

Knowledge Management: The Strategic Information System (SIS) and business intelligence

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Abstract:- The emergence of strategic information systems in their self-referential duality provides a rich synthesis which should be the paradigm of information in the future. The strategic information system and business intelligence will mark a new awake and more flexible company able to face an increasing complex environment due mainly to the boom of cooperative practices, crises and the exacerbate competition.

Keywords- Strategic information system, intelligence, environment, business, human.

I. INTRODUCTION:

Nowadays, we are witnessing an economic revolution based on information and knowledge. Indeed, the internationalization of trade and open borders requires economic actors to adopt a proactive, respond to changes in their environments. The effectiveness of strategies is then based on the deployment of real devices intelligence, establishing the knowledge strategic management as a major lever in the service of performance. Then, leaders are even to know and assess changes in their environment when they make decisions. But with complexity come the problem of information's multiplicity and the need to develop a strategic information system how provide business intelligence. However, the question that arises is: what connection is there between business intelligence and strategic information system. To answer this question, we leave the following assumptions: the strategic information system differs from the business intelligence, the Strategic information and strategic monitoring system are complementary, the SIS and strategic intelligence complicate the process of decision making, the system

strategic information and strategic intelligence improve decision making. Verification or refutation of assumptions is made in the present study by the adoption of an action plan focusing on strategic information and strategic intelligence system as entrepreneurial intelligence devices. We will try to detect this device specifically with the observatory study of a Tunisian company from the textile sector. The objective of this study is to provide executives with a support to help them for better understanding the information system functioning and facilitate their strategy's and decision's definition in a challenging environment.

II. KNOWLEDGE MANAGEMENT IN THE EMERGING MARKETS:

A. Importance and characteristic

Wisdom recommends placing the management of knowledge in the social economic and political context of each country. Indeed, this context is not reducible to binary representations, as desired by the equipment. It is not reducible to single genetic and cultural heritage.

Indeed, knowledge management is a combination of tools, information and conditions for project development of knowledge within the organization [10]. Material conditions and other intangible assets should be developed.

First, the development of physical conditions [6] can be a primary challenge for companies in developed countries. Indeed, the room for maneuver on the fiscal side is

reduced. Priorities are many, sometimes affecting the basic needs of workers payroll or launching new products.

To cope with this problem, increase the value and business growth requires capital and attracting increased investment. However, achieving this goal requires the valuation of pre distinctive advantages of a material such as tools of modern production equipment and software to ensure the most earned by reducing waste and speed of response.

But simultaneously immaterial conditions [9] must exist. Indeed, the existence of skilled labor, the spirit of innovation, group culture[11], incentives and information can be an inexhaustible source for the development of distinct advantages.

The role of knowledge is now growing. A new logic reactivity and pre valor gave birth to the growing need for access to knowledge and its ownership. Costs' arising from the introduction of knowledge management is reduced about the benefits advocated.

That said, in emerging countries, access to new knowledge has ideas for imitation[10] , so reducing the gap between developed countries and emerging countries. Learn from the mistakes of others and their experiences are enjoyed an initial advantage for emerging economies. The adoption of new technologies has fostered industrial modernization and improvement of products and services.

However, the need to take advantage of the differential and country-specific intangible capital is the source of innovation and sustainable distinctive. Human skills [12], the country's culture, policies [2] complement each deployed to serve the business project who is good management of knowledge to grow and create value.

B. Knowledge management in the organization

It should be noted that Knowledge management is not a technology but a business plan that relies on several technologies for knowledge capitalization at the end to make a distinct advantage and foster innovation[9]. Knowledge management is a challenge for companies in search of excellence. Leaders are able to know and assess changes in their environment when it comes to making strategic decisions. J.LeMoigne [4] in his model Operation-information-decision (OID), offers a joint trios systems. The operating system treats the flow that defines the operations, it produces information that will be saved (deliveries, orders), the information system will store this information, witch will be combined with the drift

environment variables and will be the decision making basis. So there coupling between information system, operating system and system decision.

Collecting, synthesizing and disseminating information [3] at the right time and by a good person are three fundamental of the knowledge management project. This project is realized through a portal says: "Strategic Information System" and "intelligence."

The value of strategic information system and intelligence is related to their role in the issue of informed decisions. H. Tardieu and B.Guthman [8] claim that "the strategic information system intended to support or form the competitive strategy of the company, its pledge or plan to maintain a competitive advantage or reduce the benefit of competitors." Similarly, Lesca and Laurence [5] define intelligence as "an informational process by which the undertaking proactive research so proactive, early warning signals of its socio-economic environment in order to create opportunities and reduce risks associated with uncertainty. »

C. Composition of the SIS[8]

1. The strategic information system (SI-S: Support):

This is an information system for the automation of business activity, used for strategic purposes. It will be used to store, process and communicate information about the activity by the company as strategic. It will provide a sustainable competitive advantage. This information system is built quickly or within a predictable, not imitated by a competitor, and not jeopardizes the strategic move that the company is playing. SI-S is reflected in the facts established by SI operational sensors, networks, databases, tools for information processing and strategic indicators such as accounting.

2. The strategic information system (S-IS: Information)

It is a system that handles strategic information to establish and follow a strategy in order to facilitate decision making. It has three components:

- The first part: is to allow an assessment of the current and foreseeable environment. The in-depth reflection on the information system (S-IS) could lead to a considerable improvement of the process of strategy development.
- The second part: are the analysis of the structure and the internal situation of the

group. This analysis should enable diagnostic term accounting and financial diagnostics on physical activities in terms of the state of the working tool and a social diagnosis.

- The third: is the control of strategic objectives. This is done by informing policy makers on the parameters of activity, structure and cost. This information will be used to take corrective decisions to rectify the guidance system, and to redefine objectives more appropriate and realistic in situations detected.

D. Types of intelligence

Lesca and Laurence [5] say: “strategic Intelligence is a proactive information process by which the company research proactive signals of its socio-economic environment in order to create opportunities and reduce risks associated with uncertainty”. Also, F.Jackobiack[3] said that "BI is the observation and analysis of the business environment for detecting threats and opportunities for development."Then, it would be possible to distinguish between[1]:

* Technological intelligence : This is the art of identifying, collecting, processing and storing information plus signals relevant for orientation in the future.

* Competitive intelligence : Provides screening active steps, strategy, innovative products, new objectives, capabilities, and assumptions that underlie the actions and decisions of competitor.

* Business intelligence : It is escorting the changing needs of long-term customers, track offer new products and vendor relationship with the company.

* Social intelligence: It's a work based on empirical reasoning to identify at various meetings and to know the new tastes and new trends.

Tableau I:

SUMMARY

	“SIS”	“Strategic Intelligence”
Roles	S-IS: Assessing environmental targets Selecting customers and products that achieve strategic objectives, analyze	Observe and analyze the technical, scientific, economic and social environment of the organization.

	the internal situation of the group, monitoring the activity of the system to achieve the strategic objectives. SI-S: Support of decisions and operations = support of strategy. Enables the automation of activity. Enables the memory, the processing and communication of strategic information on business activity.	Business intelligence is the "RADAR" of the company.
Divergent points	The information comes from the internal and external environment.	The information comes from the external environment.
Common points	Assist in strategic decision making. Adaptability and flexibility of the organization. Targeting of effort and waste reduction. High Cost. Need technological capabilities and professional.	

The table above allows distinguishing between information system and strategic intelligence. Indeed, the latter is limited to information coming from the external environment of the company, while the strategic information system is powered by internal sources and external sources. At first glance, one may think that the intelligence is a part of the information system that handles information from the outside. This problem can be solved by the following reasoning: Strategic intelligence is the company's radar. Its role is to collect information from the outside. The information obtained will be sorted, evaluated, intersected and synthesized: This is the phase of intelligence. This information will be stored, processed and disseminated at the right time to the right person. This is ensured by the SI-S, which is directly related to the S-IS, where the information is classified into[8]:

* DSS (decision support system): that will build models for decision following a phase detection, selection and comparison to sort the information that will serve the company's business (and therefore participates in the intelligence phase). The resulting model will enable the resolution of problems within the company and provide strategic solutions. This is done by specialists who build themselves their preferred models of decision making or information aggregation.

* EIS (executive information system): it is an infrastructure used to capture the information needed to follow the strategy (and therefore participates in the intelligence phase) then this information is formatted depending on a template design. It should be noted here that the S-IS thus established will, in turn, provide information to the SI-S.

The models are made to support the development of scenarios, action plans (you can return to the stage of intelligence and change the plan according to information) and choose the most suited to the situation of the company and environment. Choices are then evaluated and the results are entered into the system information as information that will influence the internal decision-making.

- Problem:

Intelligence and the design of SIS are not easy. In addition to their high costs, they require specialist knowledge and sophisticated information technology to be collected and to be used properly [11]. In addition, the separation between SI-S, S-IS and intelligence can not be done easily in practice. Thus, some companies are limited to accounting, production management, and financial aspects regarding the information within the enterprise, while others just have a S-IS, therefore a data medium capable of information stoker without actual use, at the appropriate time, of this information. However, the number of companies, which monitor their environments, increases. This activity, combined with SIS will be a strategic asset for the company and will allow it to focus its actions.

III CASE STUDY

Presentation of the company:

Name: Company of manufacturing and services “Société de confection et de services”

Legal form: GMBH (limited Liability Company)

Creation date: April 1, 1996.

Address: Ksar Hellal.

Category: Knitting Socks.

Number of establishments: One.

Number of partners: Two

Participation: Private and Tunisian 100%

Number of employees: three workers and a manager.

Local: A single room containing a machine room, a workshop of finishing and a deposit.

Amount of capital: 120000 DT.

Results of balance sheets: Positive and increasing in each year.

A. Business environment:

The business environment is characterized by the existence, in the same city and surroundings, of many small and medium enterprises (SMEs) engaged in the same activity for making socks, during the year of SOCOSER creation, we recounted sixty businesses dispersed in a dozen companies. In the year 2010, this number has exceeded 1,000 jobs, most of which are electronic. The description of the business environment will enable better discernment opportunities gained by the use of information at the right time. Then, the decision will be more appropriate with the objectives of the company and its environment: A multitude of styles of socks annually invests the local market, product quality varies from poor to decent, competition from forcing players to sell their socks at discounted prices, prices have declined 22% over the past five years. The internal and external environment company's can be described at three different levels: the supply, production and flow. The division is made on the basis of the activity observation within the company. This study was made following a three-month internship in direct confrontation with reality.

TABLE II

LEVELS OF INTERNAL AND EXTERNAL ENVIRONMENT OF THE COMPANY

Level	Explication
supply	The material consists of acrylic, nylon or polyester and elastic. This material is produced primarily by three local spinning mills. Along with local suppliers, many importers from delivering thread from stocks purchased abroad. These lots are casual, usually mixtures of quality all comers. They are sold discreetly at discount prices. At the end of stokes to access these, managers must know these importers and be aware of the arrivals. The company supplies acrylic

	and elastic in spinning mills. Nylon and polyester are usually purchased from suppliers' primer choice. However, when a good opportunity arises among sellers of stocks, the management took the opportunity to try to reduce the average cost of the raw material.
Production	Production is subject to a program very close. Generally it obeys the rule of supply and demand. Firm orders are fulfilled first. The production planning in the off season reflects models that will be charged by wholesalers and according to the new trends. Performance monitoring is provided by production sheets filled each day, for each job and each worker. A monthly statement summarizes the information for each record, and serves as a database to calculate profitability.
The flow	The sale of the production is done on the local market. Several contacts were made to explore export opportunities. Offers obtained by the purchaser abroad are not suitable. The reason is that the products coming from Turkey are established in Europe at very competitive prices. Customer in Tunisia is not stable because of the competition.

B. The information system and intelligence within the company:

In its monitoring activity, the company uses two types of information:

- The formal information: which comes from suppliers of equipment and raw materials, sister organizations and international banks, private agencies or state? This type of information may announce, for example, the arrival of new machines and new products, the organization of trade fairs or exhibitions, meetings or conferences. The information is obtained from various media available to the company such as: Direct contact through meetings, exchange visits and observation of materials and products, mail or messages, phone, fax or mail, search and navigation on the Internet.

- The informal information: This type of information is usually rumors or discreet and unpublished news. They can postpone the closure of a business, another extension, the arrival of sophisticated equipment or production which we want to avoid propaganda.

Once the information is gathered, they will be sorted in order to identify useful information: They build vital support for the company allowing it to be better defined, to lie in its environment and to make decisions (for example, to raise a challenge competition or take advantage of a favorable situation). Thus, the partners will decide how much to produce, the quantities stoker, designs, markets exploit price changes. In other words, the direction to follow in the short term and long term will be to light. This can change at any time when reaching new information that requires action or a rapid response. In this context, one of the partners said that the size of the company makes its flexibility and rapid adaptation to its environment.

The question that arises at this stage is the following: is there a strategic information system in the enterprise?

Indeed, to answer this question, it is worth mentioning that the company is computerized at both production and accounting that contact with the outside world. The machines are fully electronic and are subject to an ongoing program of maintenance and control. In addition, workers have been trained on their operations. In order to ensure, as a connoisseur, job control, the senior partner was involved prior to the acquisition of equipment, a training course on the parent who gave the machines. The administrative department is equipped with computer equipment connected to the web, which allows him to explore markets outside and within the country. Accounting is performed by a specialized person and is considered as the information system of the company. It is computerized and based on accurate data. Accurate information on the yields obtained by accounting based on production records held regularly day and other information and figures taken from life within the company. The design of these cards and data processing are made according to a specific model for the company. We note in this regard that one of the partners is an engineer to master modeling techniques.

After each information treatment or to establish a balance, associates conduct an objective analysis of the results. They try to detect weaknesses in their performance and make corrections and solutions. It can be argued that, although the company does not have organic specialized

service, the strategic information system is functional with all its components and is integrated with various activities and concerns associated with it.

C. *Advantages and limitations of intelligence and strategic information system:*

System information and intelligence performance manifested in the following areas:

- Research, direct contact and negotiation with suppliers who provide the raw material at affordable prices from spinning mills.
- Monitoring of incoming son batches' of quality and recognition importers for stocks.
- The creation of new styles of socks. These models are designed in the company, and then tested in some outlets before being launched on the market.
- Through regular tours for clients, managers monitor the emergence of new models. Samples of these are studied and reproduced with improvements, and then tested on the market.
- A periodic exploitation of the local market, of Tunis and other markets within the country.
- The studies of customer are operated before contact and sale's credit. Information sources are accessed through bank and people of the same class. Insolvent customers are excluded from the business.

The major limitation of intelligence and information system for the company is not having accurate information at the right time which may result in lost opportunities.

D. *Conclusion :*

To conclude our case, we can say that the role of intelligence and information system is essential for the survival of the company and the role of intelligence is more important. It is possible to see that the size of the business is a key factor for the risk increases with the expansion of the company. The flow of information and knowledge is in both directions "top down" and "bottom up". The company applies, informally, a combined approach of knowledge management. The Associate Chief behaves father who sends his expertise and knowledge to the members of the society. On the other hand, workers and members of society can trigger a change in the choice of materials or models in response to information received from their formal information. The culture of the company, based on

the exchange of knowledge and perspective encourages the involvement of workers. It obverse while the evolution of the business environment makes necessary the monitoring of surroundings: This is the subject of intelligence.

Thus, inspection of the intelligence activities in the managerial process generally leads us to analyze it in relation to the strategic decision through the strategic information system. In this context, human capital[7] must be valued for a perfect mastery of information technology, which will then be the responsibility of each discipline rather than a specialist. It is in this context that the question of formation of man and his preparation for the future.

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