

THE ROLE OF COMPETITIVE INTELLIGENCE IN THE STRATEGIC MANAGEMENT OF SMALL AND MEDIUM ENTERPRISES (CASE SME ALGERIAN)

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ABSTRACT

The objective of this paper is to conceptualizing how competitive intelligence (CI) influences the strategic management of Small and Medium Enterprises (SMEs) which considered as a key element for the success of business particularly in the current period characterized by numerous economic and financial turbulences. This study aims to determine the difficulties associated with the adoption, the practice and the implementation of (CI) by (SMEs) in Algeria. Since CI is equally important to SMEs, we deliberately targeted them because the researchers strongly believed that this category of firms may lack the huge resources required to launch and maintain large sophisticated (CI) networks. A sample of 115 entrepreneurs selected randomly, questionnaires, structured and unstructured interviews were used and were deliberately designed to generate quantitative and qualitative data. Questionnaires were analyzed by SEM method. Data collected through structured and unstructured interviews were analyzed through special set of interpretive practices and narrative techniques. The evidence from this study showed that there is a very slow application of competitive intelligence by SMEs, and clearly revealed that (CI) as practiced nowadays is seriously misunderstood by many entrepreneurs who manage SMEs in Algeria. The study recommends that managers must take training includes the use of CI, its strategic importance and its benefits. In addition, we also recommend that SMEs have likely to favor the integration and implementation of operational Competitive intelligence systems within their overall managerial system to enhance its application.

Keywords: Competitive intelligence (CI), Strategic Management, Small and Medium Enterprises (SMEs), structural equations modeling (SEM).

Introduction

Nowadays, Small and Medium Enterprises (SMEs) are at the heart of the world's economies and represent both the substance of the productive system and its principal factor of renewal. Since their performance is first economic and social after that financial terms, at the contrast to big firms who are largely linked to their financial imperatives due to their huge resources; therefore the place and the role of SMEs is absolutely inevitable.

Moreover, globalization of trade and markets, and technological innovation are factors in the multiplication of risks that make the position of companies, especially SMEs, increasingly difficult. Hence competitiveness and development processes depend on the ability of companies to control their integration into industrial, financial and commercial networks in order to better direct the balance of power into their interest. They are enforced to define their strategies according to new shifting and uncertain environments.

Competitive intelligence (CI) is therefore a product of this state of instability, which means that companies use new means to encounter an environment characterized by extreme rivalry and to secure their patrimony. In this context, the effectiveness of SMEs rests on the deployment of genuine Competitive intelligence devices, major levers in the service of economic performance and employment.

According to the previous statement, are the government and the managers of small and medium-sized enterprises aware of the issues of information (product of Competitive intelligence) they need to make the right decision?

The strategic management of economic information has become one of the key drivers of the overall performance of companies, particularly SMEs. Indeed, the process of globalization of markets forces economic agents to adapt to the new balance between competition and cooperation. Henceforth, the management of industrial strategies relies heavily on the ability of companies to access strategic information to better anticipate future markets and competitors' strategies.

I. Definition of Competitive intelligence:

Despite the fame of this term in economic and managerial literature, Competitive intelligence has not yet entered into the habits of our enterprises and state structures, although these concepts and notions underlying it have existed for a long time elsewhere.

I. 1. Academic Definition of Competitive intelligence:

The Competitive intelligence can be defined as a set of coordinated actions of research, processing, dissemination and protection of strategic information, possibly involving the State and companies (Commissariat général du Plan, 1994). The pursued information is vast and extends to economic, competitive, scientific, technological, legal, geopolitical, etc. Economic and Strategic Intelligence (ESI) cover intelligence and alert activities, synthesis and study work, influence and counter-influence, for the benefit of private or public actors. It must also aim at the protection of the national heritage, particularly in the technological and industrial fields.

In this sense, it is preferable to use the expression "Economic and Strategic Intelligence", which recalls the need for a strategy reflected and negotiated between the major public and private actors in the national and international level. These actions are conducted in strict compliance with the law, thus differentiating this concept from intelligence. Strategic Competitive intelligence is therefore an action in the field of information, the collective image and meaning, in a globalized world where information born in a place on the planet can have immediate and unforeseen effects elsewhere on a Actor in another place on the planet (Conesa,2004).

1.2. operational definition of CI

Competitive intelligence can be considered as a combination of three informational functions: intelligence, information protection and influence.

1.2.1 The intelligence function:

This function is used to anticipate threats and opportunities, i.e., to reduce uncertainty. A company can practice intelligence by transforming information into knowledge. Through this process, it will seek to be better informed about the environment than its competitors, and to be informed about them. Intelligence follows a cycle, called information cycle (definition of needs, collection, processing, and diffusion). The intelligence function is used to modify the asymmetry of information that can exist between the company and its competitors in favor of the firm that learns about others and better than the others. It is not spying, but "legitimate" Competitive intelligence, practiced by a company. This function is known as Foresight (BESSON & POSSIN, 2006).

1.2.2 The influence function:

Its mission is to change the environment through information pressures. Lobbying is a classical practice of corporate influence, but there are others, which can be grouped into two categories: coordination and discouragement. Firms send coordinating signals when they want to avoid a frontal collision with competing firms (avoidance), or with partner firms (agreement). The discouragement of rival firms is to confuse their intelligence system, to mislead or paralyze them. Obviously, these practices are very difficult to study due to their discreteness. But the disinformation operations are not necessarily remarkable: announcements of redemptions that do not take place, positions of leaders on an undefined market perimeter. However, these operations are difficult for study because companies are extremely discreet at this subject.

1.2.3 The protection function:

Defined by information risk management, this function is used to protect the information held or issued by the company, in particular its appropriation by competitors. Thus, the information risk management function preserves the asymmetry of information for the benefit of the firm that manages this risk. It is to ensure the safety and information security of the company. Patent management is part of a company's defensive arsenal and protects technical knowledge. Confidentiality clauses, restrictions on access to premises, firewalls are examples of tools available for managers to protect information (REVELLI,1998).

These three functions can be fulfilled legally. Otherwise, we will talk about spying or corruption, not competitive intelligence. Many practices about information management entered the field of management sciences' studies.

Through its components, Competitive intelligence is a way of managing the flow of information between the company and its environment. It is therefore, in a way, a strategic method of managing information. It aims to increase information asymmetry for the benefit of the firm that practices it and thus gives it a source of competitive advantage. Intelligence, protection and influence functions tip the balance of competitive advantage to the firm that practices competitive intelligence to the detriment of the firm that does not perform any of the three functions. If it was only carrying out the intelligence function, the gap would be smaller but would remain in favor of the first firm (mael.le.hir.free.fr, 2006).

1.3. Competitive intelligence, a major challenge for companies

Strategic information is now recognized as a decisive competitive advantage for companies in an intense competitive environment, as they are able to develop appropriate approaches, possibly with the support of specialized public or private bodies to develop strategic information according to its needs.

High value-added information is difficult to characterize and acquire given the explosive volume of information available; this requires the implementation of a strategic culture of information, as well as tools and methods that have a certain degree of technicality. These methods and tools of competitive intelligence were seen light under this name in the United States in the 1980s, and are today widely used in large companies, especially if their field of action is international (MOINET, 2010).

Despite the efforts to raise awareness of Algerian companies, they are still late when compared with those of developed countries and even with our neighbors. Indeed, Japan, Germany, the United States, the United Kingdom and the Scandinavian countries are often cited by observers as references to Competitive intelligence practices; Economic history and cultural factors are

paramount to explain the ability of economic actors to integrate and manage information and knowledge as a genuine intangible asset of the firm (la Chambre .R. C et I,2007).

II. Strategy and Strategic Management

In order to clarify what the strategic side of a firm affects. First, it is necessary to relate and to dissect all the historical and functional approaches representing this component.

II. 1. Definitions

Originally, it was a military term. It is the art of carrying away a war, and directing means for victory. It is a question of thwarting the opponent's plans to seek to confront him directly: flatter him, divide him, avoid him when he is strong, surprise him, and encourage him to arrogance.

The central idea is to run war with the minimum of devoted means. The most attractive strategy is to achieve victory without fighting. So it seems that it is a question of choosing the adversary or choosing his allies, choosing the place and time of the fight, the nature and the importance of the means involved.

For the company, the strategy remains an art of design and organization of means aiming at the attainment of objectives in relation to an evolutionary and competitive environment which supposedly be well known. So, it is a question of choosing the fundamental options concerning the optimal integration of the organization into its environment, these options ensuring its survival, development and prosperity (DUCREUX J.M & KACHANER, 2009).

The strategy consists of identifying the long-term objectives of an organization and then choosing the means of action and the allocation of resources to achieve these objectives.

However, Strategic Management is a relatively new discipline that was structured in the mid-1960s under the impetus of the business policy specialists of the Havard Business School.

For them, the strategic decision concerns the choice of fields of activity and the nature and intensity of this commitment (KOENIG G., 2004).

II. 2. The Essential Components of Strategic Management:

The strategy involves the whole company for a relatively long period of time, it corresponds to decisions on objectives and the actions necessary to achieve them and it also integrates the means to carry out the actions. These characteristics show that the strategy is under the general direction and involves a high level of uncertainty. These decisions have a long-term impact and concern the whole organization (HELFER, 1996). Consequently, we conclude that strategic management equals strategic decision.

II. 2. 1. Mission

The reason of being exist of an enterprise is the fundamental reason for its existence. The mission statement is usually a sentence or paragraph that formulates this reason to be a stable benchmark in everyday (sustainable) change.

It is important to note that there are no good or bad mission statements, but statements that have a mobilizing effect, inspiration or leave people indifferent. In principle, a mission should incorporate elements of response to the following fundamental questions (Thomas & HUNGER, 2008):

- Why does the company exist?
- What is its purpose?

II. 2. 2. Vision

A vision is an image of the future that managers seek to create. It is described in the present, as if it was happening now. More concrete, vision gives shape and direction to the future of the company.

In comparison with the mission, which represents the reason for the existence of the company, the vision further describes what the company would like to be. Formulated appropriately, it should represent a challenge for stakeholders, while engaging their interest and enthusiasm. In summary, the vision should answer the question: How do we see our organization in five years, or ten years?

II. 2. 3. Strategic diagnosis

It is the ability to detect strengths and weaknesses as well as the identification of threats and opportunities, with a view to (ATAMER T. & CALORI R., 2002):

- Assess its competitive capacity;
- Identify the elements of differentiation or added value of the delivery / manufacturing process (products or services);
- Measure your skills.

II. 2. 4. Competition analysis:

To analyze the competitive position is to understand the strategic position of a company in relation to its competitors, which gives an explanation why some companies are inherently more attractive than others or rather the identification of strategic actions having an effect on the attractiveness of an entire industry and the strategic position of individual firms, all of which can

be summarized according to Porter's five forces that determine the attractiveness of a market as follows: (manager-go.com,2014):

- The bargaining power of clients
- Supplier bargaining power
- The threat of new entrants
- The threat of alternative products or services
- The intensity of rivalry between existing firms

II. 2. 5. Management of innovation:

Innovation and technology are among the most important factors that determine the rules of competition. Development of a new product is the expression of an innovation strategy, hence the decision of the company: what is its strategy of developing new products in order to obtain them in strategic terms (CORBEL ,2009) :

- Which market should be targeted?
- Which competitors are to be attacked and which ones do not?
- What are the customer needs that the company can best satisfy?

II.2.6. Strategic marketing:

If marketing is the social process, geared towards meeting the needs and desires of individuals and organizations through the creation and voluntary and competitive exchange of goods and services generating utilities, its strategic aspect Long- and medium-term objectives, sales targets, profits, and short-term action programs. It consists of the company, to build its offer according to the demand, its know-how and the competitive game.

This approach is based on operational or emerging technologies, existing or potential markets or market segments, product life cycle, competitiveness and distinctive competencies (LEVY LINDON ,2006).

III. The practical aspect:

It is clear that SMEs are the engine of economies and the creator of jobs par excellence, and to have the same role in Algeria, these companies must resist and face competition intensified by all legal means.

III.1. State of play of Algerian companies:

According to the statement by the Director-General of the National Agency for the Development of SMEs "30,000 SMEs close their doors every year", then there are other types. A disastrous figure leading to a long reflection followed by several approaches and programs since this mass closure of companies is due to "lack of competitiveness and innovation" (Watan,2014).

In 2013, the total population of SMEs amounted to 747,934 entities, of which some 60% are incorporated, the remainder consisting either of natural persons (18,27%) or entities (22.57%) in the artisanal sector. There are also 547 EPE type companies (ONS,2014).

Several causes are the source of the vulnerability of our companies. Citing the most important: on the one hand, the lack of awareness among business leaders of the importance of information for the performance and competitiveness of their enterprises and, on the other hand, Because of an economic policy which does not have a clear vision vis-à-vis exports as is the case in the developed countries.

However, by becoming aware of the inability of its enterprises to resist the aggressiveness of this increasingly competitive world, the State has drawn up a national program of upgrading aimed at filling the Algerian enterprise competitiveness.

The deficit observed in Algeria concerns the basic culture of Business Intelligence, tailored to support the strategic objectives defined by their leaders. There are several reasons for this lack of operational implementation within companies:

- A lack of availability on the part of the leaders that prevents them from investing in this process which requires a certain step back,
- A lack of in-house skills, trained in the tools and methodologies of Competitive intelligence,
- The reluctance to devote the necessary financial resources to this function, to mobilize useful skills, to train existing staff, to call on external service providers.

The policy of raising the awareness of companies to the Competitive intelligence is accompanied by a training manual in this discipline published by the Ministry of Industry and Investment Promotion which presented the following definition of this concept: Competitive intelligence is understood in the sense of collecting, analyzing, processing and disseminating relevant and useful information that contributes to the production of the knowledge essential to decision-making and to the management of companies. It is understood as an approach of anticipation and projection in the future, based on the links between the networks of companies and those of economic operators. Its application is advised given the deficit in this type of training. That said, is this program sufficient to make Algerian companies competitive? Will they be able to create more wealth by employing the living forces of the country?

Experience has shown that a few years after the implementation of the Association Agreement of Algeria with the European Union, Algerian companies were out of competition, including those who participated in the upgrading program .

An inventory that requires the reinforcement of this program by a large-scale project that will motivate companies to adhere to this upgrade. The result of this reinforcement will be twofold: on the one hand, it will improve the visibility and competitiveness of enterprises, in particular SMEs, and on the other hand, it will contribute to the diversification of the national economy given its size.

III.2. General Procedure:

The strategic management of economic information has become one of the key drivers of the overall performance of companies. Indeed, the process of globalization of markets forces economic agents to adapt to the new balances between competition and cooperation. From now on, the management of industrial strategies relies heavily on the ability of companies to access strategic information to better anticipate future markets and competitors' strategies.

This study, and after an inventory of the stakes of Competitive intelligence for Algerian SMEs, aims to give a model that can be used to implement the structural equations for each information function and that are: intelligence or intelligence, protection Information and influence.

In order to do so, a sample of 133 SMEs was distributed equally between the three regions of the country (center, east and west), and a questionnaire was distributed covering all of its aspects the aforementioned assumptions. 115 questionnaires were suitable for analysis and the results were interpreted as follows:

1.2. The hypotheses

From this model, we decided to test the following assumptions:

Principal hypothesis :

Competitive intelligence plays a role in the strategic management of small and medium-sized enterprises.

The Principal hypothesis achieve good results it has been split into three secondary hypotheses and which are:

1. Foresight contributes enormously to the proper formulation and application of the strategies of small and medium-sized enterprises.
2. Influence facilitates the diagnosis and strengths of the strategic situation of small and medium-sized enterprises.
3. Security makes it possible to identify and increase the competitiveness of small and medium-sized enterprises.

In this study, a structural model is used to analyze the structural effect of Competitive intelligence on the strategic management of SMEs. The Competitive intelligence is in three elements: the Foresight, the influence and the security. These three elements affect the latent variable (strategic management) that is under the formative type.

The latent variable (strategic management) has six variables under the reflective type. These variables are objective, strategic monitoring, strategic diagnosis, competitive analysis, innovation management and strategic marketing. What is important in this study is to test the fit of the global SEM model which is based on the main null hypothesis:

Ho: The global hypothesis model presents a good fit.

By accepting this main hypothesis, structural modeling indicates that the model presented adequately reproduces our conceptualization of the observed covariance's and that the data correspond to the proposed model. Finally, our assumptions about "strategic management".

Competitive intelligence has a positive structural effect on strategic management.

It is also relevant to determine the structural contributions of each component of strategic management. Therefore, this study also attempts to test the following assumptions:

H1: The "Foresight " has a positive structural influence on strategic management.

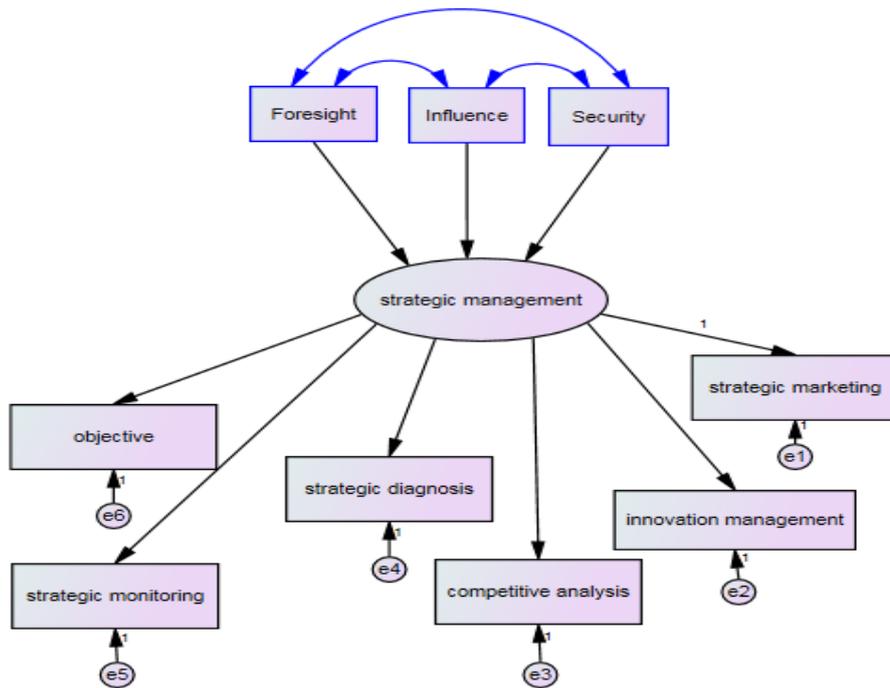
H2: The " Influence " has a positive structural influence on strategic management.

H3 :The "Security" has a positive structural influence on strategic management.

Using the Likert scale at five degrees to evaluate customers responses, to facilitate the treatment process was given weights were as follows:

- strongly agree (5)
- agree (4)
- neutral (3)
- disagree (2)
- strongly disagree (1)

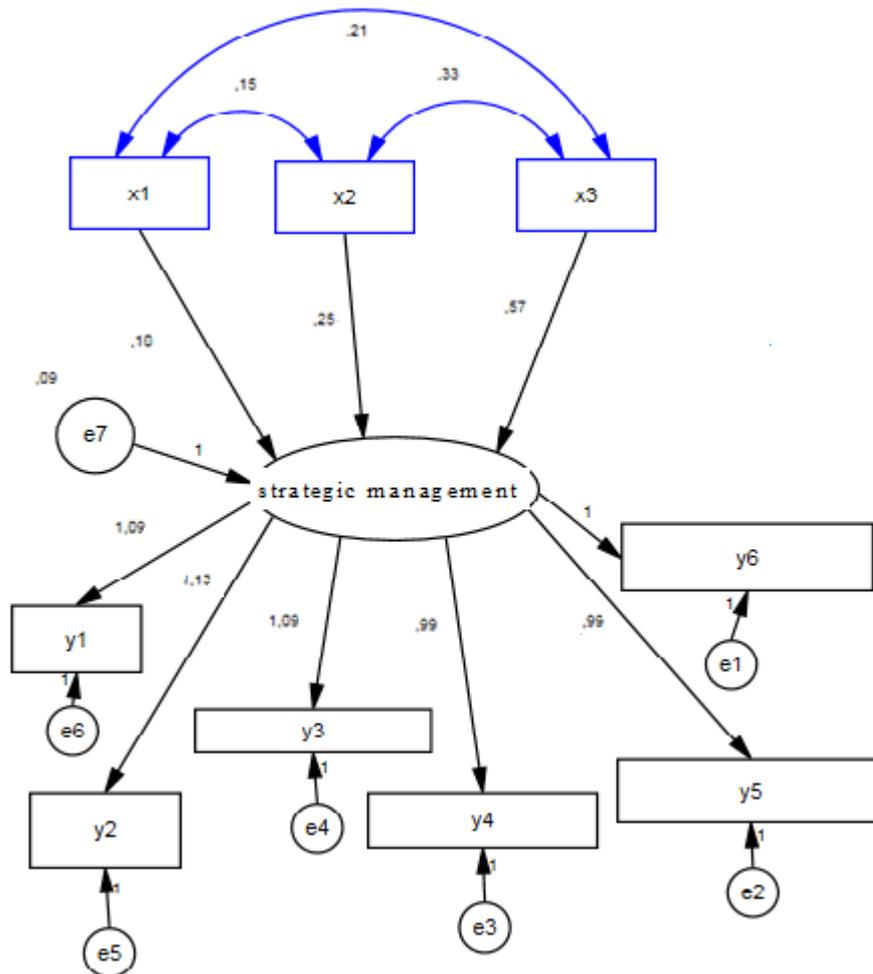
Figure 1 : The conceptual model of research



Analysis and interpretation of results:

The data from the study were processed using software (spss, spss Amos 22). In the following, we will present successively the results of the structural analyzes.

Figure 2 : The conceptual model of research (1)



Source : SPSS Amos Outcomes

Parameter estimation and model adequacy:

In the causal model, the estimation of the parameters is based on the minimization of an adequacy function approximating the calculated covariance matrix on the collected data and the theoretical matrix resulting from the modeling. The maximum likelihood method is used.

The notation of the variables is as follows:

SM: strategic management.

X1 - X3: The components of variable (C I): (Foresight and influence and security).

Y1- Y6: The components of variable S.M: objective (Y1), Strategic monitoring (Y2), Strategic diagnosis (Y3), Competitive analysis (Y4), Management of innovation (Y5), Strategic marketing (Y6).

Table 1 : The importance indicators

indicator	CFI	NFI	RMSEA	AGFI	GFI	χ^2 / df
Value	0.98	0.96	0.08	.086	0.93	.168

Source : Results of SPSS Amos

The validation of the theoretical model involves two steps. On the one hand, it is necessary to evaluate the quality of the overall model and on the other hand to examine the adequacy of the different parts of the model

Interpretation of the results:

Table 1 shows that the structural model is a good fit. Indeed, the normed chi-square has a value less than 3. The GFI, NFI and CFI indices are greater than 0.9 and very close to 1. Moreover, the RMSEA is less than 0.1 and converge to 0.

Moreover, the results of Table 3 make it possible to verify the significance and the importance of the causal links between strategic management and the components of Competitive intelligence (Foresight, influence and security) in order to validate the research hypotheses.

Table 2 : Results of causal links and validation of research hypotheses

Null hypothesis test H_0	Sig	Value T	The partial hypotheses
confirmed	0.03	2.23	H1 ($S.M$; Foresight)
confirmed	0.000	3.32	H2 ($S.M$; influence)
confirmed	0.000	8.37	H3 ($S.M$; security)

Source : Results of SPSS Amos

$$S.M = 0.1x_1 + 0.25x_1 + 0.57x_1 + 0.09$$

As shown in Table 3, the research hypotheses H1, H2 and H3 are confirmed. Indeed, the Student tests are greater than 2 and the probability levels are significant at the risk of 5%. Thus, we can conclude that strategic management depends positively on the Foresight, influence and security that represent the different functions of Competitive intelligence.

Conclusion :

The Competitive intelligence, has occupied much the governmental spheres. Invented by the Japanese, this method combines public and private actions and means, the effectiveness of which has been proved by the American, British, German and even developing countries such as Brazil, Still found its place in the Algerian economy, which allows the taking of a number of important decisions that deserve to be exposed.

Consequently, the discussion of results generally leads to the proposal of rich and in-depth information, with the aim of suggesting a set of theoretical and operational recommendations.

Based on our example in strategic management, the application of these equations enabled us to verify the existence of the role of Competitive intelligence by its functions and components namely: monitoring, influence and information security in the field Strategy of SMEs.

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