



The Role of Economic Intelligence in Improving the Performance of Small and Medium Enterprises:

A Study of a Sample of SMEs in the Wilaya of Chlef

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Abstract ;

This study aimed to analyze the impact of economic intelligence and strategic vigilance on the performance of small and medium enterprises (SMEs) by examining the role of economic intelligence in improving their performance. To test this, a specially designed questionnaire based on the adopted study model was created. After validation, it was randomly distributed to the study sample, with 80 questionnaires distributed and 61 valid responses collected for analysis. The construct validity and reliability of the questionnaire were confirmed, and the data was processed using the SPSS software, which facilitated various related statistical tests. The results revealed a statistically significant positive impact of economic intelligence components on the performance of SMEs.

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1. Introduction

The economic intelligence system in organizations, particularly in small and medium enterprises (SMEs), aims to provide timely information to managers to support decision-making. The concept of economic intelligence has become a central topic of interest for both managers and researchers due to its importance at both the macro and micro levels, as it reflects the desired outcomes of every activity. It serves as a fundamental driver for the continuity and existence of organizations, especially SMEs, which, like other organizations, aim to achieve satisfactory results to survive in a competitive world shaped by globalization.

SMEs are considered leading investment engines for development, possessing immense potential to stimulate growth through investment and by adopting specific policies to reduce the obstacles they face. They are also capable of generating wealth and creating jobs. Across all sectors, SMEs seek ways to strengthen their information sources and secure a larger market share. Analyzing the external environment of SMEs through an economic intelligence system is essential, as it is one of the tools available to organizations to confront challenges and achieve their various objectives.

A. Problem Statement

This study seeks to explore the role of economic intelligence in the SME sector and its potential as an approach to enhance and improve performance in this sector. Based on this, the main problem can be framed as follows:

How can an economic intelligence system, which bases its decisions on information, improve the performance of small and medium enterprises (SMEs)?

B. Study Hypothesis

"There is a statistically significant positive impact of the components of economic intelligence on performance."

C. Study Objectives

- To introduce key terms associated with economic intelligence.
- To primarily identify the economic intelligence system and its impact on SMEs.
- To clarify the role of economic intelligence in improving the performance of SMEs.

D. Study Methodology

The study adopted an analytical methodology in the fieldwork, focusing on numerical and graphical economic analysis tools to interpret various relationships, phenomena, and economic problems faced by SMEs in Algeria. The tools used in this study include:

- Statistical and graphical data derived from the Ministry of Industry and Mines and the Directorate of Industry and Mines.
- The use of analysis techniques and commentary on various charts and tables.
- Processing data using SPSS software.

The study model was structured as follows:

- Independent Variable: Economic intelligence, divided into four dimensions: Strategic Management, Information, Strategic Vigilance, Information Sources

- Dependent Variable: Performance, divided into four dimensions: Performance Measurement Field, Measurement Systems, Financial Aspect, Customer Aspect.

2.Theoretical Framework: The Relationship Between Economic Intelligence and Performance in SMEs

2.1 Concept of Economic Intelligence:

Economic intelligence has been defined in various ways, and the key definitions are summarized below:

- **Alain Juillet**, the head of economic intelligence in France, defined it as: *"A control method that manages strategic information to achieve competitiveness, economic security, and organizational security."*¹

In France, significant work has been done on this concept. Economic intelligence is defined as: *"The search for and interpretation of publicly available information, aimed at identifying the intentions of economic actors and understanding their capacity to implement them. Economic intelligence encompasses all monitoring activities in a competitive environment and distinguishes traditional information by the nature of its application domain. As it pertains to open information sources, it requires compliance with credibility and the identity of the actors involved."*²

- **Harold Wilensky**, in his 1967 book titled *"Organizational Intelligence"*, defined economic intelligence as: *"The economic activity of producing knowledge in service of the economic and strategic objectives of an organization, which is collected and produced in a legal context and from open sources."*³

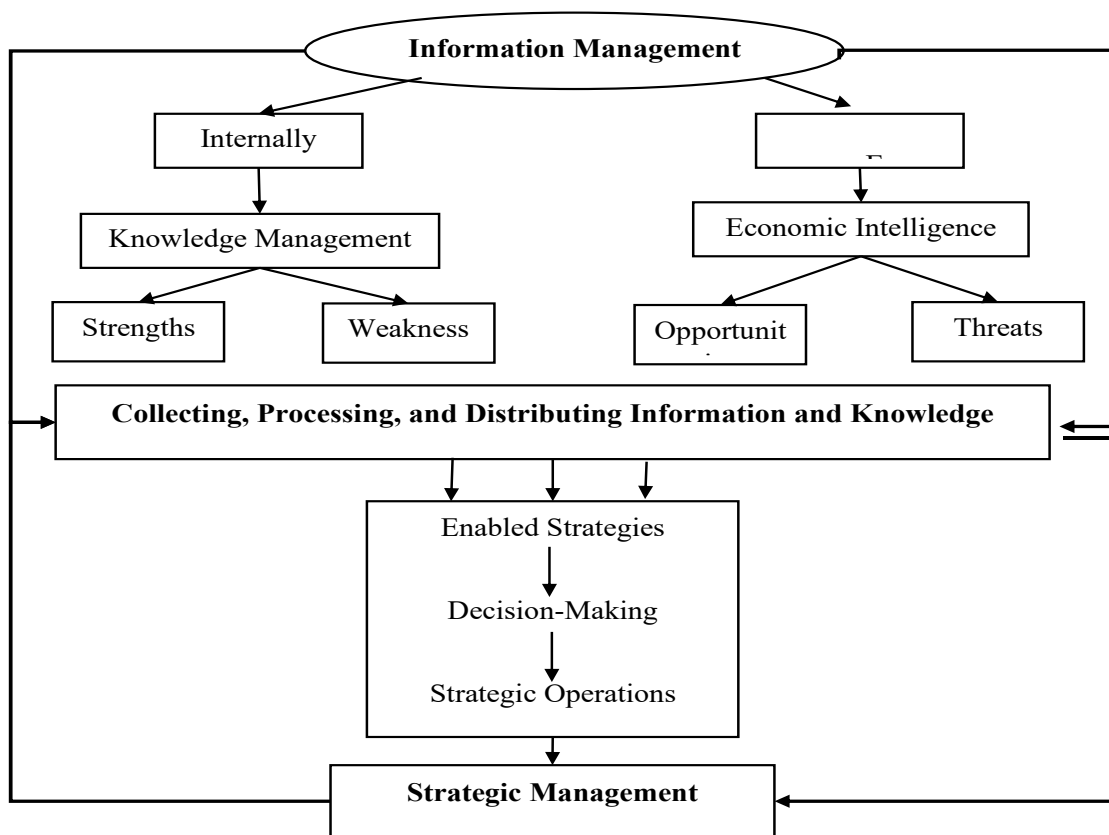
From these definitions, it is evident that economic intelligence involves the continuous and systematic search for and collection of information across various domains (social, commercial, economic, regulatory). The information is then categorized, analyzed, disseminated, and utilized to support decision-making, ultimately strengthening the competitive position of an organization.

2.2. Economic Intelligence and Knowledge Management:

Economic intelligence and knowledge management complement each other in enabling sound decision-making. This begins with the collection, processing, and distribution of information and knowledge, followed by the formulation of potential strategies. Finally, decisions are made to implement short-, medium-, or long-term strategic actions.

This cooperation between economic intelligence and knowledge management can be summarized in the following diagram: ⁴

Figure (1): Information Management Within the Organization

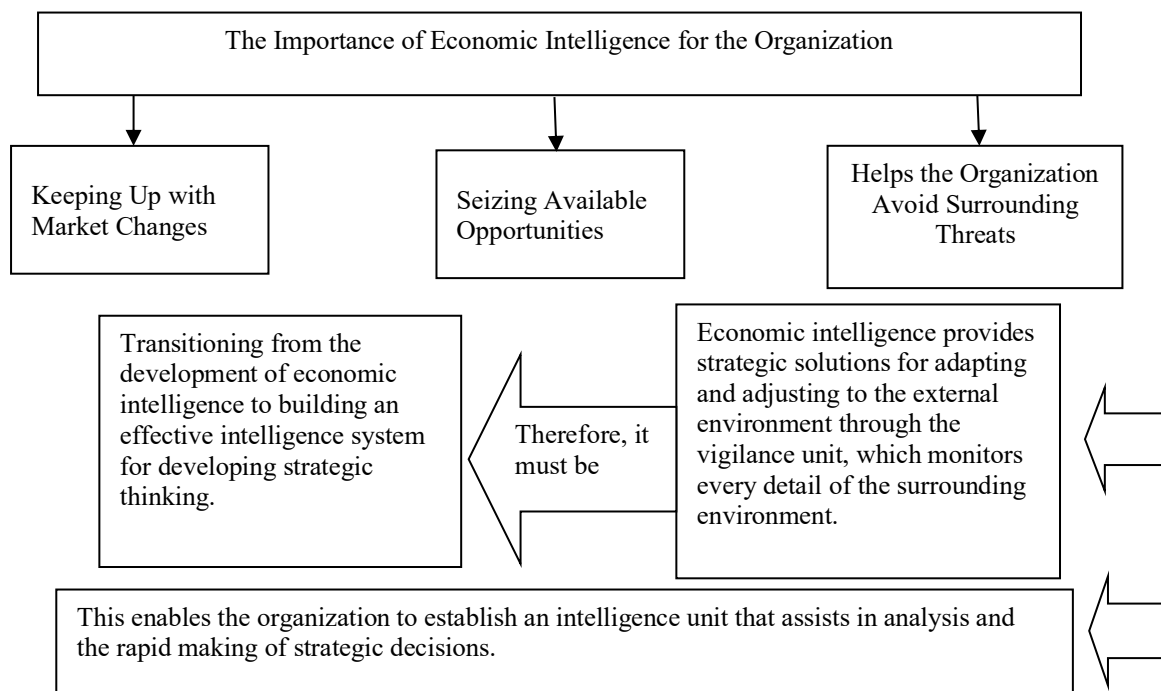


Source: François Jakobiak, *Intelligence in Practice*, Organizational Edition, Paris, 1998, p. 87.

2.3. The Importance of Economic Intelligence:

The significance and benefits that economic intelligence brings to an organization can be illustrated through the following diagram:

Figure (2): The Importance of Economic Intelligence in the Organization



Source: Nabila Sahnoune, **Introduction to the Approach of Economic Intelligence in the Organization, Seminar on Awareness of Economic Intelligence and Strategic Vigilance**, Algiers, El Aurassi Hotel, Algeria, 23/12/2008, p. 03.

From Figure (2), we can clearly observe the importance of economic intelligence within an organization through two strategies: a defensive strategy and an offensive strategy. Economic intelligence enables the anticipation and exploitation of opportunities in its environment, as well as adaptation to new market changes. It also provides protection and security to the organization against threats such as information leaks, economic espionage, and the receipt of false information intended to deceive the organization.

2.4. Strategic Vigilance:

Vigilance, as a general concept, has been given several definitions, including the following:

- Michel CARTIER considers vigilance as: *“The activity that allows us to stay informed of all developments in the sector we operate in.”*⁵
- It is also defined as: *“The function associated with managing information resources to make the organization more intelligent and competitive.”*⁶
- RIBAUT defines it as: *“The general and intelligent monitoring of the organization’s environment by searching for current and future information.”*⁷
- Humbert Lesca defines it as: *“A continuous collective process carried out by a group of individuals who voluntarily and proactively collect and use information in line with potential changes in the external environment. This is aimed at creating business opportunities and reducing the risks of uncertainty in general.”*⁸

From these definitions, regardless of the first and second ones, which broadly address vigilance, we can conclude that vigilance is considered an activity or process related to managing information to utilize it for creating something new within the organization.

2.5. Comparison Between Strategic Vigilance and Economic Intelligence

Strategic vigilance can be adopted by an organization easily and without complications, as it does not require significant resources. On the other hand, economic intelligence is a system that is costly and takes a long time to implement. The simplicity of applying vigilance is due to the basic nature of the system, which focuses on continuous observation and discovery but lacks effectiveness in altering the environment. In contrast, economic intelligence focuses on positioning the organization within its environment.

The distinction between the two systems can also be made by highlighting their respective units:

- **Vigilance Unit:** Consists of 5 to 15 individuals responsible for monitoring the environment. This unit is divided into:
 - o **Operational Cells:** Dedicated to monitoring specific areas (research, competition, culture, etc.).
 - o **Strategic Cells:** Dedicated to achieving general vigilance and establishing links for analysis and coordination between the monitored specific areas.

- **Intelligence Unit:** Consists of 5 to 30 individuals responsible for intervening in the environment on behalf of the organization through lobbying and influence activities. Thus, its relationship with the environment is one of interaction.

Vigilance is not merely an objective but a pathway that theoretically leads to economic intelligence. The latter relies heavily on the results of vigilance, whose role is to collect information (technological, competitive, cultural, legal, etc.) and utilize this information to achieve strategic objectives.

2.6.Second: Small and Medium Enterprises in Algeria

There is no specific, clear, or unified agreement on the concept and definition of small and medium enterprises (SMEs). Various criteria are used to define these enterprises, including the following: ⁹

- **Number of Employees:** This is one of the most commonly used and widespread criteria globally due to its simplicity, ease of calculation, and statistical tracking.
- **Invested Capital (Total Assets):** The total amount of capital invested in the enterprise.
- **Production and Sales Volume:** The scale of production and the sales achieved by the enterprise.
- **Level of Technology Used:** The degree of technological advancement utilized in the enterprise.
- **Market Size:** The size of the markets the enterprise operates in.

Additionally, some definitions have relied on a combination of criteria. Despite this, researchers and experts have differed, and various perspectives have emerged regarding the use of specific criteria to define the concept of small and medium enterprises (SMEs). Several approaches to this definition are noted below: ¹⁰

- **European Union:** Differentiates enterprises based on capital and the number of employees:
 - Enterprises with fewer than 9 employees are classified as *micro-enterprises*.
 - Enterprises with 10–99 employees are considered *small enterprises*.
 - Enterprises with 100–499 employees are classified as *medium enterprises*.
- **USAID (United States Agency for International Development):** Defines micro-enterprises as those employing fewer than 10 workers, along with other characteristics such as revenue and capital.
- **Developing Countries:** According to the United Nations Industrial Development Organization (UNIDO), micro-enterprises employ 1–4 workers, while small enterprises employ 5–19 workers.

The Algerian legislator classifies SMEs as shown in the following table:

Table (1): Classification of Enterprises According to the Algerian Legislator

Unit: Algerian Dinar (DZD)

Type of Enterprise Specifications	Medium	Small	Micro
Number of Workers	50–250	10–49	1–9
Turnover (DZD)	400 million–4 billion	≤ 400 million	< 40 million
Annual Assets (DZD)	200 million–1 billion	≤ 200 million	≤ 20 million

Source: Prepared by the researchers based on the *Official Gazette of the People's Democratic Republic of Algeria*, Issue No. 2, Directive Law 02-17, dated 11 Rabi' al-Thani 1438, corresponding to January 10, 2017.

2.7. The Role of Economic Intelligence in Improving SME Performance

Regarding the role of economic intelligence in improving companies' financial performance, accounting and financial thought have identified several channels through which economic intelligence and strategic vigilance can impact financial performance, including the following:¹¹

- Increasing Access to External Funding Sources

The proper application of economic intelligence and strategic vigilance can enhance the likelihood of accessing capital markets by addressing two major barriers to obtaining external financing:

- The inconsistency of information between lenders and borrowers due to weak accounting disclosure.
- The borrower's failure to act in the lender's best interest, neglecting the interests of stakeholders associated with the company.

- Increasing the Company's Value

Strategic vigilance systems not only improve access to external funding sources but also increase the company's value. Investors are more likely to pay higher prices for shares of companies where strategic vigilance is effective and provides reliable information. Additionally, reduced capital costs translate into lower economic costs, making a country more attractive for investment.

- Reducing Financial Crisis Risks

Several studies have shown that weak legislation and inadequate investor protection were key reasons behind the financial collapses in Asian markets. This lack of protection makes net cash flows more sensitive to negative events, reducing investor confidence in markets and leading to a drop in investment returns, currency collapses, and stock price declines. Moreover, project returns in emerging markets tend to be more volatile than in developed markets. Managers in such markets must exercise greater prudence, practice economic intelligence, and obtain the necessary information to support decision-making.

- Improving Relationships with Stakeholders

Stakeholders, including investors, banks, employees, workers, suppliers, and the government, all monitor and influence the management and oversight of the company. Effective management and oversight can increase cash flows and improve the company's standing. Shareholder wealth

grows when the company provides services to its customers as required, maintains strong relationships with suppliers, adheres to its legal obligations, and communicates effectively with investors through financial statements, regular meetings, transparency, and timely disclosure, avoiding deception.

However, the impact of economic intelligence on the financial performance of companies and SMEs can only be effective if the following characteristics are met:

- The ability to ensure that the agent makes decisions aligned with the contract established between the agent and the owner (shareholders) and to guarantee the continuous flow of capital to finance companies.
- Reducing the effects of information asymmetry between managers and capital providers, which could lead to the loss of lenders' (financiers') wealth.
- The ability to protect shareholders' interests, minimize financial and administrative manipulation, and combat fraud and deceit aimed at misappropriating the company's resources and funds.
- Ensuring the protection of shareholders' interests and mitigating the risks posed by financial and administrative manipulation.

Finally, the proper implementation of an economic intelligence system and strategic vigilance serves as a pathway to progress for individuals, organizations, and society as a whole. It monitors every detail in the internal and external environment of organizations, providing individuals with a suitable level of assurance for achieving reasonable profitability from their investments. These mechanisms also ensure the strength and stability of companies' performance, thereby supporting and stabilizing the advancement of financial markets, economies, and societies.

3. PRACTICAL ASPECT: STUDY OF A SAMPLE OF SMEs IN THE WILAYA OF CHLEF

The study population consists of all small and medium enterprises (SMEs) operating in the Wilaya of Chlef in 2024, totaling **13,053** enterprises across all sectors ¹². The following table shows the distribution of enterprises by type of activity.

3.1. Study Sample:

The study questionnaire was distributed randomly to a sample of SMEs in the Wilaya of Chlef, representing **0.61288%** of the study population:

$$0.61288\% = \frac{80}{13053}$$

Out of the 80 questionnaires distributed, 61 were retrieved

Table (2): Number of Questionnaires

Number of Questionnaires Distributed	Number of Questionnaires Retrieved	Number of Invalid Questionnaires
80	61	19

Table (3): Measurement of Variables Through Questionnaire Questions

Independent Variables	Questions
Axis 1: Strategic Management	6–12
Axis 2: Information	13–25
Axis 3: Strategic Vigilance	26–32

Source: Prepared by the researchers based on the questionnaire.

The items of the dependent variables are summarized in the following table:

Table (4): Items of Dependent Variables

Dependent Variables	Questions
Axis 1: Performance Measurement Field	36–40
Axis 2: Measurement Systems	41–43
Axis 3: Financial Aspect	44–46
Axis 4: Customer Aspect	47–49
Axis 5: Functional Performance Evaluation	50–52

3.2. Distribution and Retrieval:

A total of 80 questionnaires were distributed to 80 small, medium, and micro-enterprises in both the private and public sectors. Approximately 61 questionnaires were retrieved.

Table (5): Number of Questionnaires Distributed, Retrieved, and Invalid

Number of Questionnaires Distributed	Number of Questionnaires Retrieved	Number of Invalid Questionnaires
80	61	19

3.3. Questionnaire Tests

Cronbach's Alpha Reliability Coefficient: The coefficient is presented in the following table:

Table (6): Cronbach's Alpha Reliability Coefficient for the Model

Variable	Cronbach's Alpha	Number of Items (Nof Items)
Overall Model	0.953	40

Source: Prepared by the researchers based on SPSS data.

The overall Cronbach's Alpha reliability coefficient is **0.953**, indicating that the measurement tool is highly reliable. Additionally, all items are similar in importance, as removing any item from the variable results in a new Cronbach's Alpha value approximately equal to **0.95**.

First: Study of the Opinions of the Study Sample

Table (7): Measurement and Ranking of the Relative Importance of Strategic Management Elements

Statement	Mean	Standard Deviation	Chi Square(x ²)	x ² Probability	Rank	Adoption Level
You have a vision of your organization's activities after 5 years	3.41	1.07	21.87	0.000	7	High
You formulate the organization's goals to be achieved	3.43	0.67	17.15	0.000	6	High
You achieve your annual goals	3.61	0.71	14.20	0.001	5	High
You find yourself forced to adjust the set goals	3.62	1.03	3.46	-0.326	4	High
You develop a strategic growth plan for the organization	3.39	0.49	2.77	-0.096	8	Moderate
Your organization is affected by changes in its operating environment	4.05	0.76	2.6	-0.274	3	High
You face competitive challenges with large-sized organizations in the same sector	4.08	0.71	7.51	0.023	1	High
You gather information about what is happening in the environment	4.08	0.737	4.95	-0.084	2	High
Weighted Mean	3.7					High

Source: Prepared by the researchers based on SPSS results.

The tables above indicate that the study sample participants generally agree, with a rating of "Agree," that all the statements related to this axis demonstrate that economic intelligence (strategic management) is a focus of SMEs.

In general, we can rank the various statements that collectively represent strategic management in descending order (from highest to lowest), based on the average level of agreement with these statements (from the perspective of the study sample and according to the adopted methodology), as follows:

- **Statement:** "You face competitive challenges with large-sized companies in the same sector" ranked first in terms of its significance to strategic management. According to the study sample, this statement had a mean score of **4.08**, a standard deviation of **0.71**, and a level of adoption rated as "Very High." The percentage of participants who gave high agreement ratings ("Strongly Agree," "Agree") for this statement was **31.1% + 76.2% = 107.3%** of the total sample. SMEs should focus on establishing a specialized unit for gathering information about their environment to monitor every detail and effectively compete with large companies in the same sector.
- **Statement:** "You collect information about what is happening in the environment" ranked second in terms of its relevance to strategic management. According to the study sample, this statement had a mean score of **4.05**, a standard deviation of **0.76**, and a level of adoption rated as "High." The percentage of participants who gave high agreement ratings ("Strongly Agree," "Agree") for this statement was **29.5% + 49.2% = 78.7%** of the total sample. It is essential for companies in the same sector to focus on collecting environmental information.
- **Statement:** "You develop a strategic growth plan for the organization" ranked eighth and last in terms of its relevance to strategic management. According to the study sample, this statement had a mean agreement score of **3.39**, a standard deviation of **0.49**, and the percentage of participants who gave high agreement ratings ("Agree," "Neutral") for this statement was **39.3% + 60.7% = 100%**, representing all study sample participants.

- The Chi-Square Test (χ^2) results show that the χ^2 statistic is significant ($\text{sig}(\chi^2) \leq 0.05$) for all statements. Thus, the responses of the sample participants regarding strategic management are consistent with those of the population, except for the statements "You find yourself forced to adjust the set goals," "You develop a strategic growth plan for the organization," and "Your organization is affected by environmental changes in its area of activity," which were not statistically significant ($\text{sig}(\chi^2) \geq 0.05$). This indicates that the responses of the sample participants regarding strategic management do not reflect the responses of the population.
- The weighted average for the strategic management axis is 3.7, rated as "High," indicating a commitment to and interest in strategic management among the study sample.

❖ Opinions and Responses of Study Participants on the Second Axis of Economic Intelligence (Information)

The study will identify the main challenges faced by small and medium enterprises (SMEs) in gathering, processing, and using information for performing tasks and making decisions. The table below presents the arithmetic mean, standard deviation, frequency distribution, and results of the Chi-Square Test (χ^2) for a single sample regarding the opinions and responses of the study participants toward these challenges. The researcher used the weighted average of the statements to determine the difficulties related to economic intelligence, which significantly limit performance effectiveness. The results are as follows:

Table (8): Measurement and Ranking of the Relative Importance of Economic Intelligence Elements (Information)

Statement	Mean	Standard Deviation	Chi-Square (χ^2)	χ^2 Probability	Rank	Adoption Level
You process and analyze information obtained from the environment.	3.8	0.77	31.79	0.000	11	High
You save and store information obtained from the environment.	3.6	0.484	4.74	0.03	12	High
You disseminate information obtained from the environment within the organization.	3.9	0.464	54.06	0.000	7	High
You have personnel capable of collecting and delivering information in a timely manner.	3.8	0.653	15.37	0.000	10	High
You maintain communication with other organizations in the field of information.	3.98	0.785	1.02	0.602	6	High
Information is transmitted quickly.	4.13	0.694	9.97	0.007	4	High
You process, collect, and distribute information to develop strategies.	4.05	0.693	10.26	0.006	5	High
Information reaches you before others in the external environment.	3.9	0.737	4.95	0.084	8	High
Your organization studies and monitors competitors and identifies their capabilities.	3.88	0.685	11.25	0.004	9	High
Your organization collects scientific and technical information.	4.27	0.609	20.88	0.000	2	Very High
In the commercial aspect, your	4.14	0.853	3.37	0.185	3	High

organization monitors markets regarding new products.						
Processing information is the foundation of economic intelligence.	4.459	0.621	20.88	0.000	1	Very High
Weighted Mean	3.99					High

Source: Prepared by the researcher based on SPSS results.

The results show that the study participants generally agree with the statements related to this axis, rated as "Agree," indicating that economic intelligence (information) is a key focus for SMEs.

In general, the various statements that constitute the "information" axis can be ranked in descending order (from highest to lowest) based on the mean level of agreement (from the perspective of the study sample) and according to the adopted methodology as follows:

- **Statement:** "Processing information is the foundation of economic intelligence" ranked first in terms of its significance in the information axis. According to the study sample, this statement had a **mean score of 4.459**, a **standard deviation of 0.621**, and a level of adoption rated as "Very High." The percentage of participants who gave high agreement ratings ("Strongly Agree," "Agree") was **52.5% + 41.00% = 93.5%** of the total sample, indicating strong interest by organizations in information processing and its strong connection to economic intelligence.
- **Statement:** "In the technological aspect, your organization works on collecting scientific and technical information" ranked second in terms of its significance in the information axis. According to the study sample, this statement had a **mean score of 4.27**, a **standard deviation of 0.69**, and a level of adoption rated as "Very High." The percentage of participants who gave high agreement ratings ("Strongly Agree," "Agree") was **36.1% + 55.7% = 91.8%**, reflecting organizations' focus on collecting technological information (technological vigilance).
- **Statement:** "You save and store the collected information from the environment" ranked last (12th) in terms of its relevance to the information axis. According to the study sample, this statement had a **mean score of 3.6**, a **standard deviation of 0.489**, and a high neutrality rate of **36.1%** among the study sample.
- From the **Chi-Square Test (χ^2)**, it is evident that **χ^2 is statistically significant** if **$\text{sig}(\chi^2) \leq 0.05$** for all statements. Thus, the responses of the study participants on information are consistent with those of the population, except for the statements "You have connections with other organizations in the field of information" and "You receive information earlier than others in the external environment," which were not statistically significant as **$\text{sig}(\chi^2) \geq 0.05$** . Therefore, the responses of the study sample on information do not fully reflect the responses of the population.
- The weighted average for the "information" axis is **3.99**, rated as "High," indicating a commitment and interest by the study sample in information.

❖ Responses of Study Participants Toward the Main Challenges Facing Strategic Vigilance in SMEs:

The key challenges faced by SMEs in using strategic vigilance systems to improve performance are identified in the following table, which presents various frequencies,

percentages, arithmetic means, standard deviations, and test results for a single sample regarding the performance and responses of study participants to these challenges. The results are as follows:

Table (9): Measurement and Ranking of the Relative Importance of Economic Intelligence Elements (Strategic Vigilance).

Statement	Mean	Standard Deviation	Chi-Square (x ²)	x ² Probability	Rank	Adoption Level
Your organization is alert to developments and fluctuations in its environment.	3.73	0.54	32.00	0.000	6	High
Your organization is aware of all updates in its operating sector.	3.786	0.61	22.26	0.000	5	High
Your organization has a strategic vision and continuous monitoring of its environment.	3.85	0.7	8.88	0.012	3	High
Your information sources are highly developed and official.	4	0.6	25.7	0.000	1	High
Your organization identifies current and potential competitors.	3.81	0.64	16.75	0.000	4	High
Your organization segments the market it operates in into its specific market and suppliers.	3.68	0.87	15.26	0.002	7	High
The organization maintains good relations with its employees.	3.85	0.679	12.03	0.002	2	High
Weighted Mean	3.81					High

Source: Prepared by the researchers based on SPSS results.

The study participants generally agree (rated as "Agree") on all statements related to this axis, indicating that strategic vigilance is of interest to the organization.

In general, the statements can be ranked (in descending order from highest to lowest) based on the mean level of agreement with these statements and according to the adopted methodology as follows:

- **Statement:** "Your sources of information are highly developed and formal" ranked first in terms of its relevance to strategic vigilance. According to the study sample, this statement had a **mean score of 4**, a **standard deviation of 0.6**, and a level of adoption rated as "High." The percentage of participants who agreed with this statement was **63.9%**, indicating that

organizations have official sources for obtaining information, which in turn activates their strategic vigilance system.

- **Statement:** "Your organization divides the market it operates in into its specific market and suppliers" ranked last in terms of its relevance to strategic vigilance. According to the study sample, this statement had a **mean score of 3.68**, a **standard deviation of 0.87**, and a level of adoption rated as "High." Only **39.3%** of participants expressed agreement, suggesting that organizations are not sufficiently focused on market segmentation.
- Based on the **Chi-Square Test (χ^2)**, the **χ^2 statistic** is statistically significant if **$\text{sig}(\chi^2) \leq 0.05$** for all statements. Thus, the responses of the study sample regarding strategic vigilance align with those of the population.
- The weighted average for the strategic vigilance axis is **3.81**, rated as "High," indicating a commitment and interest in strategic vigilance among the study sample.

❖ Responses of Study Participants on the Contribution of Economic Intelligence to Improving SME Performance:

Based on the preceding sections, the relationship between economic intelligence and performance effectiveness will be examined.

Table (10): Measurement and Ranking of the Relative Importance of Performance Elements (Performance Measurement).

Statement	Mean	Standard Deviation	Chi-Square (χ^2)	χ^2 Probability	Rank	Adoption Level
The organization achieves its set goals during the year.	3.86	0.34	33.19	0.000	1	High
There is a deviation between set and achieved goals.	3.39	0.66	44.9	0.000	5	High
The organization has the ability to allocate and use resources.	3.57	0.49	1.328	0.249	3	High
The organization ensures proper execution of work units.	3.62	1.01	105.14	0.000	1	High
The volume of resources used for production is covered.	3.55	1.05	26.27	0.000	4	High
Weighted Mean	3.598					High

Source: Prepared by the researchers based on SPSS results.

The tables above indicate that the study participants generally agree (rated as "Agree") on all statements related to this axis.

In general, the statements can be ranked (in descending order from highest to lowest) based on the mean level of agreement with these statements and according to the adopted methodology as follows:

- **Statement:** "The organization achieves its set goals during the year" ranked first in terms of its significance in the performance measurement field. According to the study sample, this statement had a **mean score of 3.86**, a **standard deviation of 0.34**, and a level of adoption rated as "High." The percentage of participants who agreed with this statement was **86.9%**, indicating that organizations generally achieve their planned goals for the year.
- **Statement:** "There is a deviation between set goals and achieved goals" ranked last in terms of its relevance to measurement systems in performance measurement. According to the study sample, this statement had a **mean score of 3.39**, a **standard deviation of 0.66**, and a level of adoption rated as "Moderate." The percentage of participants who expressed low agreement with this statement was **34.4%**, suggesting that the study participants generally oppose deviations between set and achieved goals.
- From the **Chi-Square Test (χ^2)**, the χ^2 statistic is statistically significant if **$\text{sig}(\chi^2) \leq 0.05$** for all statements. Thus, the responses of the study sample regarding performance measurement align with those of the population.
- The weighted average for the "Performance Measurement" axis is **3.598**, rated as "High," indicating a commitment and interest in performance measurement by the study sample.

❖ **Second: Study of the Linear Regression Equation**

This section examines the impact of economic intelligence elements (strategic management, information, strategic vigilance, and information sources) on organizational performance.

The validity of the main hypothesis will be tested: **"There is a statistically significant positive impact of economic intelligence elements on performance."**

The main hypothesis will then be tested by formulating the multiple regression model as follows:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

- **First Sub-Hypothesis:** "There is a statistically significant positive impact of strategic management on performance."

The coefficient for strategic management was **0.25 x_1** , indicating a positive relationship and a strong correlation between strategic management and performance.

Table (4-40): Multiple Regression Model

Model		Statement	t	sig
01	Constant	1.374	7.449	0.000
	X ₁	0.250	2.341	0.023
	X ₂	-0.488	-5.129	0.000
	X ₃	0.625	4.889	0.000
	X ₄	0.020	0.475	0.637

Source: Prepared by the researchers based on SPSS results.

- ❖ **Second Sub-Hypothesis:** "There is a statistically significant positive impact of information on performance."

It was found that the coefficient for information is negative, indicating no correlation between information and performance.

- **Conclusion:** The second sub-hypothesis is rejected.

- ❖ **Third Sub-Hypothesis:** » There is a statistically significant positive impact of strategic vigilance on performance."

The coefficient for strategic vigilance is positive, indicating a direct positive relationship between strategic vigilance and performance.

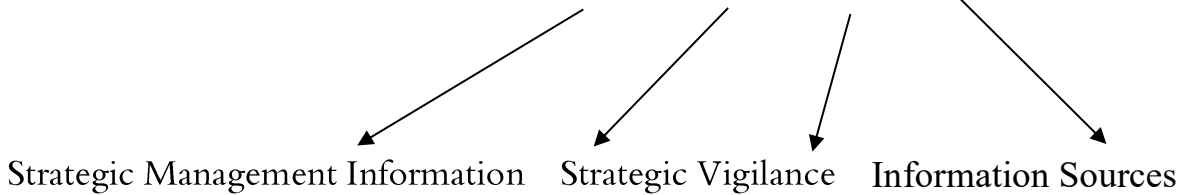
❖ **Fourth Sub-Hypothesis: "There is a statistically significant positive impact of information sources on performance."**

It was found that the coefficient for information sources is positive, indicating a direct positive relationship between information sources and performance.

➤ **Conclusion:** All sub-hypotheses are validated except for the second sub-hypothesis.

Final Multiple Regression Model:

$$Y = 1,374 + 0,25x_1 - 0,488x_2 + 0,625x_3 + 0,02x_4$$



- There is a significant positive relationship ($0.000 \approx \text{sig}(f) < 0.05$) between the elements of economic intelligence and performance, except for information sources ($0.637 \approx \text{sig}(t) > 0.05$).
This means that as the elements of economic intelligence change, performance changes in the same direction, except for information sources, which change in the opposite direction to performance.
- The correlation coefficient ($r = 0.893$) between the independent variable (economic intelligence) and the dependent variable (performance) indicates a strong positive relationship.
- The coefficient of determination ($R^2 = 0.782$) suggests that 78.2% of the variation in performance is explained by the independent variables (elements of economic intelligence).
- The f-change value is $R^2 = 54.961$.
- All sub-hypotheses are accepted except for the second hypothesis, which indicates no positive impact of information on performance.
- The fourth hypothesis is also not accepted because $\text{sig}(t) > 0.05$, meaning there is no positive impact of information sources on performance.
- The main hypothesis is partially accepted, meaning there is a statistically significant positive impact of the elements of economic intelligence on performance, thus confirming the hypothesis to some extent.

4. CONCLUSION

The study was conducted in two phases: a theoretical phase followed by a practical phase based on a survey distributed to managers and administrators of small and medium enterprises (SMEs). The findings are summarized as follows:

- The concept and content of economic intelligence have evolved from an economic activity aimed at producing knowledge to serve the economic and strategic objectives of organizations—collected and produced within a legal framework and from open sources—into a methodology for searching for and interpreting publicly available information to activate it, assess its potential, and use it in decision-making.

- There is a statistically significant impact of economic intelligence on organizational performance, specifically through the influence of **strategic management, information, and strategic vigilance** on the performance of SMEs.
- However, there is no positive impact of **information** on performance, as the coefficient for information is negative (**-0.48**), indicating no correlation between information and performance.
- The study also found that the elements of economic intelligence change in the same direction as performance, except for **information sources**, which change in the opposite direction. There is a significant positive relationship (**$0.000 \approx \text{sig}(f) < 0.05$**) between the elements of economic intelligence and performance, except for information sources (**$0.637 \approx \text{sig}(t) > 0.0$**).

4.1. Recommendations and Suggestions

- Organizations should focus on the elements of economic intelligence: strategic management, information systems, information, and strategic vigilance, as there is a positive correlation between these elements and performance.
- It is necessary to establish specialized departments for economic intelligence within Algerian organizations. These departments should be responsible for gathering information about other organizations operating in the same field, reporting directly to top management, sharing expertise, and identifying strengths and weaknesses to apply the most effective practices in economic intelligence and strategic vigilance.
- Economic institutions should organize conferences and workshops involving decision-makers to establish performance standards for economic intelligence and strategic vigilance in Algeria, fostering competitiveness among organizations to implement and expand the use of economic intelligence.
- Small and medium enterprises (SMEs) should prioritize economic intelligence systems, as their performance is largely attributed to the elements of economic intelligence.

5. Bibliography List :

1. Books

- François Jakobiak, **Economic Intelligence**, Edition d'organisation, Paris, 1998.
- Jean Pierre Legendre, **Economic Intelligence: A Practical Guide for SMEs**, 2006 Report of CIE (Circle of Economic Intelligence) of MEDEF, Paris, November 2006.
- Christian Coutenceau, **Practical Guide to Economic Intelligence**, EYROLLES, Edition d'organisation, Paris, 2010.
- François Jakobiak, **Intelligence in Practice**, Edition d'organisation, Paris, 1998.
- Bergeron P, "**Observations on the Vigilance Process and Obstacles to Its Practice in the Organization**," Argus, vol. 24, no. 3.
- Laurent Hermel, **Mastering and Practicing Strategic Vigilance and Economic Intelligence**, Afnor Editions, 2nd Edition, France, 2007.
- **Statistical Information Bulletin**, Issue 30, May 2017, Ministry of Industry and Mines.

2. Seminar article

- Mounouar Haddad, **The Role of Banks and Financial Institutions in Financing Small and Medium Enterprises**, International Forum on the Requirements for Qualifying Small and Medium Enterprises in Arab Countries, April 17-18, 2006, Chlef.

- Nabila Sahnoune, **Introduction to the Economic Intelligence Approach in Business, Seminar on Raising Awareness of Economic Intelligence and Strategic Vigilance**, Algiers, Hôtel El Aurassi, Algeria, 23/12/2008.

- Naima Yahiaoui, Hakima Bousalma, **The Role of Corporate Governance in Improving the Financial Performance of Companies**, Mohamed Khider University, Faculty of Economic, Commercial and Management Sciences, National Conference, Biskra, May 7, 2012.

3. Internet websites

- Origin of Strategic Intelligence, see: www.intelligencestrategique.be/site/ase_is-fr/intelligencestrategique/origine-de-l-intelligence-strategique.html, visited on 24/04/2015.

- <http://www.clic.net/presse/article5/2000-02.01.html>, visited on 13/04/2016.

- Ali Smida and Emna Ben Ramdhane, Cultural Determinants of Strategic Vigilance Practices, Université Paris 13, see: www.cemadimo.usj.edu.lb/doc/Smidaben.pdf, visited on 21/01/2013, p.2.

5.ENDNOTES

¹ Jean Pierre Legendre, *"Economic Intelligence: A Practical Guide for SMEs"*, CIE Report (Circle of Economic Intelligence) of MEDEF, Paris, November 2006, p. 5.

² Christian Coutenceau, *"Practical Guide to Economic Intelligence"*, EYROLLES, Organization Edition, Paris, 2010,

³ *"Origin of Strategic Intelligence"*, see: www.intelligencestrategique.be/site/ase_is-fr/intelligencestrategique/origine-de-l-intelligence-strategique.html, visited on 24/04/2015.

⁴ François Jakobiak, *"Economic Intelligence"*, Organization Edition, Paris, 1998, p. 87.

⁵ <http://www.clic.net/presse/article5/2000-02.01.html>, visited on 13/04/2016.

⁶ Bergeron P., *"Observations on the Process of Vigilance and Obstacles to Its Practice in Organizations"*, Argus, vol. 24, no. 3, p. 18.

⁷ Laurent Hermel, *"Mastering and Practicing Strategic Vigilance and Economic Intelligence"*, Afnor Editions, 2nd Edition, France, 2007, p. 2.

⁸ Ali Smida and Emna Ben Ramdhane, *"Cultural Determinants of Strategic Vigilance Practices"*, Paris 13 University, see: www.cemadimo.usj.edu.lb/doc/Smidaben.pdf, visited on 21/01/2013, p. 2.

⁹ Mounouar Haddad, *"The Role of Banks and Financial Institutions in Financing Small and Medium Enterprises"*, International Forum on the Requirements for Qualifying Small and Medium Enterprises in Arab Countries, April 17-18, 2006, Chlef, p. 15.

¹⁰ Mounouar Haddad, *Previously Mentioned Reference*, p. 16.

¹¹ Naima Yahiaoui, Hakima Bousalma, *"The Role of Corporate Governance in Improving the Financial Performance of Companies"*, Mohamed Khider University, Faculty of Economic, Commercial, and Management Sciences, National Forum, Biskra, May 7, 2012, p. 16.

¹² Statistical Information Bulletin, Issue 30, May 2017, Ministry of Industry and Mines.