

**Private International Institute of Management and Technology**

**THE IMPACT OF BUSINESS INTELLIGENCE ON SME In  
Morocco**

**Case study: NOVA MODA II-**

**Project management**

**By: Erresimi Youssef**

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## **ABSTRACT**

This research paper aims to study the contribution of business intelligence (BI) to small and medium-sized enterprises (SMEs) and provides a portrait of BI services for small and medium-sized enterprises. Based on the existing literature, we will try to examine its factual dimension in Morocco. The main objective is to emphasize from the literature review that BI plays an important role in the performance of SMEs. We have proposed a conceptual perspective that allows to understand the concept of BI and SMEs to understand their internal practices in Moroccan SMEs to improve performance. Controlling information is a major challenge faced by businesses, especially small and medium-sized businesses. Information is the decisive key to their differentiation and development, and also the key to their survival in the fierce environment of national and international competition. In addition, understanding the internal and external environment is also essential. On the one hand, SMEs must recognize their strengths and weaknesses and, on the other hand, they must highlight opportunities and threats. Keywords: business intelligence, information, SMEs, performance.

## GENERAL INTRODUCTION

Today, the business world is facing a radical social-economic change brought about by the globalization of the market. Undoubtedly the arrival of the information society, the evolution of the production economy towards the knowledge economy, access to knowledge and to information and communication technologies are generating an unprecedented discussion. Such turbulence is seen as the guarantor of economic growth, and these companies see it as an opportunity and try to seize it. Indeed, the digital revolution accentuates the strategic aspect of information and in particular economic information.

Therefore, the relationship of cooperation and competition between countries and companies develops with a complex logic, leading to the establishment of a network of interconnection, interdependence and even competitiveness. Companies can find themselves in competition with their own partners, such as distributors overnight, or even become partners of previous competitors (alliances, mergers, acquisitions). As a result, a complex environment full of uncertainty and increasing dialogic. (W.GROSSMANN & S.Rinderle; 2015).

Like other countries, Morocco is aligned to develop its mechanisms in order to meet the challenge of adapting to the economic and technological revolution. Also, SMEs must acquire the means of environmental knowledge in order to promote their services and promote them in the world. Although Moroccan SMEs participate with 95% of the economic fabric, their contribution only exceeds 20% of Moroccan GDP. Undoubtedly, SMEs are called upon to increase their performance by integrating strategic choices that create more added value. In this regard, BI is understood as a kind of innovation management, mainly because of rapid changes in technology and information flows and the need for strategic decision control.

It is considered as the instrument that will allow better collection, processing, protection and dissemination of information, so it must become a strategic component of any organization

BI's approach helps provide the company with a detailed understanding of its environment, through the internal and external information to which it has access. This understanding of the environment is intended to help decision-makers in their choice of strategies whether in the short, medium or long term.

In this regard, how does BI relate to performance? and what is the decisive contribution of BI to the performance of SMEs?

More specifically, the following guiding axes will be discussed:

What are the practices of business intelligence in SMEs in Morocco?

What is the impact of information management in SMEs?

What is the link between business intelligence and performance?

Starting from the main assumption that: business performance is largely dependent on adopting and BI approach.

Arriving at the following sub-hypotheses:

The management and sharing of information plays a key role in improving the performance of SMEs through the business intelligence process.

An SME is successful if the leaders realize the important role of business intelligence.

An SME is efficient if it has human capital qualified in business intelligence.

In the first part, we will present the concept of business intelligence and its impact on Moroccan SMEs, then in the second part by conducting an empirical study on the contribution of business intelligence and the performance of SMEs

As such, the assigned objectives revolve around:

\_BI practices in SMEs in Morocco

\_On the role of BI in SMEs.

\_The link between performance and business intelligence

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**PART I: BUSINESS INTELLIGENCE AT THE HEART OF THE CONCERNS OF  
SME**

## INTRODUCTION

For several years, Morocco has considered SMEs as a source of economic growth because of the following reasons, the flexibility of their management, the speed of their reaction and their capacity to adapt to the demands of an increasingly pressing environment and competitive.

However, Moroccan SMEs have shown great resilience in the face of a not very encouraging environment, linked in particular to the monopoly of large companies, administrative procedures, which lack the necessary skills and qualifications. Moreover, economic and financial performance is threatened by enough difficulties, which requires SMEs to play their role in wealth creation, to adapt an adequate and coherent strategy.

SMEs in Morocco have yet to notice the important role of BI because of this, most of them do not have BI cells. This orientation follows the lack of interest of the leaders who, for the most part, believe that the cost of setting up an BI system is greater than its added value.

In addition, SMEs believe that, in order to operationalize an BI unit in the field, it was necessary to reach a critical size in order to allow them to include these tools in their management. However, Moroccan SMEs must adapt their situations to their environments, through the practice of modern management, in particular BI in order to strengthen their performance, optimize their productivity and increase their assistance in creating added value. our national economy.

in this first part, we will present in the first chapter the importance of BI for SMEs and in the second chapter, the impact of BI on the performance of SMEs.(CHAWKI & AIT LEMQEDDEM,2021)

## **CHAPTER 1: BUSINESS INTELLIGENCE AT THE HEART OF THE CONCERNS OF SMES**

Business intelligence has become an increasingly used concept, it is an information flow management tool that helps companies to constantly adapt to the demands of the day. And to better understand this concept which is the main variable of this study.

This chapter examines issues relating to the conceptual generalities of competitive intelligence and its practices in SMEs.

### **Section 1: Business intelligence: a theoretical diagram**

Since the introduction of BI in SMEs, the concept and its practice have evolved significantly, and this section aims to advance its conceptual framework.

*Business intelligence is a concept that has multiple meanings.*

In 1994, a research group set up under the aegis of the general planning commission defined the concept as: economical actors. These various actions are carried out legally with all the guarantees of protection necessary for the preservation of the company's assets, under the best conditions of quality, time and cost." To remove any ambiguity between BI and industrial espionage, he specified that his actions should be carried out in accordance with the law. In short, we believe that BI is part of a holistic approach to intelligence, influence, security, and heritage protection.

For Bernard Besson and Jean-Claude Possin, it is about: "The ability to obtain answers to questions by discovering intelligences between two or more pieces of information previously memorized. The company will use all the means at its disposal to seize opportunities or detect threats at the service of this capacity "3. In fact, the discipline of

business intelligence is put in place by actors, transmitted through a network, organized according to objectives and used by decision-makers.

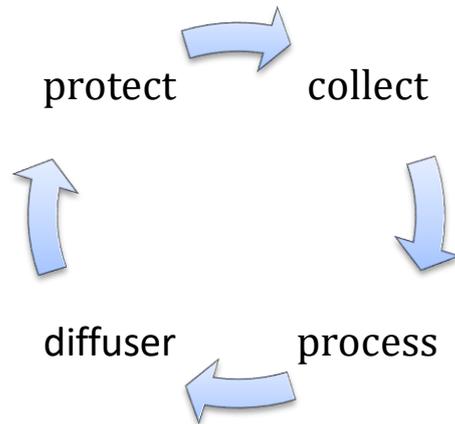
Jean-Louis Lévet "Business intelligence is a process of collecting and interpreting economic information with a view to economic action, immediate or subsequent, individual or collective

Carlo Revelli proposes a more relevant definition articulating a: "Process of collecting, processing and disseminating information which aims to reduce the share of uncertainty in the making of any strategic decision. If to this end we add the desire to carry out influencing actions, it is then appropriate to speak of economic intelligence." <sup>5</sup> This definition explains that this approach is developed through the search for information, the competitive environment of the company. In fact, the collection is organized and then delivered to the managers in order to bring about a strategic decision for the company

Business intelligence gives the company "the ability to effectively combine internal and external know-how and skills, in order to solve a (...) unprecedented problem".

BI leads to a particular interest in networking behavior and the implementation of the process which must link the skills of the various departments and stakeholders of the company

The objective of business intelligence is to provide managers and decision-makers in the company with valuable information, on which they can base their decision-making. This need is of a systematic nature in its process integrating processors and processes of the different phases: Information collection, processing, dissemination, and protection.



**1. Status and size of SMEs in Morocco:**

There is no universal definition of an SME, it is defined according to the data specific to each country. However, there are two types of identification criteria. The first is quantitative, which covers the various elements that make up the company's activity such as staff, turnover, added value, social capital, location and the market. The second is qualitative, used not only to complete the first criterion, but also to give a precise idea of the SME, since it provides information on its internal structure, organization, and management methods.

The authors of the document Vision for the future of Morocco - what a vision for the. SME, written on the occasion of the 'Maroc - .Vision 2020' project, in September 2001. After a deep reflection on the concept of SMEs in Morocco and from a sample made up of nearly 10,000 companies, those - they proposed a definition of Moroccan SMEs on the basis of three criteria

Total workforce	<250 people
Sales figures	<50 millions DH
total Balance sheet	< 30 millions DH

the first article of law 53-00 which forms the 'Charter of the SME', this charter considers it as "a company managed and / or administered directly by the natural persons who are the

owners, co-owners or shareholders and which is not more than 25% of the capital or voting rights held by a company, or jointly by several companies, which does not correspond to the definition of an SME ” Moreover, SMEs must meet the following two conditions:

- Having a permanent workforce of no more than 200 people
- Achievement either, of a turnover excluding tax of less than DH 75 million, or a total balance sheet business of less than DH 50 million, during the last two fiscal years.

This charter proposed specific criteria for newly created companies, those with less than two years of existence: are considered as SMEs, companies having undertaken an initial investment program of less than 25 million DH and respecting a ratio of investment per job less than 250,000 DH

The definition developed by the National Agency for the Promotion of SMEs (ANPME) for SMEs takes into account only the criterion of turnover and disregards the workforce of the company. According to this definition, there are three types of companies

The definition developed by the National Agency for the Promotion of SMEs (ANPME) for SMEs takes into account only the criterion of turnover and disregards the workforce of the company. According to this definition, there are three types of companies:

The very small business	less than 3 million dhs
Small business	between 3 and 10 million dhs
The medium-sized enterprise	between 10 et 175 millions de dhs

After the presentation of the different definitions of the SME, we can see that it is impossible to identify a single definition valid for Morocco.

The uneven development of the different regions, and the very irregular dissemination of the population on the national territory, and the disproportionate development from one sector to another or from one branch to another, Morocco requires defining the SME on the basis of the eligibility criteria within the general framework of a definition by region, zone, branch, etc. For example, the turnover of electro mechanics must not be the same as that of agro-industry, differently the definition must take into account several social-economic factors (standard of living, price, wages ....) also such a definition should not therefore simply retain maximum ceilings or minimum boards but take into account the parameters taken in our social-economic reality.(MAROC PME,2004)

## **2. The challenges of Business intelligence in SMEs in Morocco:**

In recent years, profound changes have affected the environment for SMEs. The sequence of these mutations is:

- Economic, characterized by the globalization of trade and market segmentation.
- Geopolitics, with the collapse of the communist bloc and the growing role of the European Union
- Technological: Accelerated by innovation and competition, characterized by the search for commercial advantages of developed countries, has led companies and countries to reconsider their industrial strategies and to rethink new challenges in the definition of tools designed to better answer it 10.

As time and space shrink, the development of new information and communication technologies has led to the dematerialization of the economy, while making the market more competitive and the business environment more complex. , more flexible and less readable

Thus, every company is now faced with new threats, which are becoming more and more serious, such as:

- Expanding the geographically, although many SMEs have only recently been able to survive and develop in the local market
- The development of international trade rules, in particular, has led to qualifying customs protection. At the same time, new forms of lobbying have emerged in various countries and large international companies
- The development of new information technologies and means of communication facilitate the entry of international competitors into promising markets
- In general, the factors that can affect SMEs and their markets are multiple and the factors that SMEs must know how to follow or even anticipate are: technological, competitive, economic, legal, political ...

The concept of business intelligence means, going beyond documents, intelligence (scientific, technological, competitive, etc.), protection, influence (national influence strategy, information and disinformation company, etc.). These overruns come under strategic and tactical intentions and must control the management of certain operations and the interaction (or success) associated between all levels of activities that perform business intelligence functions: from the basic level to the intermediate level from the country.(LAIDI ,2020)

## **Section 2: business intelligence practices of SMEs in Morocco**

Business intelligence is a triptych that brings together three complementary and interdependent systems: monitoring, security and influence. The purpose of this section is to first show the BI triptych and its practices.

This approach is a mode of corporate governance that breaks down into operational specialties implemented by monitoring, protection and influence experts

a. The watch and control

Business intelligence and BI are two distinct concepts, the second includes the first. Therefore, when we speak of BI, any company, especially its leaders, must watch its environment, protect its strategic information, use its knowledge.... Business intelligence is the main objective of BI, it pays particular attention to everything related to the active, continuous and iterative monitoring of technical, commercial, legal and other environments, it also foresees changes so that decision-makers can choose the 'orientation of the organization's strategy. Therefore, the process is designed to be based on specific, reliable and verifiable data and facts to ensure the sustainability of the organization

When effective, it allows the business to make adjustments before new competitors enter or launch new products. If we add the word intelligence to the world watch, it is because it is not enough to have a good strategic observatory. So, we must explain the information it provides and finally deduce good consequences. Business intelligence must allow companies to have a strategic vision of the competitive environment, but to be effective, the information collected must be systematically analyzed and used strategically.

✓Growth Continues

the watch thanks to an intelligent use of resources: subscribe to certain newsletters, follow the news and newsgroups (via Google, Yahoo), monitor Internet pages (thanks to free tools such as Vigilus Smart), create a communication space (blog, Mayetic Village). The possibilities are many and varied. There are many tools that can search, collect, process, analyze, and even store information. In fact, the technical solutions completely cover the

information cycle (expression of needs, collection, analysis and dissemination), and these technical solutions have succeeded in regularly reducing the limits of surveillance on the Internet.

➤ Search engines are monitoring solutions and specific patent research and analysis tools, the role of an information expert is also important: it is an asset for the company. In short, SMEs have different ways of benefiting from the advantages of systems that adapt to their business intelligence needs, some of which have financial costs lower than the cost of lack of information.(Henri,2006)

b. Security:

The security function is used to protect information held or published by the company. Therefore, the information risk management function can preserve information asymmetry for the benefit of the company that manages it. This comes down to ensuring business security and information security. In fact, patent management is part of the company's defensive arsenal and protects technical knowledge.

Confidentiality clauses, site access restrictions, and firewalls are examples of tools managers can use to protect information<sup>14</sup>.

Thus, the protection of company information is crucial, especially when know-how and innovation are decisive for competitiveness. The internal security problems of each company in terms of equipment, or IT systems must extend to information assets.

This protection must be considered, initiated and disseminated within each structure according to its characteristics and the requirements to be met. First of all, it will allow the company to maintain a competitive advantage.

Then, the protection of basic information will ensure the sustainability of the company itself, which must in particular maintain control and freedom of action within the company. Thus,

the management team will be protected from external risks, especially in times of economic crisis.

The mission of business intelligence also extends to the protection of strategic company information. There are many threats against the company, they can concern the information systems, the image and the reputation of the company or its leaders, the safety of the personnel (if applicable, the expatriates), the protection of the intellectual property, financial stability ... and all other aspects of the business.(Krishna kagita 2019)

c. Influence:

The purpose of the influence function is to change the environment through the pressure of information. Lobbying is a typical practice of corporate influence, but it can also be divided into two categories: coordination and deterrence. When a company wants to avoid a frontal conflict with a competing company (disagreement) or a partnership (agreement), it will send a coordination signal. The deterrent of competitors lies in disrupting their intelligence systems to mislead or cripple them. False information is not necessarily catchy or illegal: no acquisition announcement has taken place, leading positions in uncertain markets<sup>15</sup> ...

Deliberately formulating a policy of global influence does not mean conquering the world, but securing its status and balancing existing relations with major countries for a long time. The most important thing is to master geopolitics, geo-economics, technology, culture.... Thanks to social learning, this strategy makes it possible to consider the perspective of future development from the angle of pure market logic, thus retaining all the necessary degrees of freedom. Consequently, influencing practices are part of business intelligence techniques, just like monitoring and security.

## **1. National practices of business intelligence**

State practice refers to business intelligence targeting first, the information system and secondly, actions related to influence and information warfare. Regarding strategic watch, the country has an information infrastructure and surveillance systems to support its development model.

In generic practice terms, intelligence objectives are all distant domains and perspectives, designed to help make strategic decisions. The measures taken aim to discover current and future developments likely to affect Morocco at the political and economic, social and environmental levels, internally or externally.

These include the Royal Institute for Strategic Studies (IRES), the Strategic Watch Center (CVS), and the National Agency for the Promotion of Small and Medium-Sized Enterprises (ANPME), the National Documentation Center (CND), Moroccan Institute of Scientific and Technological Information (IMIST), etc. These institutions remind Moroccan actors of opportunities and various threats and disseminate information on technology, science, economy and politics to them. Through reports, newsletters, thematic portals and watch letters

For practices of a specific or environmental nature, the watch focuses on a specific area, and the duration depends on the characteristics of the latter. Therefore, the Kingdom has observation stations in important areas such as industry, education, and tourism. This is the case of the Moroccan Foreign Trade Observatory (CNCN), which implements a commercial and strategic watch for the benefit of foreign trade operators.

As a result, several watch committees were created at regional levels in the face of the Chinese textile offensive, Moroccan employers organized an observation committee made up of public and private actors to thwart Chinese competition.

In terms of competitive strategy, Morocco has replaced sartorial strategies sectors in key economic sectors (agriculture, industry and tourism) with a five-year plan which has long laid the foundations for its economic choices. These strategies are first of all the result of a strategic diagnosis and a prospective analysis, in which the country has reconsidered its strategic orientation, the possibilities of specialization in the new economy and its positioning in relation to the new economy.

First, offshore and service management and heavy industry (automotive, aeronautics, etc.), the intensity of competition is moderate, while the intensity of capital and technology is high. Then, the modernization of traditional fields (phosphates, textiles, agro-food, tourism, etc.) is very competitive, but the technological and capital intensity is very low. Therefore, the Kingdom's strategy is to take advantage of its comparative advantages in traditional areas and to exercise non-tariff advantages in new areas (offshore and services, automotive, aeronautics, electronics, and chemicals).

As for the strategy of influence, they are required to safeguard the highest interests and support the competitive strategy of the kingdom. The analysis of the political and economic situation in Morocco makes it possible to distinguish three chessboards which dominate most of its influence practices. The first is political, which is the main objective of the country because it undermines its territorial integrity. It is indeed the business of the Sahara, for the Kingdom, it is the main pillar of political and security stability ...

As for its practice of influencing the economic spectrum, it is played out in Brussels and aims to maintain the agricultural free trade agreement signed with the EU in 2012, Digital Morocco 2020, Industrial Acceleration Plan (PAI ), Off shoring, and renewable energies.

## **2. Inter-organizational practice**

Inter-organizational practices cover intelligence-related actions, including collective strategies, organizational intelligence, and explaining communities.

Public institutions use networking in the form of agglomeration and concentration, clusters (digital, CE3M, textiles, agro-industry, luxury goods, etc.) or business ecosystems (clusters). This involves in particular integrating a group of service providers and suppliers who provide complementary products and services around a leading company and forming a united economic community. Among other factors, it can also attract foreign direct investment and find a large part of the added value with a high integration rate. Among other factors, it can also attract foreign direct investment through a higher integration rate and find a large part of the added value.

The Moroccan industrial ecosystem is organized in the form of a supply system or a local production system (SPL). These are ecosystems created around a key company that delegates other contributors to other network participants in a controlled manner, but which is essential for creating competitive offerings. Therefore, the configuration and supervision are marked by the significant influence of the hub company. In this regard, we can mention the situation where the Renault ecosystem and the Peugeot ecosystem are surrounded by several operators and suppliers. Likewise, in addition to other ecosystems under development (Boeing in Tangier, Bombardier in rail transport, offshore transport, etc.), Casa's Airbus ecosystem now has around a hundred subcontractors and equipment manufacturers. ). Morocco supports the establishment of these networks through the establishment of integrated industrial platforms (P2I) and free zones, as well as the development of port logistics bases linked to the export-oriented ecosystem. Therefore, these practices are part of its support for competitive strategy<sup>17</sup>.

By way of conclusion to this chapter, it is estimated that, in complex environmental conditions, the operation of the company can no longer ensure without information, an essential fuel. In an organization, the need for this resource becomes more important, given the complexity of the tasks and processes constituting it, the internal relationships that it develops, and the external ones that it must identify and manage. A company, as an open system, must therefore be able to know and understand also, what surrounds it, it is a prerequisite for any action. In a competitive environment, such a material becomes more essential than ever, an environment characterized by high turbulence and complexity, which makes forecasts very difficult and sure alliance of the terrain compulsory.

The information acquisition operations must be organized and automated, hence the information system, the non-monitoring interval must not exist, continuous monitoring of the environment must take place, hence the activity of business intelligence.

## **CHAPTER 2: THE IMPACT OF BUSINESS INTELLIGENCE ON THE PERFORMANCE OF SMES**

BI is likely to have an impact on business performance because it provides the information necessary for adaptation and competitiveness. Although BI is required to play a fundamental role in the performance of SMEs.

In this chapter, we propose to present in the first section the impact of information management in SMEs and in the second section the improvement of the performance of SMEs through this approach.

### **Section 1: The impact of information management in SMEs**

In a context of globalization, accompanied by an increase in the volumes of information, the increase in the number of sources of it and the development of new information and communication technologies; information literacy is a vital necessity for the business.

#### **1. Information at the center of business intelligence**

Information becomes a strategic issue, not only for national security, but also to defend the overall competitiveness of a country. Therefore, the importance of information as the raw material of the economic world has not recently emerged, information is not a commodity like any other in knowledge societies. If a business has the right information at the right time, be it market knowledge, technology, regulatory information, or other information, it will have a competitive advantage over its competitors.

In order to deepen their competitive advantages, SMEs must be able to create information asymmetry in their systems. business intelligence aims to better control information in order to become a tool for decision-making and performance improvement. After processing, even if the information seems poor, it can also add value. Therefore, information is recorded as an economy and even a tradition which is good for any SME

BI includes identifying and expressing information needs, collecting, transforming, absorbing, and acting on information for strategic purposes. People can understand it in many ways: national policies, business strategies and even management practices. Its particularity lies in

the multidisciplinary nature of its research and its practice, and its character remains hybrid. It is therefore not necessary to limit it to a specific thematic framework, but to reconsider its particularity according to the problem analyzed

Within SMEs, the management, sharing and protection of information assets are generally carried out in an unstructured and rarely formalized manner. Managers tend to make decisions and assess risks on the basis of an analysis or a one-sided interpretation of information.

With the development of technology, more and more tools have been developed to enable businesses to protect themselves from damage and computer accidents, while the costs are affordable for SMEs. This is especially true for antivirus and firewalls. However, information security cannot be limited to a simple installation of software. In addition, it should be mentioned that the characteristics of SMEs very closely determine the way of implementing information protection

Scientific production in this area treats this defensive component of business intelligence as a problem, which belongs to managers rather than technicians. Indeed, within SMEs, methods, and tools for preventing information-related risks and disasters are still limited, and the limited availability of resources that can be allocated to BI must be taken into account.

## **1. Information is a strategic raw material**

In a context of profound changes in the environment for SMEs, information is a strategic raw material for all in the service of economic performance and employment where information becomes a strategic raw material for:

- Act: This involves carrying out analyzes as part of the company's strategic or operational projects, making decisions, developing new products, etc.
- Anticipate: From the discovery of weak signals, this involves apprehending future and environmental developments in business in order to determine threats or discover emerging opportunities, and to propose forward thinking.
- React: companies must be reminded of important events to which they must react quickly.

## **2. Decision making and information:**

information needs and adopt the tools necessary to meet those needs. By integrating them into decision-making and internal capacity building, organizations will be able to perform better. So, organizations must develop capacities (technical, human or other) in order to collect information and better orient their strategic choices.

The SME information system includes all the means and procedures for searching, entering, classifying, processing, and disseminating information. Its objective is to return information to managers in a form that can be used at the right time to promote the normal functioning of operations and decision-making at all levels.

Decision-making is a non-linear process which consists of making a choice supposed to be informed by information and motivated by the experience or intuition of the decision-maker, among several possible options, with the aim of acting in a given social context. and depending on the actors involved. It is not necessarily a question of seeking the best solution, nor only of making a simple choice among options, but of fully understanding the situation in order to decide on the most satisfactory and acceptable solution. for stakeholders

As a result, decision-makers cannot be sure of their understanding of the situation and of the solutions available to them. The information would influence decision making by allowing the decision maker to better understand the constraints in his environment, to

identify solutions, and to consider the consequences of each of them. Indeed, information would help broaden the limited field of vision of decision-makers. For example, a buyer will learn the best about the different products available to him, and will be able, without knowing all the existing products, to rationally decide which one he deems most satisfactory. His decision will be influenced by the information he has on the different products.

The classification of information is based on its degree of sensitivity. A unified classification must be disseminated throughout the company (documents, business applications, messaging and informal information). It can prevent sensitive or confidential information from being voluntarily or not disseminated outside the company, which could harm its activities. On the contrary, it does not unnecessarily restrict access to information useful to employees during their work. Information security is necessary, but it should not be overprotected, otherwise it can undermine business efficiency.

Regarding rich information sources, they can:

- Collect numerous clues (information capacities), in order to understand several aspects that affect the subject which interests the SME.
- Communicate quickly (interactivity), to check and adjust the point of view.
- Use several forms of language (oral, body, digital language) to communicate, so that it can not only promote the speed of communication, but also promote the dissemination of certain non-formalized clues.
- Communication with several other interfaces to collect various instructions of a personal nature, is easy to access and reliable.(P.Stzffine,2015)

## **Section 2: Improving the performance of SMEs through a business intelligence approach**

The performance of a company is a generic concept that covers various concepts such as competitiveness, effectiveness, efficiency, value creation, etc. Performance refers to the company's ability to achieve its strategic objectives by adopting the best ways of doing things. Indeed, achieving better performance is the object of BI.

### **1. The link between business intelligence and performance**

In business research, the concept of performance is still under debate, consequently, it cannot be defined absolutely, its definition depends on its context. We are therefore talking about economic performance, technical performance, commercial performance, etc. BI's contribution to this performance dimension lies in the integration of information and the rationality of successful strategic choices linked to the company's activities.

Therefore, on the one hand, it is necessary to appreciate the role of BI in terms of strategic thinking and appropriate decision-making, and on the other hand, to make the company more competitive

Even though BI is found to have an impact on business performance, few studies have addressed this relationship in a rich and relevant way. There are those who claim to do so by linking intelligence activities to strategic uncertainty, or between intelligence and the manager's ability to process information. Therefore, the performance of the company comes from the influence of the intelligence activities associated with the BI

The aim of SME research is to verify the intensity of monitoring, the integration of information into the strategic process and whether there is an appropriate relationship between the intensity of monitoring and the strategic uncertainty of each department. This is to check and determine if this relationship is relevant for SMEs and if it has an impact on performance

So, to analyze the needs of SME in BI ,we must study the relationship between strategic uncertainty and the ability of the company to understand its environment, improve its positioning and generate new sources of innovation .performance refers to mastery of the environment ,which can be measured in terms of productivity and profitability

SMEs have different structures and their BI practices depend on the behavioral logic favored by the manager and lead to various practices. However, one common characteristic can make them easily implement the BI approach, namely that a strong organizational culture around leaders can encourage sharing, change and adaptation. Knowledge of the actions of the leader and the profitability that BI can bring him can improve the performance of the company. Consequently, management culture seems to be a performance indicator

well without affecting performance. The higher the level of BI efficiency implemented by the SME, the better the performance. In short, we should not tie the actual relationship between BI and business performance, but rather tie BI's performance to that of the business. Before studying this relationship, the first steps in defining and measuring the effectiveness of BI should be taken.

There are good reasons for designing BI efficiency measures. In addition, it is essential to consider another important link between intelligence and performance: decision making. This is because in the same way, BI can have very good quality and can deliver the right

information at the right time, and if the decision is wrong (or the decision is incorrect), it cannot provide better performance. .

To a certain extent, decision-makers are likely to make bad decisions based on very good information, as a large number of variables will affect the quality of the decision (power issues, rationality of the decision-makers themselves, etc.). On the other hand, as we all know, performance is explained by countless parameters. This comes from the quality of the decisions, and the quality of the decision itself comes from many parameters, including the quality of the BI. Here we have entered a complex chain of causation (explanatory factors = effective intelligence= strategic decision making (then tactics and operations = performance). In an absolute sense, it seems impossible to measure the impact of BI on performance. because it involves many interrelated variables

There is always a relationship between performance and certain characteristics of BI: regularity, intensity, frequency, progress, various sources of use, suitability with perceived uncertainty, affiliation in taking decision. These characteristics represent the efficiency variables of BI to some extent, as long as they contribute to better performance. In addition, a limited number of efficiency variables (considered to be the most relevant for performance) are generally used to study the link between intelligence and performance.(Rea Llave,2019)

## **2. Strategy and business intelligence:**

A defensive BI enables risk prevention. It is one of the pillars of business intelligence, but not the only one. Offensive business intelligence makes it possible to define development paths to improve the impact on the environment. It is a new way of thinking about the life of companies.

information that is available, reliable, processed and analyzed by experts, rather than simply observing the competition on the Internet or in trade magazines is crucial. However, it is not easy to find relevant information, to process it and to use it for business development especially for small and medium enterprises which do not have sufficient means to create specialized services.

➤ business intelligence tools

You don't wake up one morning and think I'm going to install an business intelligence device .the company must allocate the right employees for intelligence ,production ,regulation ,medical care ,finance it and security .the day before can be carried out by the assistance of the conference ,the visit of the fairs, the reading of the professional media .but it must determine the needs in order to use relevant terminologies ,know how to direct research ,and avoid overloading too much information

There are several tools and platforms that integrate internal business intelligence systems to find information, such as Global Reach. However, business leaders such as small and medium enterprises cannot benefit from the resources of large groups.

➤ Determination of needs

The definition of needs requires two steps: the first step of collecting information: which molecules are supposed to generate competitive choices. Then comes the second stage of market development, it is important to find out which drugs will be used tomorrow so that they can be predicted and brought to the global market. So, knowing where we are, knowing how we are in our environment, knowing where we are going, but also knowing how and what to collect and knowing how to use it.

For other companies, the difficulty lies in choosing the relevant influence targets to move from the research and development phase to the operational phase. Communication is one way: you have to establish a brand image and develop a reputation. Develop a target-based influencing strategy and travel to the trade show to verify the environment in which the product is located, so that the strategy can be implemented depending on the role of the attendee.(Tripathi & Bagga,2020).

### **3. Business intelligence: innovate to perform better**

Innovation requires tangible and intangible assets, which are difficult to establish and disseminate. This is because tangible assets are identifiable as assets on the company's balance sheet, while intangible assets are intangible and require personal knowledge and skills. These assets are often expensive to buy, and since technical knowledge is tacit and encoded, their profitability will appear for a long time, making their transfer very difficult. Consequently, it is necessary to be able to absorb the knowledge of all innovative projects in order to better manage its dependencies linked to the nature of the assets

In this regard, two elements of the concept of absorptive capacity can be distinguished: “Looking inward” refers to the absorptive capacity of a single organization made up of several units, while “Looking out” refers to the company's ability to see the outside world. There will be an absorptive capacity inside or outside the organization. The most frequently mentioned hypothesis at the SME level is that the external environment is the most likely to bring novelty.

The absorption process is far from spontaneous. It is based on previously acquired knowledge and skills which enable people to benefit from and enhance the knowledge available in the outside world; and improve their ability to discover learning opportunities in the business

world. However, the emergence of such external learning skills depends on internal capacities (R \* D, innovation, etc.).

Also, by developing their own internal learning capacities, companies have also acquired capacities which allow them to mobilize and improve the knowledge available in their environment. Therefore, absorptive capacity refers to the ability of a business to recognize, absorb and use knowledge of the environment, that is, the ability of a business to integrate its endogenous R&D work.

Tilton questioned the public goodness of knowledge. It showed that in some industries, especially in the semiconductor industry, it is possible to get information (scientific publications, knowledge, etc.), and the absorption of this information is superficial, but for the development of innovation. For the author, each individual, each organism has its own absorption capacity, the result of its history and, for organisms, of its organism.

Therefore, the capacity of an innovative company should not be limited to its information potential and the simple translation of text but should determine the opportunities that may be hidden behind specific information. In other words, the business must have the capacity to absorb the information behind its reading ability.

BI takes into account the inter-firm relationship in the production of new resources provided by the partners. Companies using this approach will find themselves not only optimizing their information systems internally, locally, regionally or nationally, but also internationally. Taking this aspect of information into account will lead to the emergence of a concept that also exists in technical surveillance and is increasingly being developed within the framework of economic intelligence. This is the concept of the network.

Innovation arouses particular interest in the behavior of networks and the implementation of processes that must link the skills of the different partners. the real strength of an innovative company lies in its ability to bring the team to participate in the project .in other words, to succeed in innovation, it is necessary to bring together several participants: to create in innovation network. The latter characterizes innovation as source of competitive advantage. start-ups have clearly indicated the existence of their networks in the innovation process. these companies need to demonstrate how to manage resources and build innovative networks

Then, innovation becomes the result of a slow process that allows a series of alliances between participants and objects involved in carrying out the innovation process Thus, in order to distinguish innovation networks from other forms of networks, economists have mentioned the technological economic networks (TEN). This term distinguishes the scientific world from that of the market.

The design of these networks, that is to say the identification of the actors involved and the organization of their interaction, cannot be dissociated from the process of generating collective skills. Choosing who belongs to the network means determining which skills will be developed and which products or services will be produced.

Consequently, managing innovation means promoting the creation of networks, selecting partners, attracting them, changing their objectives and focusing on innovation projects. Innovative companies are mobilizing to find and use their decision-making information network. The complexity of the environment and the continuous increase in its uncertainty have notably provoked the real need to clarify decisions through information. In an uncertain environment characterized by high growth, the decision-making process can be short because the manager's intuition plays an important role.

Business intelligence helps analyze the research environment to monitor threats and opportunities presented by future innovations based on market development. It is a tool that prepares the market by disseminating selected information on innovation projects and the improvements that the innovation will bring to customers. However, this information system generates additional costs. Most innovative companies can still use the latter. If we compare the benefits with the performance of their business, we can conclude that their costs are negligible.(FITZ-ENZ,2010)

## CONCLUSION

To conclude, business intelligence is a concept that can be studied in strategic management with a view to improving organizational performance. Information is at the heart of management practices; it requires understanding and comprehensive management to achieve growth and innovation.

In addition, it is necessary to propose an approach centered on processes, and on the flow of information, in order to identify and standardize practices. This vision must be supplemented by psychosocial considerations taking into account the participants and their environment, its factors and their environment position business intelligence within an informal framework.

Beyond the information functions, it is in the ability to create interdependencies between them that the organization can increase its performance, going beyond a simple decision-making purpose. This articulation between the functions of business intelligence is similar to what could represent an object of business intelligence likely to be deepened

. Information is perceived as a whole, and information functions systematically refer to its control, which is of significant importance in the exercise of management. The environment, internal or external, is a substantial variable in these practices requiring a global vision from an efficiency perspective.

For practitioners, this reflection helps to better understand the business intelligence that naturally exists in all organizations with a greater or lesser degree of formalism. In addition, the need for overall information management, particularly in highly forward-looking activities, also represents a managerial contribution.

**PART II: BUSINESS INTELLIGENCE AND THE PERFORMANCE OF SMES**

**-CASE OF NOVA MODA II-**

## INTRODUCTION

All scientific research requires a conceptual framework and a methodological approach required to achieve plausible, coherent and relevant outcomes. As such, implicitly or explicitly adherence to an epistemological paradigm governs all scientific research and calls out to its status and the context that will lead to its realization. Indeed, all sciences have yet to prove their legitimacy and their ability to present a rigorous methodology rooted in objectivity. Several metaphysical currents coexist, differing in nuances concerning the status of knowledge, the nature of reality or even the criteria of validity<sup>25</sup>. At the same time, the process of accessing practical realities also raises questions and a necessary trade-off between a quantitative or qualitative methodological predominance. Our choice is directed towards the latter, which appears to be the most suitable for effectively meeting research objectives. This original orientation, with regard to the topic dealt with, requires details concerning the approach adopted in a specific research context.

In the empirical part, we aim to make the problem more operational. We present the methodological framework followed to gather information and the tools adopted for the development and collection of information in order to achieve the research objectives.

We are trying, in this research, to develop a methodology that will allow us to analyze as much as possible this phenomenon linked to business intelligence in SMEs.

In this part we propose to present in the first chapter the methodology of the survey and in the second chapter to analyze the results of the business investigation.

## **CHAPTER 1: METHODOLOGY AND EMPIRICAL REVIEW**

During this chapter we aim to make the studied problem more operational. We present the methodological framework followed to collect information and the tools chosen to develop and collect. In the introduction of the qualitative methodology also made it possible to justify the technique used, namely the use of an interview guide as a technique for collecting information. In this thesis, the relevance of qualitative methods will be particularly emphasized.

Faced with the lack of benchmarks in the literature, this flexibility is necessary for us to use our judgments where appropriate. One of the first observations we can make about business intelligence is that little information is reported in the literature on the information flows of effective BI within companies. Most of the documents reviewed describe the BI model and contributions to the business. To our knowledge, few researchers study the interaction on the efficiency relationship of BI in the performance of SMEs.

In addition, we believe that the established experimental studies have little precision in terms of BI, as they define this activity based only on the search for opportunities and threats. This lack of literature is not only an exciting area for researchers, but also encounter many difficulties in understanding this phenomenon with few benchmarks.

Faced with this situation, it is preferable to conduct exploratory qualitative research. In this sense, a qualitative methodology finds its full justification. Indeed, few empirical studies address the issues of business intelligence. As part of a quantitative approach. This approach is based on the verification of research hypotheses and enriches the theory subjected to the observation of reality. The exploratory method used in this thesis is deductive. The deduction is based on the reasoning which starts from one or more working hypotheses towards the

explanation of these hypotheses by experience. In the deductive method, theory precedes information gathering

### **research steps**

This axis details the steps to follow to gather the information necessary to answer our research questions. Therefore, we believe we can better understand the method choices introduced earlier in this chapter.

The first step before choosing any form of method is to solve the problem in the research area. There is no methodological reason to choose SMEs in Casablanca, except for the fact that we believe that information from such organizations is vital and that this information is more open to external criticism. On the other hand, geographical proximity is an important element that can collect the necessary information in several stages, especially since the Casablanca area has experienced a notable industrial emergence in recent years, and the establishment of large-scale projects and interest. growing number of multinationals.

Indeed, our first impressions indicate that the power of information will become the center of attention of companies that constantly seek to maintain a leadership position in the market. We are convinced that in this type of SME we can find the issues that require BI attention. In order to better understand the BI of small and medium-sized enterprises in Casablanca.

#### **1. The method of data collection:**

Faced with the dynamics of multiple SMEs and the gaps in the literature, we need a way that allows us to go directly into the field and collect information on a wide range of BI topics. Due to their descriptive nature, case studies can prove to be an interesting method to collect relevant information directly from stakeholders in the selected sample. The case study is

directly linked to the exploratory dimension, so it corresponds to the nature of our research. This approach focuses on revealing the complexity of a situation and promoting understanding through its holistic approach.

The method we'll use to gather the data for this scoping study is the interview guide, in which we ask managers to describe their business situation.

The objective in launching this study is to identify the impact of BI on the performance of SMEs while shedding light on the methodology used.

However, each company has its specificities, its strengths and its weaknesses in the application of the principles of business intelligence. Each tries to get closer to the ideal structure and to develop the link between the two concepts.

However, each company has its specificities, its strengths and its weaknesses in the application of the principles of business intelligence. Each tries to get closer to the ideal structure and to develop the link between the two concepts

The idea is to do a qualitative study that can accurately describe this link. Qualitative methods are well suited to the study of opinions and behaviors.

Unlike quantitative studies, the objective of qualitative studies is not to measure but to understand the sequences and logics of the experience of individuals, of the interpretations they make of it, taking into account the specific contexts of each.

This is the reason why the search for statistical representativeness makes little sense in qualitative methods, which must, on the contrary, favor variety.

This is the reason why our study does not aim to be statistically representative. Its priority objective is to identify and analyze the actions implemented by the SME in the area of business intelligence, to improve performance

The survey was therefore carried out only among an SME that has an business intelligence system.

## **Section 2: Survey technique: the interview**

For the realization of this survey, we chose the interview guide, it is about oral one-on-one, direct contact, between two people or one person (or more) and a group of people whose one transmits to the other information sought on a specific problem. It is an exchange during which the interlocutor expresses his perceptions, his interpretations, his experiences, while the researcher, by his open questions and his reactions, facilitates this expression, avoids that this one move away from the objectives of the research. We talk about interview, interview or interview. Interview techniques involve fundamental processes of communication and human interaction. These processes provide the researcher with very rich and nuanced information and food for thought.(Douglas B.Smuel,Merdith A.Bucher, Takakuni Suzuki,2020)

We have therefore developed an interview guide with the objective of reproducing the real image of BI in the SME NOVA MODA II, which we have broken down into six elements that cover the different areas of business intelligence.

The first element is "Understanding Business Intelligence". It brings together questions relating to the level of understanding and interest of the company in business intelligence.

The second element is “The collection of information” aims to clarify the way in which the needs are detected and by which actor, it also raises questions concerning the collection and the sources used.

The third is titled "Information Processing".

The fourth is concerned with "Dissemination of information".

The fifth looks at "Information Protection and Influencing".

BI and performance was the subject of the last item.

## **1. Classification of interviews according to the procedures**

### **a. The non-directive interview**

It is an unstructured interview, it is said to be unstructured in the sense that there is not a series of prepared questions, and then the interviewer retains a freedom in the manner of conducting the interview; the same applies to the interviewee in the way of answering.

We talk about an in-depth interview because it is about getting the interviewee to deliver aspects of himself, to bring up things that may be buried in him. The investigator, instead of asking questions, introduces a theme (problem, incident ...) and lets the subject speak as much as he wishes

This type of interview is used when we are interested in the motivations, conflicts and attitudes of subjects who, once they have gained confidence, gradually reveal their anxieties, their frustrations, their feelings, their hopes and their prejudices.

### **b. Semi-structured or semi-structured interview**

It is certainly the most used interview in social research. It is semi-directive in the sense that it is not entirely free, nor entirely directed by a large number of precise structured questions. Usually, the researcher has a relatively open interview guide that allows them to collect the necessary information. But he will not necessarily ask all the questions in the wording and order. As much as possible, he will be flexible with the interviewee so that he can speak openly in the terms and in the order that suits him. The researcher will simply try to refocus the interview on the objectives whenever the subject deviates from them; he will add some clarifying questions at the most appropriate time and in the most natural way possible

### **c. Directed interview or structured interview**

This type of interview is used to collect information in a standardized way. It is a kind of oral questionnaire. The questions are planned in advance and have a standardized wording. All the people questioned answered the same questions, after having received the same explanations. The interview therefore takes place in practically identical conditions for all the interviewees.

To carry out our investigation, we considered that the semi-directive interview technique is the most suitable. This is an interview where the course of the various questions and the content of these are developed in a strict and pre-established manner. The questions are asked one after the other and the interviewee is more or less forced to confirm himself, in his answers, as planned. However, even in the context of these interviews, the interviewee has a fairly large spontaneous latitude. The reason for using this technique is related to the precise objective of the study (the impact of BI and performance)(Bolderston ,2012)

## **2. Preparing for the interview**

Preliminary contact was made with the company by telephone to outline the subject of the study. Subsequently an email is sent to present the subject of the investigation and to set an appointment for the interview.

The meeting requires prior preparation, it should not be improvised, This preparation concerns:

Content: an overview of previous surveys and research carried out in Morocco or elsewhere on business intelligence was mandatory.

- Collecting as much information as possible on the companies being investigated, their environment and sometimes the contact person to the extent possible.

### **3. Conduct of the interview**

Some general indications: It is important to create a current of sympathy and understanding while remaining natural and sincere, the investigator nevertheless adopts an attitude as neutral as possible: he is not there to judge in the name of morality or of philosophy but for good information.

- The language of the interview must be neutral, neither pedantic, nor too technical, nor falsely adapted to the level of the interlocutor. A simple and dignified attitude inspires confidence; a demagogic carelessness destroys it.
- Objectivity requires the researcher to know how to keep doubts about himself. As much as he must, so to speak, be wary of what his interlocutors say to him, he must show a certain skepticism with regard to his own attitudes and behaviors because, without realizing it, he can lead interviewees to adopt their own way of seeing things.
- Knowing how to listen: remain welcoming and open while taking care to bring the interview back to the objectives pursued if the subject gets lost in apparently unnecessary considerations.
- Avoid indiscretion or an authoritarian attitude: they cause blockage.
- At the end of the interview, the interviewer asks the interviewee what he thinks of the interview carried out or if he has anything to add or delete. Don't forget to thank him.

The interview conducted showed the need for a dual attitude. The first is to adopt a non-directive position to create a climate of trust and explore the reasoning of our interlocutor. The second is an instruction more designed to collect information on previously identified topics. First of all, we try to do it using a calm tone. Then, at the start of each interview, we will carefully watch the interlocutors on the many names that were going to be used then, at the end of each topic, we re-express the words collected to ensure their understanding and allow more flexibility to move on to the next topic

We are sometimes surprised when the interlocutor is already answering the next question during the reasoning process. In order to overcome this issue, we are still raising these questions and reporting that they have been partially answered.

Finally, while the open nature of the interviews allows researchers to use their judgment and general impressions, this advantage can also be detrimental to researchers as they must accept the subjective nature of the interviews. In fact, he can interpret the data according to what he wants to hear, and even to a limited extent and attempt to influence the interviewee by his knowledge of the subject( Thomas&Thomas,2016)

To conclude, the purpose of this chapter is to present the interviewed company and the techniques used for the analysis of the results

## **CHAPTER 2: FINDINGS AND ANALYSIS OF THE EMPIRICAL SURVEY**

In this chapter we discuss the following axes: a general presentation of NOVA MODA II and the summary of the interview carried out.

## **Section 1: Presentation of the company NOVA MODA II:**

This section will be the subject of the following three axes: the choice of the SME, history of the company, strategy, human resources and professions of this SME.

### **1. Choice of the SME NOVA MODA II**

To choose a company, it is necessary to make a strict selection of the possible SMEs available. This is why, when an entrepreneur says he is doing BI, we must be vigilant and go further, by asking for a more precise definition of BI. It is possible that the manager conceives of BI as Internet research, in this case it is clear that this is not a company that performs BI.

In addition, and because of COVID 19, the list of choices of companies interviewed was limited, the majority of SMEs that practice BI do not accept to welcome me, given the security measures taken into account in the face of pandemic.

### **2. Company history: case study**

Expert in its field, it is a family exporting SME of 300 employees, NOVA MODA II SARL oversees an international group which has been working for renowned brands for more than 15 years.

The history of NOVA MODA II SARL goes back to the year 1999, when a first production unit specializing in subcontracting clothing for women, men and children was born and which it attributed to NOVA. MODA II SARL as a corporate name. It was a success both in terms of quality and efficiency, which is why the management of the company decided to invest in a second unit thus the name NOVA MODA II SARL was born in 2006. As soon as the increase in production capacity proved necessary in order to respond favorably to orders from principals, the decision to invest again was not made. not long since 2010 saw the birth of LORATEX SARL, the third unit which joins the siblings.

To adapt to new market requirements characterized primarily by increasingly fierce competition and more efficient services, NOVA MODA II SARL inaugurated its new factory at the end of 2011, a modern building that allows it to operate in a working environment more pleasant and which meets the new requirements and standards of hygiene, safety and respect for the environment

This vocation is all the more reinforced by its establishment in the Industrial Zone of Gzenaya in Tangier, thus benefiting from wide logistical and operational advantages. LORATEX SARL in turn moved in November 2014 to a new building located in the industrial area of Al Majd, thus benefiting from state-of-the-art infrastructure. Likewise for NOVA MODA II SARL, they are in the process of building their new premises, still in the same industrial zone as LORATEX SARL.

The group is modern and it sees itself open to development and technological innovations. (<http://www.groupenovamoda2.com/>).

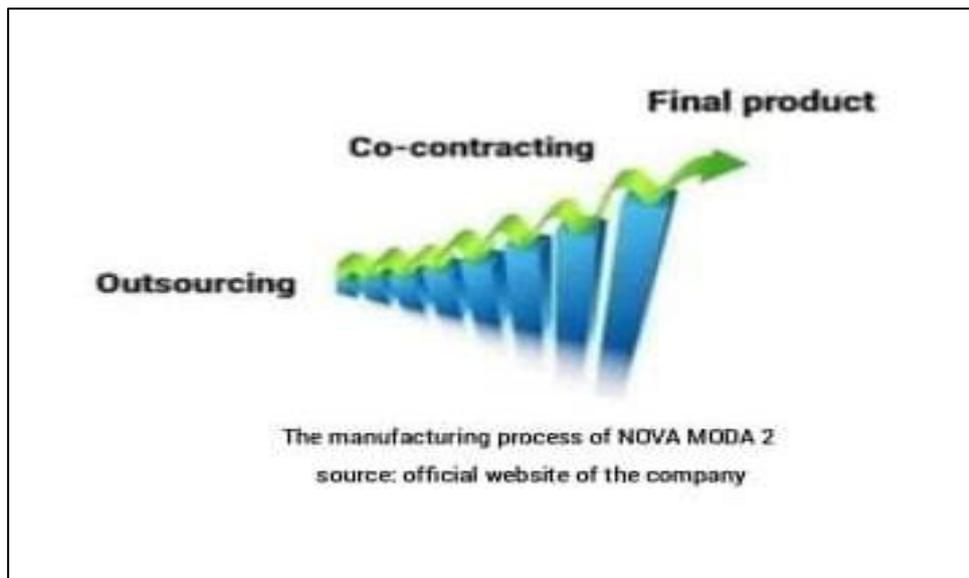
### **3. Strategy, human resources and businesses of the SME**

#### **a. strategy**

Concerned about the importance of the economic challenges of the sector and the importance of provident insurance, the group has set itself objectives to be achieved and represents its development strategy.

As part of improving the production system, the company aims to acquire an information system that will allow it to manage information flows in real time, whether internally or to its customers. The investment in technology will also concern production tools such as automatic padding carts and the cutting robot

One of the group's strategic priorities is the change from subcontractor status to that of co-contractor and then supplier of finished products.



Quality management is also one of the pillars on which the group relies to satisfy its customers. The company is in the process of developing a Quality protocol which will have as its mission the continuous improvement of procedures and operating methods, the analysis of non-conformities, the control of preventive actions as well as internal audit. This policy is a preliminary step that the company intends to take in order to prepare the ground for applying for certifications, in particular ISO 9001 and Fiber Citoyenne. Respect for the environment is not to be outdone, since the company has already installed a device that collects rainwater and reuse it after treating it. To support the company in its development strategy, it has chosen to join the Groupement Interprofessionnel d'Aide au ConsBII (GIAC), a professional association which consists in helping companies wishing to carry out a diagnosis of identification and expression of their needs in continuous training and also supervise them in their reorganization and improvement of their productivity.

**b. Human resources:**

The development of staff is an area on which the group is counting to build loyalty and make them do their best for their business. A training program is followed by the staff, in order to improve their performance and leadership

Spanish is the main language used in day-to-day dealings with customers, which is why the company provides courses for its administration in the language of Cervantes

In order to ensure a source of qualified labor, the company has set up in collaboration with the State a training center for young people wishing to enter the field. Both theoretical and practical training leading to employment at the end of the apprenticeship period.

The group has contacts who provide customers with communication in 4 languages, namely French, English, Spanish and Dutch

**c. The business of the company:**

The company specializes in custom tailoring of ready-to-wear items (tank tops, T-shirts, tops, dresses, shirts, pants, etc.). The group has know-how to produce garments in weft \* warp and mesh fabrics.

The group has 15 production lines to its credit, each with between 30 and 50 workstations ensuring an average daily production capacity of more than 15,000 pieces. The quality of the finished product is ensured thanks to the good qualification of the workforce on the one hand and modern and efficient machinery on the other hand. The development of production management is a priority for the group. Thanks to the Method Department, the group is constantly reviewing its production system in order to optimize its value chain, which will subsequently make it possible to minimize the cost

## **Section 2: Analysis and summary of the survey**

This section will be reserved for the overall interpretation of the interview, the presentation of the SWOT analysis applied to the company and, at the end, the recommendations and research limits.

- Overall interpretation of the interview:

Following the treatment of the answers obtained from the interview with the person in charge of NOVA MODA II, we derive the following results

### Understanding of business intelligence

- What does the term Business intelligence mean to you?

Competitive intelligence is the research, collection of important information and the necessary tools that can help the business anticipate and predict potential facts, which enable it to cope with competition, technological change, customer requirements, as well as the evolution and changes of different standards

- Is information culture part of your company's mindset?

The company places great importance on information. For the manager, it is an essential raw material for any decision-making, and to have a head start compared to other economic players.

- Is there a structured information retrieval practice in your company?

The company became aware of an information research practice, namely the SWOT analysis method of the five years before and five years of the future under the marketing department to detect threats, opportunities, strengths and weaknesses

- What do you think of the idea of creating an business intelligence unit in your company?

The manager thinks that the idea of setting up a business intelligence unit is a positive point for the company in order to involve them in the practice of research to make economic decisions

#### Information gathering

- How do you detect the company's information needs?

The interviewee said that the detection of the information needs of the company is done in an administrative manner. With the exception of marketing and IT departments, which diagnose the internal and external environment to detect the needs of the business.

- Do you have tools to collect the information? What sources are you using?

The information collection tools for this company are registers, IT (display, electronic mail), employees, customers, suppliers, the press, internet, newsletters, archiving.

- Do you develop an information culture in your company?

We are in Morocco in a context of strong explicit recognition. It is difficult in terms of communication to convey information effectively. The interviewee says that the information culture within the company is occasional.

## Data processing

- How to extract useful information from the huge mass of information?

The collection, extraction, and exploitation of information remain problematic as the search for useful information is difficult. Does the company settle for classic and rudimentary means (Newsletters, Internet, Registers, Links, Reports, Notes, etc.) for experts?

The company analyzes information in a raw manner without technological means. They are subject to human exploitation, concern that she may be the one she needs. For this, the SME uses the IT tool without special protection

## Dissemination of information

- Is there a culture of information sharing at the level of the various company departments?

The sharing of information is done all depends on its nature and degree of sensitivity within the company. The information is disseminated only to the interested party.

- How is information disseminated within your company?

The dissemination is done orally during meetings, seminars or interviews, on the internet by electronic message, on the information system, dashboards, social networks, internal newspapers and letters of inquiry. Information

## Protection of information and influencing

- How is information memorized? Where is the memory of the company located and who is responsible for it?

The interviewee says that the memory remains at the level of the branch where the most strategic information is stored

- What measures do you use to protect the information assets of your company?

The interviewee says that internal company information is stored in an information system that is accessible to all staff, but strategic, external information is not available in the IS. To protect information in the company, there are just access codes for PCs and conventional devices for confidential information.

- Do you carry out influencing actions to protect the interests of your company?

The company uses a number of means, including networks: maintaining a close relationship with the media and social networks to prevent rumors. The company participates in events, has sponsorships to maintain its image.

- Does your company equip itself with the means to influence the decisions of the public authorities (laws, standards or regulations)?

For this question, she gave me the same answer as the previous question (no answer).

### Business intelligence and performance

The interviewee said, for business intelligence to improve the performance of SMEs, they need time and follow the BI process step by step in order to be successful.

The company has realized the importance of the impact of business intelligence. They learned about the value and role of information for the survival of the business in a globalized and

changing environment. However, they differ on the organization of research, hence the difficulty of setting up an appropriate business intelligence structure.

In the information collection component, the detection of needs has no procedure, and no action plan is established in advance, no software is used for information collection. Each structure manager defines his information needs by instructing one of his employees to collect them if the information exists at the level of his structure, otherwise he expresses it at the hierarchical structure to which he is attached. And sometimes the collection is done by strategic methods such as polls, customer surveys, exhibitions, relationships.

The sources used for the collection of information are: Formal (registers, computers, regular newsletters, press, internet) informal (relationships, clients, seminars).

Based on responses, staff awareness is occasional, and an information culture is almost lacking.

The study shows that NOVA MODA II does not use scientific tools for the analysis and interpretation of the raw information collected, it is satisfied with classic and rudimentary means (bulletins, internet, register, link sheet, report, notes) and human exploitation in the context of work meetings.

The storage media used are paper media and electronic files accessible to all company staff. However, strategic information remains stored at the top management level.

For protective measures at the enterprise level, there are only access codes for the PCs and the elaboration, documentation of the rules to be observed, which contain confidential information.

At the level of the SME, there is not a quality of know-how, it is not developed in everyone. The dissemination is done for each entity according to its need and according to its activity in the form of paper or electronic files, in most cases, the information processed is intended for managers and using the following channels depending on the degree of sensitivity of the information:

- Orally during meetings, seminars or interviews.
- Internet: by electronic message
- In internal newspapers or newsletters.

Information sharing is done according to the information needs of each department (information sharing remains restricted).

In terms of influence, and to preserve its interests, it uses different means: the media, the press, company general meetings, diplomatic representations, the events it organizes, one-off events, seminars, etc.

In general, it can be said that the practice of BI within the company NOVA MODA II is done on an occasional and informal basis. It is characterized by

- Lack of identification for information purposes;
- An occasional watch according to the needs of the company;
- Limited surveillance: the company only monitors the competitive environment;
- The information dissemination channels are: oral and electronic;
- Low sensitivity to information security;

- Lack of information security measures;
- A remarkable influence on the environment through participation in professional associations and direct contact with public authorities.

### **1. Analyse SWOT for NOVA MODA II :**

A SWOT analysis of the BI situation in the SME NOVA MOODA II can shed light on the link between this discipline and performance:

<b>Strainth</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• The company is aware of the importance of business intelligence and its strong support in this area.</li> <li>• Create a business with qualified and competent personnel.</li> <li>• The hierarchical structure is strongly involved in the collection, analysis and dissemination of information.</li> <li>• In various disciplines, particularly in project management, marketing, IT, organization and prevention of economic information systems, health and safety of economic information systems, various short, medium and long-term training courses have been organized.</li> <li>• The archive is organized according to the structure, ie each structure organizes its own documents.</li> <li>• Have the means of dissemination and access to information.</li> <li>• The desire of the whole company to take a step forward with an BI approach</li> </ul>	<ul style="list-style-type: none"> <li>• Scarcity of monitoring and intelligence instruments.</li> <li>• Use of traditional and obsolete means for collecting and processing data.</li> <li>• The culture of information sharing within the SME is very limited.</li> <li>• No action is taken to educate employees on the value of information.</li> <li>• Staff without qualifications in business intelligence, there is therefore no training (theoretical or practical) dedicated to business intelligence.</li> <li>•It does not have the resources and software dedicated to protecting information.</li> </ul>
<b>Opportunities</b>	<b>Threat</b>
<ul style="list-style-type: none"> <li>• Knowledge of its environment</li> <li>• experience in his field.</li> <li>• Access to some information is inexpensive, especially when using the Internet.</li> <li>• Business intelligence training and awareness seminars are being organized.</li> </ul>	<ul style="list-style-type: none"> <li>• In Morocco, there is no national business intelligence policy for small and medium-sized enterprises.</li> <li>• There is no institution specializing in the production of information.</li> <li>• Lack of security means therefore the risk of hacking is high.</li> <li>• There is no support in the field of business intelligence in Morocco, especially for SMEs.</li> <li>• Due to changing regulations, the environment has become increasingly uncertain.</li> <li>• Global economic and financial turmoil, due to the COVID-19 health crisis.</li> </ul>

## **2. Recommendation and research limits:**

### **a. Recommendation**

After carrying out a study on business intelligence and the performance of SMEs, we will propose some elements adapted to the various dysfunctions aimed at dissolving these obstacles for the development and success of this approach:

- Allocation of a budget, in particular for an BI cell approach.
- The prehension of the general direction of the BI is not enough, it must carry out actions of awareness among all company employees. For this we recommend:

The general management of SMEs must participate in any plan related to intelligence economic. It must also clearly define the direction and participate in defining the information needs and the role that each person plays in the system. This is a decisive step for management to establish a timetable to monitor and control the progress of the company's business intelligence practice. Therefore, it is necessary to focus on the following aspects:

- Structuring of the organization.
- Appointment of a team and project manager qualified in economic intelligence.
- Choice of competent people and highlight the role of each in the structure.
- Establishment of an implementation schedule
- The cost of the project must first be assessed

✓ Raising employee awareness allows everyone to be integrated, by interpreting the importance and challenges of business intelligence and by publishing articles in company newspapers, explaining the composition of business intelligence and its advantages, organizing on-site training, internal meetings to inform employees.

- The human factor plays an important and indispensable place in the process of economic intelligence. Therefore, the decision-making approach of the company requires the participation of all employees. Responding to different levels of responsibility with a strategic approach is the best way to help decision-makers make the most relevant choices at the right time.

In addition, in determining the required positions and skills, consideration should be given to the ability of employees to participate in business intelligence activities, including information protection. Their operational profitability depends on the company's ability to define and interpret its options to limit needs and costs.

- Business intelligence must comply with laws and regulations relating to confidentiality of information, clear and precise ethical standards should be adopted and implemented by management in this area.

- Finally, the establishment of a business intelligence system in an SME must integrate a system from the start of the project to monitor efficiency and profitability, to ensure performance.

#### **b. The limits of research**

The main limits of research can relate to respondents, companies, interviews, IT tools and research methods .... However, this is a project aimed at representing the situation of business intelligence in SMEs in Morocco and its relationship with performance.

Responses collected using the interview guide came from a company interviewee. Ideally, the answer should accurately represent the business situation. In fact, in this study, only one interviewee, representing all points of view of their organization. Given the diversity of opinions within the organization, it is unlikely that one person will represent all of these opinions.

Consequently, an adequate representation of the reality of SMEs by a single respondent constitutes the basic hypothesis of the study. This does not necessarily reduce the quality of the process, but severely limits the interpretation of the results by managers of small and medium enterprises.

Indeed, this type of interview research is mainly based on self-assessment. This can lead respondents to deliberately introduce bias, either deliberately as a response that meets society's expectations, or bias produced unintentionally due to a misunderstanding of the issue arising from their wording or method of presentation, and by using this type of interview, it is difficult to distinguish good intentions from actual practices.

The search is limited in relation to the number of companies consulted. Indeed, the participating SME can give a false idea about the practice of business intelligence in the SME in general.

## CONCLUSION

Among the effects of globalization, the emergence of economic warfare between states through their companies, ignited by an exponential development of information and communication technologies, which has converged into a complexity and instability of the environment in which companies operate. This context has imposed on companies in general and SMEs in particular new rules of the economic game combined with uncertainty and hyper competitiveness. As a result, acquiring the ability to control these environmental constraints, and above all to influence them in order to create and preserve a competitive advantage, is now essential for SMEs in the context of maintaining a better strategic position vis-à-vis its competitors. However, achieving such an advantage is not achieved by the compilation of information in a sterile manner but by the effective management of the information capital of the company with the aim of producing strategic knowledge with high added value useful for decision-making. Consequently, decision-makers need an approach that allows them to effectively manage information flows through two components: control and protection of information in order to guarantee decision-making that is most proportional to the objectives of the organization. company to better position itself in such a changing competitive environment. In this context, BI can be identified as a new managerial practice that allows the company to maintain its relationship with its environment through simultaneous offensive and defensive techniques.

## GENERAL CONCLUSION

In this study, we tried to focus on the relationship between the BI process and the performance of Moroccan SMEs. Indeed, business intelligence can be summed up in a trilogy: monitoring (obtaining relevant strategic information), protection of information assets (not revealing your secrets) and influence (dissemination of information or standards of conduct and help to explain their strategy). As a result, business intelligence activities enable businesses to become more competitive and respond to rapid economic changes.

Moreover, it is impossible to imagine an organization without economic intelligence. The company must have an informed organization, able to grow and adapt with the environment, to seize opportunities, avoid threats and risks; it must make full use of its resources, knowledge, skills and organizational choices, and be more effective in order to disseminate information more efficiently. Notably, the value of useful information also depends on the company's ability to get information inside and out at the right time and in the right format to the right people.

However, we have also noted that managers are very interested in business intelligence and in setting up a department for this approach because it operates in an uncertain and constantly evolving environment. Therefore, the cell will have added value and help improve performance.

Research also shows us that business intelligence requires the will of managers and requires prior reflection on strategy and information needs and the participation of all employees. It is based on the skills, knowledge and memory of the company. It requires organization, as well as a means to effectively collect and improve information essential to business operations.

Thus, we can say that the BI is very far to reach the phase of maturity within the studied SME. The role of decision-makers is always decisive and information must be shared. However, as the number of people questioned is limited for our research, we cannot generalize. But this research gives a general idea of the position occupied by BI in terms of performance.

Certainly, business intelligence in SMEs in Morocco is still in the making. Nevertheless, several actions must be considered to promote a real business intelligence strategy combining a logic of awareness and appropriate training of actors, but also on a capitalization of practices and experiences based on a global development strategy equivalent to a real management of economic intelligence.

This is a new approach in supporting the economic fabric and to boost a dynamic to SMEs in order to strengthen their competitive potential, especially since Morocco has invested in major strategic projects (emergence plan, Morocco digital 2020, Plan Industrial Acceleration (PAI), Offshoring, renewable energies, advanced regionalization, support and financing program for SMEs, etc.) which provide a framework conducive to development in terms of economic intelligence.

Ultimately, our assumptions remain valid. The management and sharing of information, human capital qualified in BI and the awareness of managers, play a primordial role in improving the performance of SMEs through a BI approach, but not sufficient for the implementation. place of an approach of business intelligence which contributes effectively

## **INTERVIEW GUIDE**

### Perception of economic intelligence

What does the term Business intelligence mean to you?

Is information culture part of your company's mindset?

Is there a structured information retrieval practice in your company?

What do you think of the idea of creating a business intelligence unit in your company?

### Needs detection and information gathering

How do you detect the company's information needs?

Do you have tools to collect the information? What sources are you using?

Are you developing an information culture in your business?

### Information processing and analysis

How to extract useful information from the huge mass of information?

How are they analyzed? Do you use computer software, expert networks?

### Storage and protection of information

How is information stored? Where is the memory of the company located and who is responsible for it?

What measures do you use to protect the information assets of your company?

### Dissemination of information

Is there a culture of information sharing across different business departments?

How is information disseminated within your company?

### Influence

Do you take influence actions to protect the interests of your business?

Does your company give itself the means to influence the decisions of the public authorities  
(laws, standards or regulations)

### Business intelligence and performance

In your opinion, can carrying out a business intelligence process within your company  
improve your performance?

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