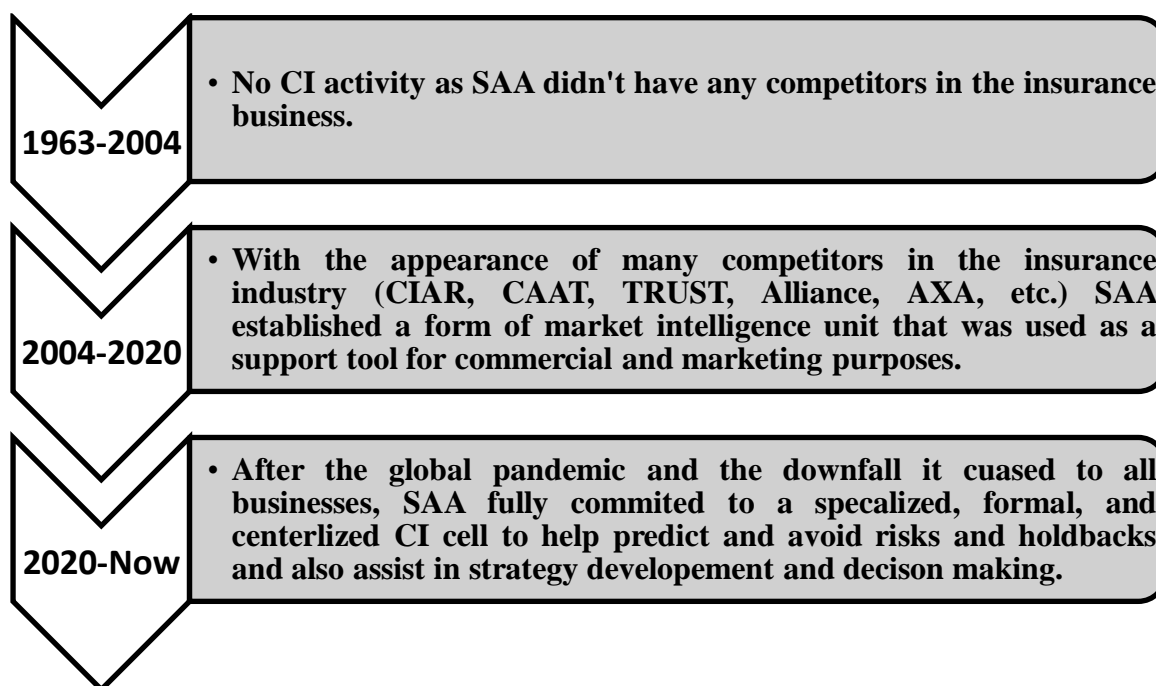
Before competitive intelligence was formalized in the SAA, it used to be a standard practice in a decentralized informal way, but during the early 2000's years, and with the appearance of many competitors in the insurance market, it became evident for SAA managers that it was inevitable to invest in a unit to help them manage their competition.

At first this unit was more of a market intelligence tool than that of CI, where it was attached to the marketing division of the organization to help analyse competitors' activities.

However during the pandemic and the many downsides it caused on the insurance business, SAA decided to fully commit to a centralized formal CI unit to help manage the downfall caused by the global pandemic.

The timeline below will summarize the history and development of CI within the SAA:

**Figure 7: The history of CI in the SAA**



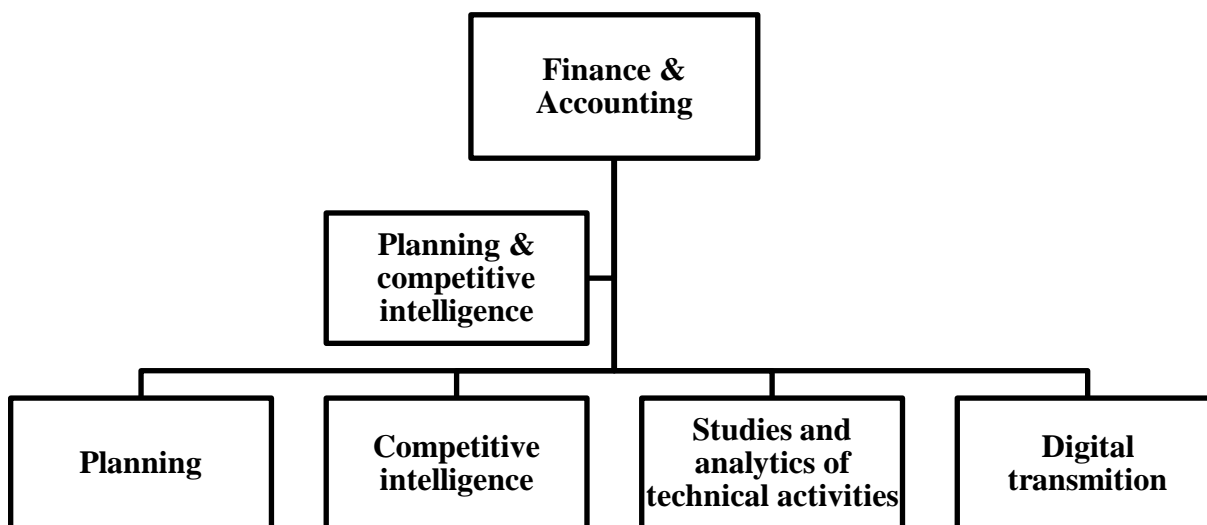
*Source:*elaborated by the researcherç

#### 4.3.2. Organizational chart

As of 2020, and after the formalization of CI operations, the cell was officially attached to the finance and accounting division of the organization.

The figure below will detail the organizational chart of the CI department of the SAA:

**Figure 8: The organizational chart of the CI unit in the SAA**



*Source:*elaborated by the researcher

#### **4.3.3. The determinants of Competitive intelligence axes**

Being the leaders of the insurance market in Algeria, SAA has to have a full grasp and understanding of their surroundings, some aspects require more attention and urgency than others, when employees were asked on how these aspects are defined, we obtained a selection of clarifications and explanations; the figure below will summarize the axes of competitive intelligence that are focused on in the SAA:

**Figure 9: word cluster of the determinants of CI axes**



**Source:** Elaborated by the researcher using NVIVO

After conducting the interviews and analysing them, we found that the determination of axes of strategic intelligence can vary depending on the context and specific requirements of an organization or situation. However, here are some conjoint tactics and contemplations:

- **Mission and Objectives:** Starting by identifying the global mission and objectives of the organization or project. These function as the guiding values for defining the axes of competitive intelligence.
- **Environmental Analysis:** Conducting a all-inclusive analysis of the external environment. This includes evaluating political, economic, social, technological, and other significant factors. Classify the key trends, opportunities, and threats that can impact the organization's success.
- **Internal Analysis:** Assess the internal proficiencies, strengths, and weaknesses of the organization. This analysis can include evaluating resources, competencies, organizational structure, culture, and other internal factors. It helps identifying areas where intelligence is needed to support decision-making and strategic planning.
- **Risk Assessment:** Evaluating impending risks and vulnerabilities that may affect the organization's ability to achieve its objectives. Consider both internal and external risks, such as financial risks, competitive risks, regulatory risks, and operational risks. These risks often shape the intelligence requirements.
- **Stakeholder Analysis:** Identify the key stakeholders involved, such as customers, suppliers, partners, competitors, and regulatory bodies. Determine their interests,

influence, and potential impact on the organization. This analysis helps define the intelligence requirements related to stakeholders and their conducts.

- **Decision-Making Processes:** Understand the decision-making processes within the organization. Identify the key decisions that require strategic intelligence support. This can include strategic planning, resource allocation, market entry, product development, and other significant decisions.
- **Information Gaps:** Identify existing gaps in knowledge and information within the organization to determine the critical areas where strategic intelligence can provide valuable insights and bridge those gaps.
- **Future-oriented Perspective:** Consider the future outlook and emerging trends that may affect the organization's long-term success. Anticipate changes in technology, consumer behaviour, industry dynamics, and regulatory environments. This forward-looking perspective helps identify the intelligence needs related to future scenarios and planning.

By considering these factors, The SAA can determine the axes of strategic intelligence that align with their goals and requirements. It's important to regularly review and update these axes to adapt to evolving circumstances and information needs.

#### 4.3.4. Types of CI practiced

The types of competitive intelligence operated within the SAA can be altered depending on any alteration in the determinants mentioned above, but there are some which constantly running and monitoring which are;



**Figure 10: The types of competitive intelligence practices in the SAA.**

Source: created by the researcher using NVIVO

In the table below, we will further explain the reasoning behind implementing these types of CI;

**Table 9: Summary on why each type of CI is implemented in the SAA.**

<b>Type</b>	<b>Reasoning</b>
<b>Environmental</b>	This type of intelligence focuses on understanding the external environment in which an organization operates. It involves monitoring and analysing political, economic, social, technological, and legal factors (often referred to as PESTLE analysis). Environmental intelligence helps identify opportunities, threats, and trends that can impact the organization's strategic direction.
<b>Risk</b>	Risk intelligence focuses on identifying and assessing risks that can affect an organization's ability to achieve its objectives. This includes analysing internal and external risks, such as financial risks, operational risks, legal and regulatory risks, reputational risks, and emerging risks. Risk intelligence helps organizations develop risk mitigation strategies and enhance their resilience.
<b>Juridical</b>	Also known as legal intelligence or legal research refers to the process of gathering, analysing, and interpreting legal information and data to support legal decision-making and provide insights into legal matters. It involves conducting comprehensive research, studying legal documents, statutes, regulations, case law, and other relevant legal

	sources to understand the legal framework, precedents, and implications associated with a specific issue or situation.
<b>E-reputation</b>	<p>Also known as online reputation intelligence or online reputation management refers to the process of monitoring, analysing, and managing an individual's or organization's reputation on the internet. It involves tracking and evaluating online content, discussions, reviews, and social media mentions to assess and influence public perception.</p> <p>The goal of e-reputation intelligence is to understand how an individual or organization is perceived online and take proactive measures to maintain or enhance their reputation. It involves monitoring various online platforms, including social media, review websites, forums, news articles, blogs, and search engine results.</p>
<b>Medias</b>	The goal of Mediatic intelligence is to understand the media landscape, assess the impact of media coverage, and make informed decisions regarding public relations, marketing, and communications strategies. It helps individuals and organizations stay informed about their public image, media mentions, and the perception of their brand or reputation in the media.
<b>Financial</b>	Financial intelligence involves analysing financial data, market trends, and economic indicators to gain insights into the financial

	health of the organization and its industry. It includes monitoring financial performance, assessing investment opportunities, and evaluating the impact of economic factors on the organization's strategy.
<b>Market</b>	Market intelligence focuses on gathering insights about the target market, customer segments, trends, preferences, and needs. It involves analysing market size, growth potential, customer behaviour, buying patterns, and competitive dynamics. Market intelligence helps organizations identify market opportunities, develop effective marketing strategies, and make informed decisions about product development and market entry
<b>Technological</b>	Technology intelligence involves monitoring and analysing emerging technologies, innovations, and industry trends that can impact the organization's industry or operations. It helps organizations stay up-to-date with technological advancements, identify opportunities for digital transformation, and assess the potential impact of disruptive technologies.

*Source:*Elaborated by the researcher using SAA internal documents

#### 4.3.5. Information sources

To have a complete grasp of the environment surrounding the SAA, CI operators must use every possible source of information available to gather the maximum useful intelligence possible, the main key sources that they depend on are summarized in the table below:

**Table 10: The different sources of information used in the SAA**

The source	Why it is used
------------	----------------

<b>Internal sources</b>	Information internal to the organization is an important source of competitive intelligence. This may include internal reports, databases, financial data, market research, performance analysis, key performance indicators (KPIs), and other organization-specific information.
<b>External sources</b>	There are many external sources that can provide relevant information for competitive intelligence. This includes research reports, market studies, industry analyses, government reports, academic publications, news articles, trade blogs, trade journals and analyst reports.
<b>Professional networking</b>	Interactions with other professionals, experts and thought leaders in the area of interest can provide valuable insights. This can be done through conferences, professional social networks, online discussion groups, professional associations and partnerships with other organizations.
<b>Interviews and surveys:</b>	Conducting interviews and surveys with internal and external stakeholders can provide qualitative insights and unique perspectives on strategic issues. This may involve individual interviews, focus groups, online surveys or questionnaires.
<b>Competitive analysis</b>	Competitor monitoring can be an important source of information for business intelligence. This may involve gathering information about competitors' products, services, marketing strategies, investments, partnerships, mergers and acquisitions, and other activities.

<b>Governmental sources</b>	Government agencies, such as ministries, regulatory agencies, and research institutes, can provide useful information in areas such as politics, economics, regulation, national security, environment, and technology.
<b>Social media and online sources</b>	Social media, blogs, online forums, and other Internet sources can provide information on emerging trends, public opinions, consumer reactions, innovations, and the activities of key players.

***Source:*** elaborated by the author using data gathered during internship

Another key source of information used in the SAA are mysterious customers who are individuals who are hired by companies or organizations to pose as regular customers and evaluate the quality of products, services, or overall customer experience. They play a crucial role in assessing and improving the performance of businesses, particularly in the retail, hospitality, and service industries.

The primary purpose of using mystery customers is to gather unbiased feedback and first-hand observations about various aspects of the customer journey. Mystery shoppers typically visit physical locations or interact with businesses through various channels such as phone calls, websites, or mobile applications. They may be given specific scenarios, tasks, or questions to address during their interactions, allowing the company to evaluate specific aspects of its operations.

The feedback provided by mystery shoppers can help companies identify strengths and weaknesses in their customer service, employee performance, adherence to company standards and policies, product quality, store cleanliness, pricing accuracy, and overall customer satisfaction. This information is valuable for identifying areas for improvement, training employees, and enhancing the overall customer experience.

Overall, mystery customers serve as a valuable tool for businesses to gain insights into their operations from the perspective of an average customer, helping them make informed decisions and improve their products and services.

#### 4.3.6. Data validation

Having such a wide variety of information sources, SAA trackers need to confirm the veracity and validity of these information gathered, to do that they use a group of methods and techniques which are:

- **Information source validity:** Assessing the credibility and reliability of the data sources is crucial. Analysts examine the reputation, expertise, track record, and potential biases of the sources providing the data. They consider factors such as the source's access to information, methodology of data collection, and any potential conflicts of interest.
- **Cross-referencing:** It involves comparing the data with multiple independent sources or data points to verify its consistency and accuracy. If different sources or data sets corroborate the same information, it increases confidence in its validity. Inconsistencies or discrepancies among sources may require further investigation or clarification.
- **Triangulation:** It involves using multiple methods or sources of data to confirm or validate the findings. This can include combining different data collection techniques, consulting various experts, or comparing data from different time periods or geographical locations. Triangulation helps to reduce biases, errors, or limitations associated with individual data sources.
- **Fact-Checking:** Fact-checking involves independently verifying the accuracy of specific data points or claims. This can be done by consulting reliable reference sources, official records, published reports, or subject matter experts. Fact-checking helps to ensure that the data used in strategic intelligence is factual and reliable.
- **Peer Review:** In some cases, strategic intelligence data undergoes a peer review process. Other analysts or subject matter experts review the analysis, methodology, and findings to identify any potential errors, biases, or gaps in the data. Peer review helps to enhance the robustness and credibility of the data.
- **Feedback and Stakeholder Input:** Seeking feedback and input from stakeholders or subject matter experts can provide additional perspectives and help validate the data. This can involve engaging in discussions, conducting interviews, or soliciting feedback on the accuracy and relevance of the data and its implications.

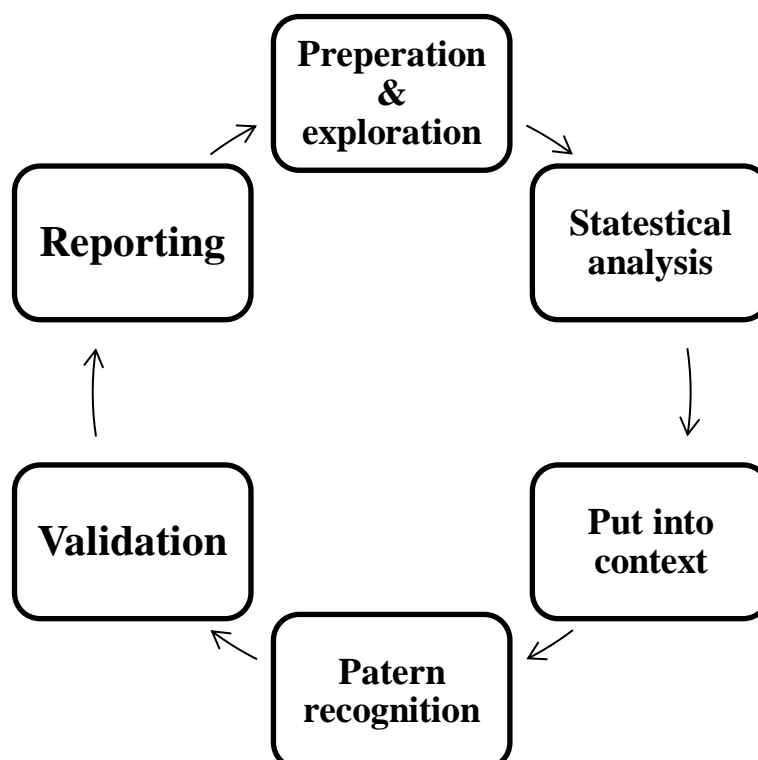
### 4.3.7. Information collection tools

Other than the mentioned sources above, SAA CI operators use another set of paid tools that allows them to gather more targeted data efficiently, all these tools function in a similar matter where you configure it into notifying you when specific key-words are mentioned in an article, research paper, social media, conferences and other sources, these tools are: **Google alerts**, **“VeilleEntreprise”** **“Legal Doctrine”**, and of course the use of research motors is an essential indispensable tool that cannot be overlooked.

### 4.3.8. Data analysis and interpretation

The competitive intelligence data analysis process involves a systematic approach to analyse and extract actionable insights from data collected during the intelligence gathering phase. Here is an overview of the key steps involved in the strategic intelligence data analysis process:

**Figure 11: CI Data analysis process**



Source:elaborated by the researcher

- **Data Preparation and exploration:**The collected data is cleaned, organized, and prepared for analysis. This may involve removing duplicates, handling missing values, standardizing formats, and ensuring data integrity. The data is transformed into a format suitable for analysis. Analysts explore the data to gain a preliminary understanding of its characteristics and identify any patterns or anomalies. This may involve conducting descriptive statistics, visualizations, and initial data profiling to uncover key insights and trends.
- **Statistical Analysis:** Statistical techniques are applied to the data to test hypotheses, identify relationships, and assess significance. This may involve conducting regression analysis, hypothesis testing, analysis of variance (ANOVA), or other statistical methods appropriate for the data and research questions.
- **Contextualization:** The analysed data is placed within its broader strategic context. Analysts consider the environmental factors, industry dynamics, geopolitical landscape, economic indicators, and other relevant contextual factors to interpret the implications of the findings.
- **Pattern Recognition:** Analysts search for patterns, trends, and correlations in the data that can provide insights into strategic opportunities or risks. This may involve employing data mining techniques, predictive modelling, cluster analysis, or time series analysis to uncover meaningful patterns.
- **Validation and Verification:** The analysis is rigorously evaluated for accuracy, reliability, and validity. Analysts cross-check findings with other data sources, conduct sensitivity analysis, or seek expert opinions to validate the results and ensure robustness.
- **Reporting and Communication:** The findings and insights are effectively communicated to decision-makers or stakeholders. This may involve preparing comprehensive reports, executive summaries, visual presentations, or interactive dashboards that clearly present the analysis, key findings, and actionable recommendations.

#### 4.3.9. CI Communication

After all of the previous steps are concluded, the final results of CI activity are thereafter reported to higher-ups and decision makers and decision makers to aid in their activities. In

the standard, CI operators in the SAA create a summary on all activities that occurred during a week's period of time into a report that is transmitted on a weekly basis, but their activity does not stop there, SAA's CI unit is equipped with a group of data scientists and analysts who gather data from SAA branches throughout the national level and create dashboards and KPI's that are constantly updated to keep the managers, stakeholders and decision makers up-to-date with the general results and activities of all branches.

#### 4.3.10. CI obstacles and challenges

Despite its effectiveness and importance it is undeniable that CI is prone to face many challenges and obstacles that might undermine its activity, some of the most common obstacles are:

- **Lack of Information:** One of the significant challenges is the availability and accessibility of relevant information. Strategic intelligence relies on accurate, up-to-date, and comprehensive data, but sometimes organizations may face limitations in accessing the required information. This can be due to restricted access to certain sources, data privacy concerns, or inadequate data collection mechanisms.
- **Information Overload:** On the flip side, organizations may face an overwhelming amount of information from various sources, making it challenging to filter, analyse, and extract actionable insights. Managing and processing large volumes of data can be time-consuming and resource-intensive, potentially leading to information overload and difficulties in identifying relevant and meaningful intelligence.
- **Quality and Reliability of Information:** Ensuring the quality and reliability of the information is crucial for strategic intelligence. However, organizations may encounter issues related to inaccurate, biased, or incomplete data. The reliability of sources and the need to validate information become critical challenges, as strategic decisions rely heavily on the accuracy and trustworthiness of the intelligence.
- **Rapidly Changing Environment:** The business and geopolitical landscapes are constantly evolving, making it challenging to keep up with the dynamic nature of the external environment. Strategic intelligence must adapt to rapid changes, emerging trends, technological advancements, and geopolitical shifts. Failure to do so may result in outdated or irrelevant intelligence, hindering effective decision-making.
- **Organizational Culture and Mind-set:** Strategic intelligence requires a culture that values information sharing, collaboration, and proactive decision-making. However,

some organizations may have a hierarchical structure, siloed departments, or a risk-averse mind-set, which can impede the flow of intelligence, inhibit cross-functional collaboration, and limit the utilization of strategic intelligence in decision-making processes.

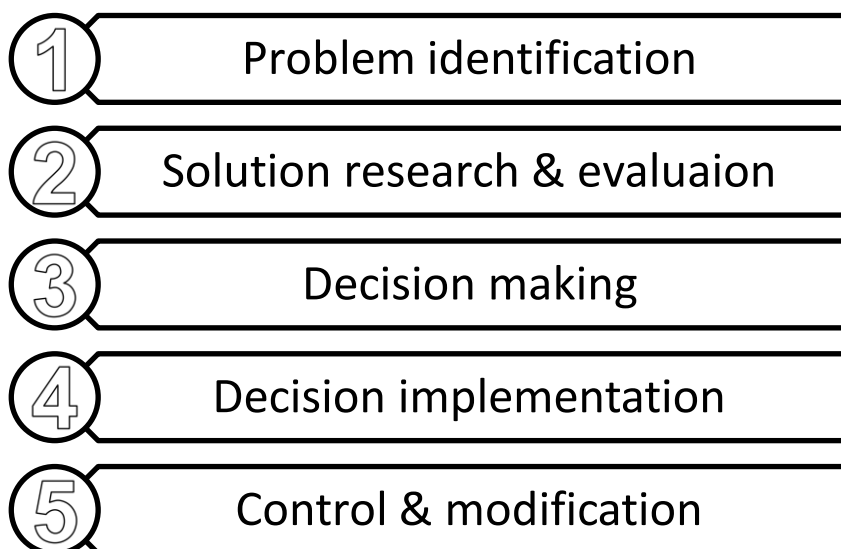
- **Resource Constraints:** Implementing strategic intelligence initiatives may require significant resources, including financial, technological, and human resources. Organizations with limited resources may face challenges in investing in intelligence capabilities, hiring skilled analysts, or acquiring advanced technologies for data analysis and interpretation.
- **Ethical and Legal Considerations:** Strategic intelligence involves gathering information from various sources, including competitors, which raises ethical and legal considerations. Organizations must adhere to ethical guidelines, respect data privacy regulations, and ensure that intelligence activities are conducted in an ethical and legal manner.

#### 4.4. CP's role in the decision making process within the SAA

##### 4.4.1. SAA's decision-making process

The decision making process in the SAA is standard and simple consisting of the steps listed in the figure below:

**Figure 12: The decision-making process in the SAA**



**Source:** elaborated by the researcher

#### 4.4.2. Decision-making tools

There are several tools and techniques that can optimize the decision-making process, it's important to note that the selection and use of these tools depend on the specific needs and context of the organization. Integrating these tools into the decision-making process can enhance the efficiency, effectiveness, and quality of strategic intelligence and ultimately optimize decision-making outcomes.

- **SWOT Analysis:** SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is a framework used to assess the internal strengths and weaknesses of an organization, as well as external opportunities and threats in the business environment. It helps identify key factors that can influence strategic decisions and prioritize areas for improvement or capitalization.
- **PESTEL Analysis:** PESTEL (Political, Economic, Sociocultural, Technological, Environmental, and Legal) analysis is a tool that evaluates the external macro-environmental factors impacting an organization. It helps identify potential opportunities and threats arising from changes in the political, economic, social, technological, environmental, and legal landscape.
- **Competitive Intelligence Tools:** Competitive intelligence tools, such as market research platforms, social media monitoring tools, and competitor analysis software, assist in gathering and analysing information about competitors, industry trends, and market dynamics. These tools provide insights that inform strategic decision-making and help organizations stay competitive.
- **Scenario Planning:** Scenario planning involves developing and analysing different future scenarios based on various assumptions and factors. It helps decision-makers anticipate and prepare for different potential outcomes, enabling more informed and robust strategic decisions. By considering multiple scenarios, organizations can enhance their ability to adapt to uncertainties.
- **Risk Assessment and Management:** Risk assessment tools, such as risk matrices or risk heat maps, help identify, evaluate, and prioritize risks associated with strategic decisions. By systematically assessing risks and their potential impact, organizations can make informed decisions and implement risk mitigation strategies to minimize negative consequences.

- **Data Visualization Tools:** Data visualization tools, such as dashboards, infographics, or interactive charts, enable the effective communication and visualization of complex data. These tools simplify the interpretation of strategic intelligence, making it easier for decision-makers to grasp key insights and trends.
- **Decision Support Systems:** Decision support systems (DSS) combine data, models, and analytical tools to support decision-making processes. These systems leverage advanced analytics, algorithms, and simulations to provide decision-makers with quantitative insights and scenario analysis for strategic decision-making.
- **Collaboration and Communication Tools:** Effective decision-making often relies on collaboration and communication among stakeholders. Tools such as project management software, online collaboration platforms, and video conferencing solutions facilitate efficient collaboration, information sharing, and decision-making processes, particularly in geographically dispersed teams.

#### 4.4.3. Information needs in decision-making

According to the interviewees of our second qualitative study, to the side of experience and intuition, reliable information is the most important asset and tool in the decision making process of the SAA, managers' needs of information may differ from one decision to another and from one decision-maker to another, after conducting the interviews the key needs of information that were in common are:

- **Market Trends and Competitive Analysis:** Decision-makers require information on market trends, including changes in customer preferences, emerging technologies, regulatory developments, and competitive landscape. This information helps in identifying market opportunities, assessing potential risks, and formulating strategies to stay competitive.
- **Customer Insights:** Understanding customer behaviour, preferences, and needs is crucial for decision-makers in the insurance industry. They need information on customer demographics, buying patterns, satisfaction levels, and feedback. This helps in developing customer-centric products, improving customer experience, and tailoring marketing and sales strategies.

- **Risk Assessment and Underwriting:** Decision-makers need information related to risk assessment and underwriting processes. This includes data on insurance claims, historical loss ratios, actuarial analysis, and risk profiling. Accurate and reliable information on risk helps in pricing insurance products appropriately, managing underwriting guidelines, and optimizing risk management strategies.
- **Regulatory Compliance:** Decision-makers must stay updated on regulatory requirements and changes in the insurance industry. They need information on legal and compliance frameworks, licensing and certification requirements, consumer protection regulations, and data privacy laws. This ensures adherence to regulatory guidelines and avoids potential legal and reputational risks.
- **Financial Performance:** Decision-makers require information on the financial performance of the insurance company. This includes data on revenue, profitability, expenses, investment portfolio performance, solvency ratios, and key financial indicators. Timely and accurate financial information helps in assessing the company's financial health, identifying areas for improvement, and making strategic financial decisions.

#### 4.4.4. CI's role in the decision making process

The information gathered from strategic intelligence plays a crucial role in the decision-making process by providing valuable insights and informing key strategic decisions. Here are the main roles of strategic intelligence in decision making:

**Figure 13: CI's Influence on the decision making process**



*Source:* elaborated by the researcher

- **Supporting Strategic Planning:** Strategic intelligence serves as a foundation for strategic planning activities. It provides decision-makers with a deep understanding of the external environment, including market dynamics, customer behaviour, industry trends, and competitive forces. This information helps in formulating strategic goals, defining market positioning, setting growth targets, and determining resource allocation strategies.
- **Informing Product and Service Development:** Strategic intelligence plays a vital role in shaping product and service development strategies. It provides insights into customer preferences, unmet needs, and evolving market demands. Decision-makers can utilize this intelligence to identify product/service enhancements, new offerings, or innovative solutions that align with market trends and customer expectations.
- **Enhancing Competitor Analysis:** Strategic intelligence helps decision-makers gain a comprehensive understanding of the competitive landscape. It provides insights into competitors' strengths, weaknesses, strategies, and market positioning. By analysing

competitor intelligence, decision-makers can identify areas for differentiation, anticipate competitive moves, and develop effective competitive strategies.

- **Facilitating Market Entry and Expansion Decisions:** Strategic intelligence assists in evaluating market entry or expansion opportunities. It provides information on market potential, customer segments, regulatory requirements, cultural nuances, and local business practices. Decision-makers can use this intelligence to assess the feasibility and profitability of entering new markets, expanding existing operations, or establishing strategic partnerships.
- **Supporting Risk Management:** Strategic intelligence contributes to effective risk management strategies. It helps decision-makers identify and assess potential risks, such as operational, financial, legal, or reputational risks. By understanding the risk landscape, decision-makers can develop risk mitigation plans, implement control measures, and make informed decisions to protect the organization's interests.
- **Monitoring Performance and KPIs:** Strategic intelligence aids decision-makers in monitoring performance and key performance indicators (KPIs). It provides benchmarks, industry standards, and best practices for evaluating the organization's performance and progress towards strategic goals. Decision-makers can utilize this intelligence to track performance, identify areas for improvement, and make data-driven adjustments to achieve desired outcomes.

Overall, strategic intelligence provides decision-makers with valuable information and insights that guide their decision-making process. It helps them make informed, proactive, and forward-thinking decisions that align with organizational goals, improve competitiveness, and drive sustainable growth.

# Conclusion

## **Synthesis and the principal results obtained**

The main objective of our research work is to identify how competitive intelligence can contribute in optimizing the decision making process in the SAA. We have analysed each of the topics separately and then tried to find the link between them.

To achieve our objective, our research was based on a research question formed as follows: **“How can competitive intelligence contribute in the decision making process in the Algerian insurance company SAA?”** and from our literature review we were able to deduce two possible hypotheses, the first deduces that competitive intelligence is a key source of information that feeds the decision-making process in the SAA, while the second suggests that despite its importance CI is not used to its full extent within the SAA.

A qualitative approach was applied via semi-directive interviews on managers and CI operators of the SAA with the goal to test the veracity of our hypotheses.

The qualitative study was conducted via two sets of interviews, the first focusing on CI operators with the goal to understand how competitive intelligence is positioned in the SAA and the second focalizing on managers and their decision-making process, more specifically the importance of information and how CI can contribute in optimizing their DM process.

The results we obtained partially validate both of our hypotheses, it was found that even though competitive intelligence does indeed play a crucial role in the decision making process in the SAA through generating constant valid and reliable information, KPIs, and interactive constant updating dashboards that help managers have a general view on all the statistics needed to make informed decisions, it is still not used to its full extent for a variety of reasons mainly organizational culture; we found that decision-makers on the higher strategic level of the SAA heavily depend on their personal experiences and instincts when making decisions which sometimes can lead to faulty decisions that the intelligence gathered by CI could have prevented.

Another obstacle that CI faces in the SAA is its organizational position, being linked to the finance and accounting regional direction can limit the interactions between other regional divisions and sub-divisions which prevents the existence of information flows between them which can be a pertinent source of information for competitive intelligence both as data input and feedback from its outputs.

## **Research limits**

Our study was faced with some obstacles that have limited it, we cite:

- Targeting the insurance field can limit the broad perspective of our study as results can widely vary from a sector to another.
- Our interviewed sample was restrained to the finance and accounting regional division, a wider perspective would have aided us to better understand our problematic.

## **Research contribution and possible extensions**

Despite the research limitations, the main objective of our study which is to determine the role of competitive intelligence in optimizing the decision-making process in the SAA was achieved; furthermore, we were able to answer all of our secondary questions and objectives.

- ✓ Introduce the competitive intelligence and decision making processes.
- ✓ Positioning CI in the DM process.
- ✓ Retracing the literature for the link and relation between both concepts.
- ✓ Identifying CI's position in the SAA and its contribution to the decision making process.

Future researchers can expand on our study by expanding the studied sample to generate a wider variety of data that can lead to more detailed results, and also by studying different insurance companies and compare the results obtained to see if they can be generalized to all companies in the sector. Another suggestion is to test these results in different sectors to have a wider understanding on competitive intelligence's impact and contribution in decision making throughout different companies of different sectors.

## **Practical recommendations**

After concluding our study and analysis we can make some recommendations for the SAA to enhance and optimize the use of competitive intelligence in the SAA:

- Re-position the competitive intelligence unit to a more strategic placement of the hierarchical level.
- Communicate the CI findings and reports to all the personnel that can benefit from having that flow of information.
- Sensitize employees to the importance of information in the decision making process and the vital role competitive intelligence can play in optimizing it.

## **BIBLIOGRAPHIC REFERENCES**

## BIBLIOGRAPHY

### Books:

- AIT TEJAN, M. (2019). *Mise en perspective de l'alignement stratégique du système d'information (SI) et des objectifs de type événementiels de la destination Marrakech*. nantes.
- AURIAC, j., & BOUGAUL, H. (1995). *Économie d'entreprise* (Castilla ed., Vol. 1). (TechniPlus, Ed.) PARIS, FRANCE.
- BIZOT.E, CHIMISANAS.M, & PIAU.J. (2016). *La communication* (Techniques tertiaires ed., Vol. 2). (Dunod, Ed.) Paris.
- BROUAR.F. (2002). Pertinence d'un outil diagnostique des pratiques de veille stratégique pour aider les PME. *6ème Congrès international francophone sur la PME*. Montreal .
- CHARRON, J.-L., & SÉPARI, S. (2004). *Organisation et gestion de l'entreprise*.(3 ed.). (Dunod, Ed.) Expert Sup.
- Day, R. E. (2001). *The Modern Invention of Information: Discourse, History, and Power*. ILLINOIS : carbondale & edwardsville.
- GLOAGUEN.P. (2002). *le guide de l'intelligence économique*. Italy: Hachette.
- HERMEL, L. (2001). *Maitriser et pratiquer la veille stratégique*.Paris: AFNOR.
- KHELASSI.R. ( 2011). *précision du management*. Alger: édition HOUMA.
- LESCA, h. (1989). *structure et système d'information facteurs de compétitivité de l'entreprise*. (Masson, Ed.) paris.
- LINDREVIE, LEVY, & LINDON. (2009). *MERCATOR: théorie et nouvelles pratiques du marketing*. PARIS : DUNOD.
- MARCON, C., & MOINET, N. (2011). *L'intelligence économique* (2nd ed.). (Dunod, Ed.) Les Topos.
- Nadeau, R. (1999). *Vocabulaire technique et analytique de l'épistémologie*. Presses Universitaires de France - PUF.
- PELLETIER.A, & CUENOT.P. (2013). intelligence, mode d'emploi, maîtrisez l'information stratégique de votre . *édition PEARSON*, 161.
- PIAGET, J. (. (1967). *Logique et connaissance scientifique*. . Gallimard.
- REIX, R., B., F., KALIKA, M., & ROWE, F. (2016). *Système d'information et management des organisations* (Vuibert ed.). (Vuibert, Ed.) Paris.
- (1998). *Réseau de grandes entreprises, Veille stratégique : organiser la veille sur les nouvelles technologies de l'information*. PARIS: CIGREF.
- RIVARD, s., & TALBOT, J. (2001). *Le Développement de Systèmes d'Information : Une Méthode Intégrée à la transformation des processus* (3rd editon ed.). QUEBEC, CANADA: PUQ.

VAN LEATHEM, n. (2005). *toute la fonction marketing*. PARIS: DUNOD.

### Scientific articles :

AALOUT, F., & MOUAIN, A. (2022). اليقظة الإستراتيجية كوسيلة فعالة في عملية اتخاذ القرارات بالمنظمة. *مجلة إدارة الأعمال والدراسات الاقتصادية*, 7, 195-209.

Ahmed, B., & Ahmed, M. (2022). The role of economic intelligence in supporting the decision-making process in an economic institution, a case study of the Algeria Telecom Corporation - Chlef Branch –. *مجلة املقسيصي للدراسات الاقتصادية واملاليت*, 6(1), 252-271.

AKTI, J., & BENWADEH, h. (2017). the impact of CI in strategic decision making. Case study; Genral cable, Biskra. *مجلة البحوث الإدارية والاقتصادية*, 2, 143-159.

BENDJELLOULI, & BENDI. (2017, november ). La veille stratégique au service de la stratégie. *AL-MOASHEER Journal of Economic Studies*, 1(4), 190.

chafiaa, B., & Moussa, B. (2020). Analyse de l'influence de la veille stratégique sur la compétitivité des entreprises algériennes exportatrices hors hydrocarbures. *Roa Iktissadia Review*, 10(2), 221-235.

*Bultin d''information Coup d'oeuil*, 1, 1-16.

CHARTRAND.M. (2003). La veille stratégique, un outil de la décision et du changement. *bultin d''information Coup d'oeuil*, 1, 1-16.

COHEN, C. (2008). *Veille et intelligence stratégiques*.

DEROUET, & LEPOIVRE. (2005). Veilles : processus et méthodologie. *Rapport NEVAOCONSEIL*, 2, 9-11.

DIAKHATE, D. (2011). VEILLE STRATEGIQUE. p. 32.

DU TOIT, a. (2013). Comparative Study of Competitive Intelligence Practices between Two Retail Banks in Brazil and South Africa. *Journal of Intelligence Studies in Business*, 2, 30-39.

Fariza, N. (2016, JUIN). LA VEILLE STRATEGIQUE AU SEIN DE L'ENTREPRISE : QUELQUES REPERES. *Revue Économie, Gestion et Société*, 6, 1-16.

Fenni, F. (2020, juin). Competitive intelligence or business intelligence: what is the difference and what is the reality of practice in Algeria? *El - Acil Review for Economic and Administrative Research*, 4(1), 408-425 .

GERUNGAN, KINDANGEN, & SAERANG, &. (2022). The impact of emotional intelligence and job security on employee performance. *EMBA*, 10, 791-799.

Gueye, P. M. (2017). The strategic watch: a technical-managerial device for economic intelligence. *Revue Internationale d'Intelligence Économique*, 7, 12.

HAMIDI, & BELAID, m. m. (2021). The reality of strategic vigilance in insurance companies- Case study: Salama Insurance Company Algeria - Guelma and Annaba. *مجلة الاقتصادية للدراسات م*, 7(1), 212-203.

- HAMIDI, m., & BELAID, m. (2023). *ملة أفلاق للبحوث والدراسات*, 6(1), 171-181.
- HAMMADY, M. I., ABD JASSIM, L., & MUBARAK, I. A. (2019). The effect of competitive intelligence on the banking performance Survey research sample of private banks. *مجلة تكريت للعلوم الإدارية والاقتصادية*, 15(48), 177-195.
- HANIF, N., ARSHED, N., & FARID, H. (2022). Competitive intelligence process and strategic performance of banking sector in Pakistan. *Int. J. Business Information Systems*, 39(1), 52-75.
- HATEM, ZURAIDAH, THOO, NORNAJIHAH, & MONIR. (2022, january ). Advancing Competitive Intelligence as a Correlation of Competitive Advantage in Iraqi Banking Industry. *International Journal of Academic Research in Business and Social Sciences*, 12(2), 361–375.
- HATHAT, E. (2013). La veille stratégique : un levier permanent de la compétitivité. 19.
- HATHAT, e., & MESSAOUDI, A. e. (2020, april). Contribution of the business intelligence in the development of the performance of the banking system in Algeria. -Proposal of a business intelligence cell for some public banks (BDL/BEA/BNA). *مجلة أرساد للدراسات الاقتصادية والإدارية*, 3, 171-196.
- KATEBI, P., EHDAIE, S., & JALILIAN, H. (2022). Analysis of the Effect of Competitive Intelligence on Strategic Decision Making in Small and Medium-Sized Food Enterprises. *International Journal of Management, Accounting and Economics*, 9(6), 354-376.
- Kaye, D. (1995). The importance of information. *Library Management*, 16(5), 10.
- KERKOU, i., & LADJOUZI, s. (2007, 12 15). L'UTILITÉ DE LA VEILLE STRATÉGIQUE DANS LE PROCESSUS DE PRISE DE DÉCISION, CAS DE SONELGAZ. *la revue des sciences commerciales*, 128-129.
- KOUBA, f., & MOUSSERATI, k. (2022). The fact of strategic vigilance practices in the Algerian public Banks and its impact on their competitive strategies. *مجلة العلوم الاقتصادية والتسيير والعلوم التجارية*, 15(2), 181-197.
- LADJOUZI, S. (2020, December ). La pratique de la veille stratégique chez les pérateurs de la téléphonie mobile en Algérie. cas pratique : Mobilis . *REVUE DES SCIENCES COMMERCIALES*, 19(2), 31-51.
- LEVEUGLE, D., & SAUTREAU, A. L. (2008). L'intelligence économique et la veille stratégique ou la valeur ajoutée de l'information. *GIDE*, 1-35.
- LUDOVIC.F, & LEVY.J. (2001). L'intelligence économique, outil de marketing : un enjeu organisationnel. *Market Management*, 3(1), 3-24.
- MALAININE, C., & BOURASS, H. (2020, juin ). Intelligence Economique et Performance des Entreprises Financières : Évaluation économétrique sur la base des données financières du Capital Gestion Group. *Dossiers de Recherches en Economie et Gestion Dossier*, 9(1), 175-192.
- MAUNE, A. (2014). COMPETITIVE INTELLIGENCE AS AN IMPORTANT CONTRIBUTOR TO THE GROWTH OF BANKS: A ZIMBABWEAN PERSPECTIVE. *Journal of Governance and Regulation*, 3(3), 81-95.

- MHENNA, R., & JAMAL, Y. (2020). LE CADRE EPISTEMOLOGIQUE :PIERRE ANGULAIRE DE TOUTE RECHERCHE EN SCIENCE DE GESTION. *Revue Économie, Gestion et Société*, 25, 1-12.
- NANECHÉ, F. (2016, JUIN). LA VEILLE STRATEGIQUE AU SEIN DE L'ENTREPRISE : QUELQUES REPERES. *Revue Économie, Gestion et Société*, 6, 16.
- Narimene, G., & Mustapha, B. (2022, JUIN). Diagnostic of the practice of compétitive intelligence within an Algerian company SOPT Constantine. *Revue des Recherches Economique et financière*, 9(1), 20.
- NASIRI, v., & MOZAFARI, M. M. (2015). IDENTIFY AND PRIORITIZE THE IMPACT OF COMPETITIVE INTELLIGENCE TO IMPROVE DECISION MAKING IN PRIVATE HOSPITALS IN QAZVIN, IRAN. *SINGAPOREAN JOuRNAI Of buSINESS EcONOmIcS, AND mANAGEmEnt Studies*, 4(3), 1-9.
- NATOU, H. (2020, juin). Les réalités de la veille stratégique et de l'intelligence économique dans les entreprises au Cameroun. *Dossiers de Recherches en Economie et Gestion Dossier*, 9(1), 18.
- PELLETIER.A, & CUENOT.P. (2013). intelligence, mode d'emploi, maîtrisez l'information stratégique de votre . édition PEARSON, 161.
- PELLISSIER, R., & KRUGER, J.-P. (2011). Understanding the use of strategic intelligence as a strategic management tool in the long-term insurance industry in South Africa. *SA Journal of Information of management* , 13(1), 13.
- SEWDASS, N., & TOI, A. D. (2014, april). CURRENT STATE OF COMPETITIVE INTELLIGENCE IN SOUTH AFRICA. *International Journal of Information Management*, 34(2), 185-190.
- SEYYED AMIRI, N., SHIRKAVAND, S., CHALAK, M., & REZAEI, N. (2017). COMPETITIVE INTELLIGENCE AND DEVELOPING SUSTAINABLE COMPETITIVE ADVANTAGE. *AD-minister*, 30, 173-194.
- Shujahat, M. H. (2019 , february ). Strategic management model with lens of knowledge management and competitive intelligence: A review approach. *VINE Journal of Information and Knowledge Management Systems*, 47(1), 55-93.
- SAOUDI, K., RABHI, T., & SADOU, M. (2015). La Maîtrise De L'information Dans Le Cadre De La Veille Concurrentielle. 1-161.
- ROUIBAH, k., ROUIBAH, A., & OULD-ALI, S. (2000). Une méthode pour initier un dispositif de veille stratégique dans une entreprise. *revue d'Information Scientifique & Technique (RIST)*, 2(1), 139-156.
- RAFAA, N., & KACHI, K. (2015, december). The reality of competitive intelligence in algerian islamic banks. Case study: SALAMA bank. *مجلة الإدارة والتنمية للبحوث والدراسات*, 4(2), 113-134.
- SIHAMDI, i., & BELAACHI, A. E. (2022, Septermber ). The Role of Strategic Vigilance in Improving the Quality Decision in Economic Institution:A Field Study with the Use of Path Analysis on Algeria Telecom Company. *مجلة إقتصاد اممال والأعمال*, 6(3), 293-309.
- Stefanikova, L., Rypakova, M., & Moravcikova, K. (2015). The impact of competitive intelligence on sustainable growth of the enterprises. *Procedia Economics and finance*, 26, 209-214.

- Ubiparipović, B., & Đurković, E. (2011). Application of Business Intelligence in the Banking Industry. *Management Information Systems*, 6(4), 023-030.
- UZOAMAKA, N.-O. P., ANIGBOGU, T., & CHIDIMMA, I. I. (2017). Competitive Intelligence and Organizationa Performance in Selected Deposit Money Banks in South-East, Nigeria. *International Journal of Trend in Scientific Research and Development*, 1(6), 105-122.
- WAITHAKA, P. (2016). Competitive Intelligence Practices And Performance Of Firms Listed On The Nairobi Securities Exchange, Kenya . *European Scientific Journal July 2016 edition*, 12(19), 107-126.
- WRIGHT, S., FLEISHER, C. S., & EID, E. R. (2009). Empirical Study of Competitive Intelligence Practice: Evidence from UK Retail Banking. *Competitive Intelligence, Analysis & Strategy Track*, 11.
- Yasmine, D. D. (2019, december ). Elaborate a Project of Competitive Intelligence in the Organisation and his Contribution at the Performance of the Marketing. *Al Bashaer Economic Journal*, 5(3), 15.
- Zakaria, R. (2021, april). The Role of Strategic Scanning in Supporting Strategic Decision by Warning Signals : a Study of a Sample From Mobilis Tlemcen, by Using Partial Least Square-Structural Equation Modelling (PLS-SEM). *مجلة البشائر الاقتصادية*, 7(1), 19-37.

# Appendix

## Interview guide

### **Interview Guide N°1: State of play of the practice of business intelligence within SAA**

#### **The purpose of the study:**

As part of the preparation of our final thesis entitled: "THE INTEGRATION OF COMPETITIVE INTELLIGENCE IN AN ORGANIZATION'S DECISIONAL SYSTEM", we have the honor to ask for your contribution and your kindness in order to kindly answer our questions. Thank you for your valuable time.

#### **Questions:**

##### **Axis 1: The Place of CI in SAA**

1. What is the place of monitoring in the organization of the SAA? (hierarchical attachment and its place in the organization chart, date of creation, number of years of experience of the watchmen in their positions...etc. = all general and organizational information)
2. What is the composition of the team that deals with monitoring within the SAA? (Number of cell staff, number of years of experience of the watchmen in their posts... etc.).

##### **Axis 2: The practice of CI within the SAA**

1. How are the axes of the CI determined? (by expr, according to the needs of the managers of which direction ?....)
2. What are the different areas of monitoring exercised in the SAA? (What types of monitoring do you conduct, who are your direct and indirect competitors?)
3. What sources of information are used to collect your data?
  - a. (During an emergency or when detecting a weak signal, how does this affect your activity?)
4. How do you evaluate the effectiveness and relevance of the information collected?
5. Do you use any tools or software to gather information? Are these tools free or paid?

6. After collecting the information, what methods do you use to analyze and interpret it?
7. In what form are the results of the previous day delivered? To whom? How often?
8. What are the obstacles encountered in the monitoring practice?

**Interview Guide 2:** The Role of competitive Intelligence in SAA's Decision-Making Process**The purpose of the study:**

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**Questions:**

1. In general, what is the process you follow in decision-making?
2. What tools do you use to optimize your decision-making?
3. What are your priority information needs?
4. Does the current CI system issued by the management that deals with the monitoring meet your information needs? How?
5. How much trust do you have in the information coming from the management that takes care of the monitoring? And what is the weight of this information in the decision-making process within your management?
6. Can you give an example of a specific decision where monitoring played an important role? How did this influence the outcome?
7. On a scale of 1 to 6, where do you rate the importance of the information gathered by business intelligence in the success of the decision-making process within your management?
8. What is the added value that CI could bring to your management for decision-making?