Research Paper   Open Access

Strategic Knowledge Management versus Management of Strategic Knowledge

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ABSTRACT: The knowledge management can be addressed according to various perspectives which allows the discussion of specific types of knowledge: the strategic knowledge related to the formulation of the business strategy and the decisions associated with it. The literature is vast on the problems of the business strategy, as well as on the management in addition to the instruments related to the management of information in the business Context. The processes whose focus is the strategy lacks more studies and ways to make knowledge more Useful.

This article seeks to discuss the concept of this type of knowledge, its characteristics, and the differences between the strategic knowledge management and the management of strategic knowledge, as well as the management of information for decision-making Strategic and control of the Same.

The approach methodology privileged the studies related to knowledge management, the transformations of tacit knowledge in explicit and Vice versa, in a process of building knowledge that passes through the individual, by groups and organizations the approach methodology presents the state of the art as well as points to new Challenges.

Key words: Information. Strategic Knowledge. Knowledge Management. Strategy. Strategic Decision-making.

I.   THEMEAND RESEARCH PROBLEM

Since the second half of the twentieth century, Knowledge gained special relevance in the vocabulary of various sciences, including the business Sciences. Managers are people who occupy a large part of their working time to make decisions of various nature and dimension. The requirements regarding the time available for decision-making always seem to be higher than the total time they have. Decisions of great importance mingle with trivial decisions. This diversity of decisions tends to increase with the level of responsibility and becomes particularly pronounced in the case of higher hierarchical managers.

The manager function involves an overly broad set of Activities, comprising analyses, decisions (including strategic), communication, leadership, motivation, Evaluation and Control. Of the set of these Activities, we isolate the process of strategic decision making, as it is the fundamental "stone" of a manager. Peter Ducker (1958), states that "decisions and actions they are the final product of the managers "Work".

The strategic decisions formulated explicitly or implicitly by the managers precede all action, irrespective of the organizational process, by which they are taken, either through the formal hierarchy, either through the broad participation of intermediate managers (tables) or by Omission. The process of strategic decision-making is complex, so it poses some problems to managers, in terms of approach methodology, to choose the preferred strategy, among the various Alternatives.

Strategic decisions involve aspects related to external and internal problems, that is, they involve the choice of the set of products and or services that companies will be able to offer to their customers, seeking to develop and take advantage of their position, in the face of the application of resources, of Possible alternatives, so that they can reach their own Objectives.

In companies' employees are concerned about repetitive operational problems, so hierarchies are worried about finding ways to increase efficiency, reduce costs, and sell More. The problems are generated automatically at all levels of the hierarchy and those that lie beyond the lower levels of this, become the reason for the attention of top managers (administrators) and have to do with the Future.

The question related to the strategy is one of the tasks of the business Managers. This idea is in line with one of the premises in which the school is based *Design* (Andrews Et al, 1965), which considers that the responsibility for the definition of the strategy is the manager (the leader).

The problems are overly complex, so it is exceedingly difficult for an administrator to solve the problems of the strategy Alone. consequently, responsibilities for the tasks of strategic management are dispersed through the organizational Structure. Some companies create very specialized structures for support in strategic decision-making, such as departments and or bodies of *Staff* To prepare the strategic analysis.

These support structures are in accordance with the Carnegie school (Ansoff, Et Al 1965), when it considers that the role of managers is to make decisions, but that they are not responsible for their formulation, but those responsible for planning. Comparatively the positioning school (Porter Et al, 1980), follows a methodology of similar approach, in which analysts formulate the strategy and the managers approve it.

II. OBJECTIVESANDAPPROACHMETHODOLOGY

As for the nature of the work,it is qualitative, since it does not claim to quantify anything, nor does it favor the statistical study. The theoretical framework of this work was constructed through the literature review. This is a method of scientific research used to assist in the identification of the relevant literature on the models of definition of the Strategic Knowledge Management and Management of Strategic Knowledge, through the bibliographic review.

It were identifies the different schools of formulation of the business strategy, as well as the inputs for the development of strategic management, namely those related to information, such as strategy information, weak and strong signals, alerts, information surveillance, as well as the information, risk management and elaboration of the theoretical conceptual framework with the main relations.

III. THEORETICAL-METHODOLOGICAL FRAMEWORK OF RESEARCH

Informationandknowledge

Although the terms of information and knowledge are used very often are not the same thing. The information is not the same thing as data, although the two words are often confused, so it is understood that the subtle distinction between these concepts is essential. The data does not convey meaning or meaning of the facts, images, or sounds, since they lack the relational elements indispensable to the establishment of a complete meaning, lacking an internal relational structure for a cognitive purpose. This structure is one of the attributes of the Information. Data is transformed into information when its creator joins meaning (Davenport and Prusak, 1998).

The concept of information as given is commonly seen in the field of scientific Research. In this view of information as given with attributed meaning (Checkland and Howell, 1998, p. 95) or simply: information = data + meaning (Devlin, 1999, P. 33). Information is the result of adding to the data, a specific pattern of relationships that establish its format. Act About the information is not only Act About the data that integrates it, but also Act About the relationships that are established, that is, about the standards Collective or individual formatting and through them on the Perception Of the real and on the Action that it runs.

The information represents a quantity that measures and or reduces the uncertainty, that is, all that allows to lessen the uncertainty experienced by an observer in relation to the occurrence of a particular event. Information is the product of processing and relationship operations of data or other information, through which the significant conceptual relationships between the elements are synthesized, taking into consideration a particular purpose of Communication. The information refers to the body of the facts and or events in a convenient format for decision-making or in a context defining the relationship between the data (William Zikmund, 2000).

The concept of information can be understood under Perspectives Very different. The information is a Object Created by man, aiming to represent an identifiable event by him in the real world, integrating and relating a set of records or data, (Le Moigne, 1979, Steven Alter, 1992). It's the difference that makes the difference (Bateson, 1972). The terms, given and information, are often used differently, depending on the context in which they are inserted. So, for example, in the scientific field, psychologists use the term *Processing of human information*, economists and managers use the term *Value of information* and computer scientists use the *Information theory*. In these three camps, the distinction between data and information is seldom made.

William G. Zikmund (2000, p. 19) defines knowledge as "the mix of information, experience and understanding that provide a structure that can be applied in evaluating new information or new situations". The information "feeds" Knowledge. Knowledge can thus be defined as a Person's ability to relate complex information structures to a new context. New contexts imply change Action Dynamism. Knowledge cannot be shared, although the technique and components of information can be Shared.

When a person internalizes the information to the point of being able to use it, we call it knowledge (Zikmund, 2000). This is a fluid mix of experiences, values, contextual information, and expert discernment, structured that provide a framework for evaluating and incorporating new experiences and Information. In organizations it is not only in documents and reports, but also in organization routines, processes, practices, and

Norms. Knowledge originates and is applied in the minds of connoisseurs (Davenport andPrusak, 1998, William Zikmund, 2000).

Knowledge is information as valid and accepted, integrating data, Acts, information and sometimes hypothesis. Knowledge requires someone to filter, combine and interpret Information. Information can be considered as a "*Substance*" Likely To be acquired, stored, and owned by a person or by a group and transmitted from person to person or group to Group. The information has a certain stability and may look better as existing at the level of society (Davenport and Prusak, 1998). Although we can store it by employing several physical supports, the information itself is not physical, but rather Abstract and so little purely mental. Knowledge is stored in People's memories, but information is out there in the world. Whatever it is exists somewhere between the physical world around people and the mental of human thoughts.

<p align="center">**Knowledge = internalized information + ability to use it in new situations**</p>

Knowledge is fundamentally and intrinsically within people. These are much more complex and unpredictable at the individual level than a whole society, so it is not surprising that knowledge will result much more difficult to obtain than Information. Knowledge exists mainly within people, is an integral part of human complexity and unpredictability (Davenport and Prusak, 1998). Knowledge presents a fundamental duality: it is something store able (at least sometimes we intend to do it) and something that flows (something that communicates from person to person). It is possibly the duality of knowledge (thing that flows and storage process) that hinders its treatment and its management.

Second Dahlberg (2006) knowledge is organized in units of knowledge (concepts) according to its characteristics (Objects /subjects). The organization of knowledge is related to a process of conceptual analysis of a knowledge domain and from there it is structured/ Fuss Generating a representation of the knowledge about such a domain that will be used for the organization of information about this domain of Knowledge.

The human brain seeks, in a permanent way, to give meaning to the future, developing a Activity Constant brain in parallel with other Activities In which he is involved, to anticipate the Future. The memory of the future Acts As a filter to help the individual to treat the immense amount of information that does not cease to be transmitted (Arie de Geus, 1997). Mintzberg and James (1991) take the idea of dividing the human brain into left and right hemisphere and apply it to Management. thus, the left hemisphere takes care of logical thinking processes and treats information sequentially, while the right hemisphere specializes in simultaneous treatments (establishes immediate relations between two or more facts) and has Ability to understand visual Images.

Knowledge construction

Psychology has sought to analyze the construction of knowledge, and some theorists have distinguished themselves in the presentation of Explanations. In this way, as a starting point for understanding human knowledge, Jean Piaget, Leon Vygotsky and Henri Wallon, theorists who drew up their theories from the 1920. They are considered constructivist, since they belong to the group of theorists who consider that knowledge results from the Subject's own action and its construction depends on the interaction of the subject with the Surroundings.

Jean Piaget, studied for more than 50 years the psychological development from childhood to adulthood, in search of the answer to the question: "how does knowledge happen?". Although the object of study of epistemology is the knowledge and the object of study of psychology is the human subject, the relationship between these two areas cannot be established in terms of two autonomous and independent sciences butrelated.

Piaget sought to show that, the child exerts control over obtaining and organizing his experience from the outside world: she accompanies the objects with the eyes, explores what is around her, returns the head to accompany the displacement of objects; Use your hands to grab, drop, play, push; You smell the objects, you take them to your mouth. These actions, which are initially pure forms of exploitation of the world, gradually integrate into psychic schemes or models developed by the child (Goulart, 2011).

In analyzing the development process of human knowledge, Piaget distinguished three functions or Aspects Differentiated: the functions of knowledge, the functions of representation and the affective functions:

- **The Knowledge functions** – They are responsible for the knowledge of the world and that include the organization of logical thinking and the organization of Reality. The *Logical thinking* It evolves from the most primitive action of man over the world, which are reflections, up to operational thought, more complex form of thought, which is itself of the intelligent adult; *The organization of Reality*, In turn, it evolves from the state of indifference between the me and the world to the Perceptions Complex about themselves and the world and the construction of Concepts.

- **The Representation functions** – Include all functions thanks to which we represent any meaning (object, event, or person) using a determined signifier (word, gesture, drawing, etc.). In this group of Piaget functions includes the deferred imitation, the game, the drawing, the language, and the mental image.

- **The affective functions** – Do not constitute the specific object of Piaget's interest; however, He recognized his importance, admitting that they constitute the engine of cognitive development. Analyzed them from the point of view of the relationship with the other, distinguishing steps ranging from anomia (absence of moral rules to limit what can do), pass to the heteronomy (rules imposed by the other) and achieve moral autonomy (Goulart, 2011, p. 22).

Piaget considered that the evolution of knowledge occurs throughout phases, each one characterized by the emergence of a mental structure, which leads the subject to perceive the stimuli that are presented to him in a certain way and, consequently, Interpreting Reality Differently. thus, in the phase preceding the appearance of the characteristic mental structure of logical operations, the child may consider that the water that is transferred from a bucket to a cup changes its quantity, due to the length of the cup or the width of the bucket. Already in the operational logical development phase, it's thought ceases to be intuitive and proceeds to operate based on the observation of objects and it will say that the amount of water remains the Same.

Piagetian studies seek to respond to the problems that arise in the process of building knowledge, in its growing development, where the goal is always an adaptation, an adequate response to the problems that are emerging. Starting from the maturation of new possibilities and the emergence of new challenges in the exploitation of the environment, the subject will build new answers, achieving more elaborate levels of adaptation and having a continuous process of equilibrium in his path of Research. The way in which this becomes a process of internal construction, that is, of formation within its mind of a structure in continuous expansion, which corresponds to the outside world.

Leon Vygotsky It was a Russian physician and philologist, who in the period from 1924 to 1932, shortly after the Soviet revolution, was charged with reviewing the Conceptions Psychological of its predecessors, seeking an explanation for the learning deficits of the Soviet Children. Vygotsky the study of the higher psychological functions because he wanted to understand the Higher psychological mechanisms, typical of human beings, that determine the possibility of thinking about missing objects, imagining events never experienced, planning, and performing Actions.

Vygotsky It emphasizes that society has created instruments and signs that have influenced social and cultural development. Man uses these signs in his daily life in various ways, to assist your Activities. Accompanying social interaction, it turns out that the meanings are socially constructed, From the intervention of the Other. By exchanging between subjects, the meaning becomes internalized as a sign. Language is the most important sign system for the child to develop their cognition; This Perspective, the development of superior mental functions, the internalization of instruments and signs through interaction, learning leads to the transformation of psychological functions.

The knowledge is constructed by the subject, actively, through a process of interaction of the subject with the Object. This interaction occurs both in the relationship with others (Piaget), and through the influence of historical and cultural socio-factors (Vygotsky, 1988).

The society can promote the construction of the knowledge of people in different ways and generally emphasizes education as the intentional way privileged to perform this task. however, throughout the day, children, adolescents, and adults are bombarded by situations that cause their thinking or that they simply present information that even becomes knowledge.

Organizationalknowledge

To understand how managers, use information from, and on the environment, in support of strategic decision-making and learning, we need to look at the surroundings in terms of information needs, research and use, i.e. in terms of insight, creation of knowledge and process of strategic decision-making.

- **The Insight** – is induced by changes in the surroundings that create discontinuity in the flows of experience of people and Activities of the Organizations. These discontinuity's are the signs (weak and Strong) that have to make Sense. Organizations then create the market (s) through the experience and innovation of new products (Weick, 1979, 1995).

The revenue of insight is the interpretation of the surroundings through the sequence of innovation, Selection and Retention. In innovation people create the market in which they want to compete, based on their experience in the interpretation of the market signals. In Selection People choose from the possible interpretations of those who are closest to their experience. In retention, organizations store the knowledge of products successfully, based on the interpretation of market signals and accumulate experience for future situations (Weick, 2000).

Organizational acumen can be guided by the belief of managers or by the Actions. In the process of guided belief, people depart from an initial state of belief that is sufficiently clear and plausible and is used as a node to acquire more and more information within meaningful structures. People can use beliefs as expectations to guide the choice of plausible interpretations or to argue about their beliefs and relevance when these beliefs conflict with the current Information. In the process of Action guided, people start the Actions And grow in their structures of knowledge, through the modification of structures, to give meaning to Actions. People can create meaning to justify the Actions in which they trust or can create meaning to explain Actions Previously Taken.

- **The creation of knowledge-** Organizations havethree types of knowledge: tacit, explicit, and cultural.
- **Tacit knowledge** It is personal knowledge, used by members of organizations to perform their Work. Right Object Learning through the experience of the work carried out, during which they develop skills and capacities to make judgments about the success or not of the Activities.

  Tacit knowledge is experimental and contextualized and cannot be easily coded, written or reduced to rules and recipes. This knowledge is vital for organizations because it is an important source of new knowledge, discoveries and innovations that are the result of individual creation, applying their knowledge and intuition to face the Problems.
- **Explicit knowledge** It is the knowledge that is formally expressed using a system of symbols and can be easily communicated or diffused. This knowledge can be based on objects or standards. Knowledge is based on objects when it is represented using a set of symbols (Ex: Documents) or is soaked in the physical entities (Ex: equipment, substances).

Knowledge is based on norms when it is used, is coded in norms, routines, or operating Procedures. Explicit knowledge encoded as Active is available to organizations because it helps the observation of organizations and the storage of knowledge and is acquired mainly through information almost always by formal education (Choo, 2002, Silva, 2003).

- **Cultural knowledge** It consists of the traditional beliefs and values of organizations and is based on experience, observation, and reflection about the Surroundings. In addition, organizations develop the sharing of beliefs and values, about the nature of their main business, capacities, markets, competitors, and Others. These beliefs and values form the criterion for the Selection of alternatives, new ideas and to assess Projects and Proposals.

In this sense organizations use cultural knowledge to answer questions such as, "what kind of organization are we?", "what knowledge will be valuable to the organization?", "what knowledge is worth pursuing?" Cultural knowledge includes the assumption, beliefs and values that are used to describe and explain reality, as well as the criteria and expectations that are used to give value and meaning to the new information (signs).

Organizations create knowledge through people; Tacit knowledge develops creative acumen and sharing; Explicit knowledge develops new products and innovations (Nonaka and Takeuchi, 1995).

Tacit knowledge is shared and outsourced through the dialogue that is used in metaphors and analogies. New concepts are created, concepts are justified and evaluated according to organizational Intentions. The concepts are tested and used in the creation of prototypes. The concepts that have been created, justified, and modeled are transferred to the other levels of the organizations to generate new cycles of creative Knowledge.

The strategy is concerned with tuning on one side of what is in the organizations and on the other what is out of the same. The quality of this tuning is limited by the **Quality of Strategic Information**with which it is fed, so the main function of the strategy is the "*Polling*"of the surroundings to detect the changes, analyze and interpret them, in terms of the performance potential that the organization has (opportunities). This constitutes a complex process based on information and or signals (weak and Strong) both objectives as subjective. The result is the perception objective of the reality of the surroundings, a set of beliefs (performance expectations) regarding what will happen, that is, the performance that managers believe is possible to achieve (Ansoff, 1990).

There are two sources of **Strategic Information** that contribute to Expectations. A source is internal information on capacities and skills (often called strengths and weaknesses) to address the Aspects Not characterized by perception of the future environment, that is to allow:

- The transformation of industry and or sector.
- Increase the results through new niches beyond the market share.
- Provide the organization of a**Architecture Strategic** – to dream about what you can do with knowledge and the resources you have known;
- To devise the strategy as an overtaking, rather than an adaptation of the ambitions to the surroundings.
- Gaining advancement on competitors, in the dissemination and marketing of products.
- Aiming at leadership in key skills for Business.

The second source is the surrounding environment that provides information (weak and strong signals) about changes and Complexity. When the changes are significant it is "important to be informed about the enemy and the place of battle, which allows to obtain advantages of the first that moves, that is, the one who occupies the battlefield first and waits for his enemy is at ease,who comes after the scene and rushes to fight is tired "(Sun Tzu, 1971). This source of information allows the organization to seek to shape the future; however, intentions can be thwarted by chance and ignorance (Clausewitz, 1989).

In small organizations the process is informal, the manager observes, estimates, and judges at the same time and does not clarify the sequence and interaction among the various elements. The main element is the **Strategic Culture** Of the manager, which determines the Perspective Temporal in which he perceives the

surroundings, as the alternatives he accepts as Credible. Culture acts as A lens or filter perceptive, which, in turn, lays down the premises of the managers ' decisions (Snodgrass, 1984).

If the perspective coincides with the time horizon required by the speed of change and the complexity of the surroundings, means that the Perspective Of the manager is in tune with the turbulence of the surrounding Environment. If the Perspective Manager's Temporal is less than the speed of change we have a Perspective myopic, otherwise we have a Perspective Farsighted. A Perspective Myopic is the result of poor quality of strategic information and the manager will have inaccurate performance expectations. The advantage of a perception foresight allows the manager to perceive trends in the turbulence of the surroundings and thus avoid surprises, predict, and respond to threats and opportunities (Ansoff, 1990).

There are other factors besides the culture that contribute to the vagueness of the expectations formulated informally, such as the limited power of observation of the surroundings, the limitations of the organization, the knowledge, and the experience of the managers. In stable surroundings and reactive intuition and experience are useful, but they become inadequate in environments characterized by anticipation and exploration/creation.

The surveillance of strategic information (collection, Selection, treatment, and analysis) can be carried out by specialized technical teams who then submit to decision makers the alternatives to strategic decisions and or by the managers themselves. The formal process is explicit and sequential. The perceptions they are prepared by the technical teams and or by the managers, and then converted into visions by the managers.

The formal forecast is subject to the same limitations inherent in the informal process, i.e. It is limited by the filter of the forecast of the methodology used to make the predictions. In the stable competence you trust the experience and no "probing" or formal prediction is carried out. The competence reactive formally extrapolates past performance. The competence characterized by anticipation incorporates the extrapolation of formal performance (Ansoff, 1978).

These approaches assume that the future will tend to be a natural extension of the past and are unable to perceive significant changes as well as possible discontinuity's. The skills characterized by the quest and creation use techniques that predict probable deviations from the past. however, they do capture some information about the potential future.

Thus, the technology used for prevention interposes a filter between the decision makers and the Surroundings. A myopic filter that is narrower than the turbulence and complexity of the surrounding environment will present inaccurate information to the Manager. A tuned filter reflects appropriately the surroundings if the level of turbulence is stable. A provisional filter will predict the changes in turbulence (Ansoff, 1978).

The tuning filter with the surroundings is used by means of the Perspective Cultural Decision-makers. If the filter on the Perception is narrower than the forecast filter, the manager will further restrict the Perception Of the future surroundings, rejecting as inaccurate or irrelevant information that is inconsistent with your experience.

The accuracy of an organization's performance expectations is limited either by the forecast filter or by the filter of the perception, depending on which of the two is the Narrowest. When the narrowest filter excludes important environment trends and probable events, performance expectations will be inaccurate regardless of computational refinement and forecasting Methodology.

The knowledge and awareness of expectations whatever their quality, is restricted to a small number of participants who are the best informed about the surroundings and or about the distinctive capacities and skills of organizations. Usually, the most numerous groups of managers who deal with internal operations, do not care about what will happen to the organization, so they have little knowledge of what will be their future.

The opportunities for communicating important strategic information to managers are considerably greater in large organizations than in small and medium-sized Ones. However, there are some limitations. One is the limitation of forecasting systems, which slows the organizational awareness about the major changes in the Surroundings. Another is the limitation of information to "strong signals", which deprives the organization of a timely warning of changes (weak signals) that develop rapidly.

Figure 1-model for the operation of the strategic information surveillance process.
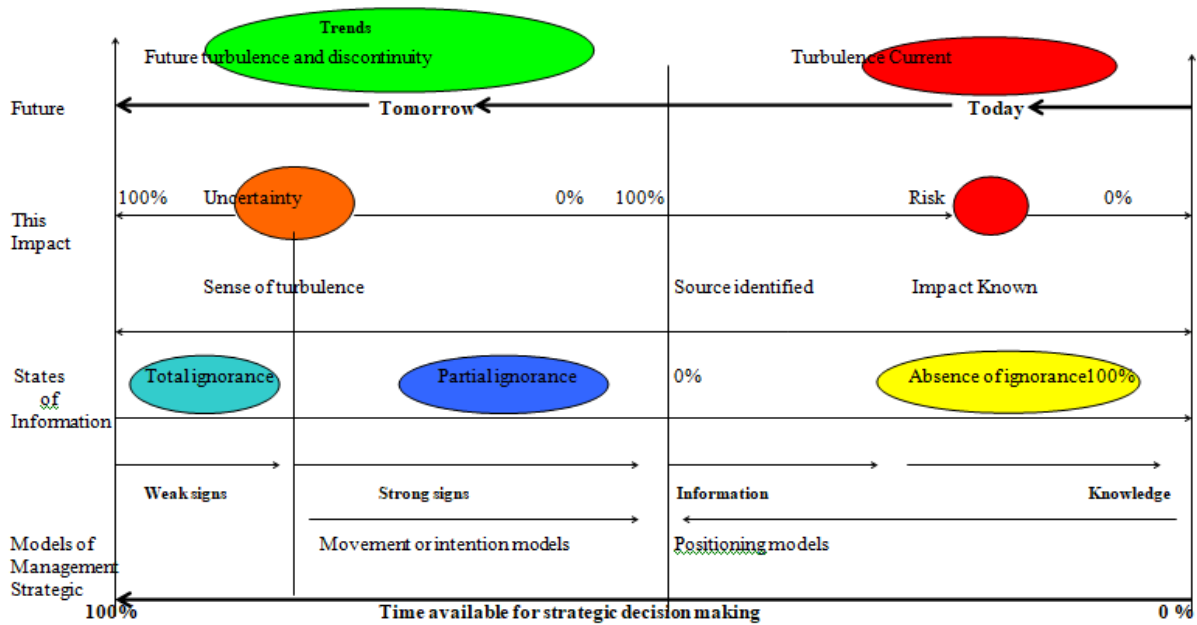
Strategic knowledge

It is important to establish the distinction of concepts that are involved in the context of strategic knowledge (Miranda, 2004):

- **The strategic decision:** It is the decision that integrates the purposes (the strategic objectives) and the resources (the strategic actions), being influenced by the cognitive limits of the decision, the complexity of the problem and the conflicts between decision-makers, that is, it is the decision making on the Strategy to be adopted, taken by the decision holder of formal authority within the organization.
- **The formulation of the strategy**: It is the process of developing strategic reflection, the result of a cognitive elaboration (diagnosis, evaluation of alternatives, choice, implementation and Control) and that suffers the influence of factors such as structure, politics, power, Organizational culture and emotions, that is, it is the process that precedes strategic decision making and is carried out by analysts (or Strategists-decision makers);
- **Strategic decision or strategic decision taker**: Is the leader of the Organization (or governing body), endowed with competences to opt for the strategy more appropriate to certain objectives, exercising the act of the Strategic decision.
- **The strategist or strategic analyst**: It is the professional of the organization, with no power of decision, that uses the strategic knowledge to formulate the alternatives strategies.
- *Experts*: It is the analysts or decision makers of an organization that have experience in the implementation of activities related to formulation and strategic decision making and who therefore tend to use the tacit aspect of strategic knowledge in their Work. For the study, they are considered *Experts* Professionals with 10 or more years of experience in formulating and/or strategic decision making.

It is pointed out that analysts and decision makers may be the same person in the organization, mainly in the smallest size and/or in family organizations, micro-enterprises, and small organizations.

Strategic decision Making

Information-based Strategic decision-making (weak and strong signals) is an increasingly complex activity, since the environment (local, regional, National, and International) is complex and turbulent, where social phenomena are unpredictable. Competition is also intense, and organizations show great concern about achieving competitive advantages.

Ansoff (1985) defines four approaches to strategic management in turbulent and complex surroundings: strategic management by control, extrapolation, anticipation, and response in real Time. Strategic management by anticipation is based on information of an anticipated nature generated from weak and strong signals.

In relation to weak and strong signals, especially those, many aspects need to be considered, such as how they are identified from the surroundings, the role they play in strategic decision-making and the process of their management. On the other hand, organizations also generate and disseminate weak and strong signals to the surroundings, which leads us to the conclusion that strategic management by anticipation aims not only the identification of signals (weak and Strong) of the surroundings, but Also the emission of signals to the surroundings.

Importance of information in strategic decision making

According to Straus and Radnor (2004) in the global and interdependent economy, there are large streams of information, so information has an increasingly decisive role in the strategy of organizations and countries for various reasons:

- Be important in strategic decision-making.
- Be important to innovate higher value-added products and services.
- Be relevant to a country's competitive advantage.
- Be a factor of synergy within organizations.
- Be influential about the behavior of individuals and groups, inside and outside the Organizations.

Lesca and Almeida (1994) claim that information is not yet managed at the height of its strategic potential. According to the same authors, the organization They can be grouped into three groups about information management:

- Those who manage information as a strategic resource and as a competitive weapon.
- Those who manage information, but not in a strategic way.
- Those who are insensitive to the question of strategic information management and the possible competitive advantages they could obtain.

According to Lesca (1986) it is difficult to affirm what the information means for the organizations and as such divides the information into three types:

- **Operating information** -information necessary for the day-to-day operation of the Organization.
  It is supervision and day-to-day control information on daily transactions; It is repetitive, accurate and formal and is subject to suffering the most varied interpretations on the part of those who use it.
- **Influence information** -information influencing the behavior of internal and external agents to the Organization.
  From this information the managers of the organizations seek to maximize the cooperation/relationship between the agents in favor of the Company. It does not have an operational character but seeks to influence the behavior of employees and external agents, for example in the motivation for promotional campaigns of products and or services, to achieve certain objectives.
- **Anticipation information** – Information that allows organizations to detect in advance the changes (discontinuity) in the environment (socio-economic, political-legal, technological, Environmental and others), enabling them to gain advantage or to avoid risks.
  It is information concerning the evolution of the environment (concerns over the long term) and that little or no relation has with the activities of the daily life (products and or services offered to the market). The information of anticipation (weak and strong signals) can take various forms, from rumors, to rumors, to articles of scientific character, etc.

It can be fragmented, of great uncertainty and characterized by ambiguity and lack of Clarity. Rarely is the information of anticipation complete and clearly defined and, it is common that it is associated with unsystematic things, inserted in a context surrounded by uncertainty. generally, anticipation information can be produced by social, environmental indications called weak and or strong signals.

Weak and strong signs

Ansoff (1975) introduced the thematic of weak signals for identifying possible discontinuity's, threats and or opportunities, coming from the global and immediate surroundings, in an early form. In the Face of economic instability, socio-political, Technological. Ansoff (1975; 1984) maintained that strategic planning based solely on quantitative, logical, historical and trend data did not contemplate discontinuity and strategic surprises.

In an increasingly turbulent universe, the very notion of planning, as a goal set *A prior,* it becomes unsuitable, so the ability to react and adapt to the changes in the surroundings is decisive and thus goes from planning to strategic Management.

The weak signals, initially used in military strategies (Ansoff, 1975; Choo, 2009), have spread since then in several areas of knowledge, such as in studies focused on the exploration of the future; The prevention of disasters or natural disasters, medicine, and, in Organizational studies, in the fields of strategy, management and information systems.

In all areas mentioned, the main objective of the study of weak signals is the same: anticipating uncertain, unexpected events with potential significant impact on organizations, to be better ready to decide or act when the Same occur (Choo 2009; Lesca&Lesca, 2011; Holopainen&Toivonen, 2012; Mayer et al. 2013).

But what are weak signals? Weak signals are defined by Rossel (2012) as perceptions of possible changes, essentially hypothetical, within a process of building socially relevant Knowledge. Detailing a little more, Shoemaker and Day (2009) describe weak signals as part of the information, apparent, random, or disjointed, which at first glance seems a background noise, but which can be significant, if viewed from other perspectives, or related to Other Information.

In economic theory, considering the perception of the surroundings, by the managers, was successively guided by the function of the information leading to the corresponding anticipations and the underlying beliefs. In the theory of management these same concepts were little by little introduced and acquired around the strategy, as the surroundings are formed by other "actors" acting in an analogous manner.

The belief of managers is increasingly formalized in the help of cognitive sciences, as well as in Epistemic logic (hierarchical beliefs) and cognitive psychology (revision of beliefs). The exchange of information between managers is also studied in conjunction with the cognitive sciences, as to the coordination they allow (distributed Cognition) and the dynamics that they induce (learning process).

In deepening the definition of weak signals, Lesca and Blanco (2002) consider aspects that characterize these signs, which were resumed and detailed later by Janissek-Muniz, Freitas and Lesca (2007) and Lesca and Lesca (2011) as Table 1.

Table 1: Characteristics of weaksignals

Characteristics of Weaksignal	Justification for the word "weak"	Difference to usual information used by managers
Fragmented	The information is incomplete, only a fragment of the information is made available, requiring other information to come to have some sense.	Fullinformation
Disseminated	Dispersed and mixed with several useless information and raw data, which makes it difficult to identify.	Structuredinformation
Strange/unexpected/surprising	Unusual information, unexpected appearance, not familiar. found, probably, by Chance.	usual, Familiar Information
Ambiguous	A weak signal type information does not speak for itself (or, on the contrary, very ambiguous). Many interpretations can be performed. Does not have an obvious cause link. It'sunclear, ambivalent, Misguided.	Clear information
unperceived Utility (weak or Null)	Without an obvious and/or apparent connection with a current Concern. The same information can be strongly interest to one person and totally without apparent interest to Others. A weaksignalisapparentlydevoid of operationalsignificance.	Indispensable information to perform a task, or to solve a problem
Not very visible, difficult to detect	A weak signal remains easily unnoticed: concealed, hidden, sunk in a quantity of data that Confuses. Hardly detectable. Detecting a weak signal is not only about finding information, it requires skill and learning to perceive it.	Information requested by Decision/user
Random/unpredictable	A weak signal doesn't show up when you need it. Itappearsrandomly, Unforeseen.	Repetitiveinformation
Differentformats	A weak signal takes on several formats: writing, drawing, photography, sound, dialogue, smell, taste, etc.	Information with little variable presentation

Source: adapted from Janissek-Muniz, Freitas and Lesca (2007) and Lesca and Lesca (2011).

The qualification of the weak signals is related to the signal strength: Weak. if, on the one hand, there are signs categorized in this way is because there are also more intense signs, the strong ones, which according to Ansoff (1984) are visible and concrete information that allow evaluation of the impact and, the conception of plans and Actions.

According to Ansoff (1975) a signal will strengthen as the information becomes more Specific. This implies, according to Mendonça, Cardoso and (2012), a notion of distance in relation to the event or surprise being Flagged. Weak signals differ from strong signals because they are less visible and have a greater distance from the impact of future Changes. Strong signals emerge whenever there is strong evidence of change, whose identification can also be perceived through a group of weak-related Signals.

It is important to highlight that the authors do not suggest irrelevance of the strong signals for strategic decision Making. Lesca and Lesca (2011), as well as Mendonça et al. (2012), only emphasize the strategic importance of weak signals, or rather the importance of what weak signals can incite, propel, warn and anticipate; In addition to the dangers inherent in ignoring them, leaving little or no time for the decision or action, may have negative consequences for the continuity of the business.

Mendonça et al. (2012), and Lesca and Lesca (2011) claim that a weak isolated signal is not significant. The value of weak signals is the result of a process of interaction between the observer and what is observed, that is, it is dependent on the perspective of Each. Therefore, a weak signal may be relevant to ones, while for others it is completely despicable, hence the need for an interpretation or creation of meaning from them, especially if held in a collective way.

To highlight the importance of what weak signals can stimulate, Lesca and Lesca (2011) cite possible results from the interpretation of weak signals: a new product or a new use for an existing product; A new potential client; A new potential supplier; A new potential competitor for whom attention needs to be directed; A new potential partner; A new technology that can result in opportunities or threats.

In practical terms the weak signals can be compared with the faint and distant clouds that may dissipate or on the contrary may approach the place where we meet and turn into more laden clouds (strong signals) that may Cause intense rain (quantifiable information), floods, *Tsunami*c.

Ansoff assigns to *Weak Signals* A premature character. According to the author, the *Weak Signals* They are elements that can awaken, in the strategic decision attentive and sensitive, a sense that something important seems to be starting up or could happen (discontinuity's / opportunities and or threats) in the relevant surroundings of the organization. It should be noted, however, that the intuition in this case is triggered by information that will have been perceived and examined carefully. Ansoff calls this *"graduated response through amplification and response to weak signals"*.

According to Kärkkäinen et al. (2001), concerning the anticipation of future and hidden needs of customers, states that they have difficulty recognizing and interpreting weak signals, and therefore it is necessary to develop specific methods for the formation of detection and use of weak signal type Information.

These expressions allow us to show that the notion of weak and strong signals, although devoid of greater definition and operational criteria, arouses interest both in the middle of academic research and in the professional context. By ignorance, weak signals are often misunderstood in companies and may even arouse misinterpretation.

The word "weak" is misunderstood and induces some managers to be wrong. In fact, a signal may be weak by its appearance and understanding, but potentially strong in the sense that it can identify something very important (opportunities and or threats) to the organization that is able to capture and interpret Them.
According to Ansoff (1975), Blanco (1998), Lesca (2001) and Lesca and Blanco (2002), A signal can be qualified weak when it has the following characteristics, because it is:

- **Fragmented** -it means that we do not have complete information, we have only a fragment of information from which it is possible to foresee Something. Weaksignalsusuallyexist in smallquantities.
- **Disseminated** – is mixed with useless information that impedes your Identification. A weak signal has low visibility. It goes unnoticed to most people.
- **Meaning** -apparently Weak and Ambiguous. A weak signal type information says little by itself, is very ambiguous, unclear, ambivalent, Misguided.
- **Unexpected** -not expected, not familiar, little repetitive, and so it may not be perceived. The characteristic of non-familiarity of an information makes it more difficult to distinguish it.
- **Apparent poor utility** -the same information can be strongly interdepartmental for a manager and without apparent interest to others, even if they are part of the same industry/sector. A weak signal is apparently devoid of operational significance. Its usefulness does not ' leap to the eye ', and the consequences of the evoked phenomenon do not happen by Themselves.
- **Difficult to detect** -poor Identification. In metaphorical terms, it can be said that a weak signal "escapes easily between the fingers".
- **Relevance** -weak, that is, it is not known what information to relate to this sign, or how to classify information in relation to the concerns and current activities of the Organization.
- **Reliability** – apparent, usually, A weak signal «announces» a future event, subjective, potentially wrong, and not verified (opportunity and or threat).

The weak signals constitute the central point of the anticipation of strategic decision-making, due to its potential relevance and usefulness to the managers prepared and with appropriate cognitive style, since according to Ansoff (1975), this type of information It may contain assumptions of breakages, opportunities and or relevant threats (competitors, customers, suppliers, etc.).

Weak signals Versus early signs/alerts

In the field of strategic management and early interpretation, the difference between signal and Clue/alert lies in the intention of the sender of information and, consequently, the meaning and reliability of it. The word "sign" Sub-entuned a deliberate intention on the part of the sender to communicate that Information. This form approaches the idea of signaling, for example, the analysis of competition through public demonstrations (like market signals).

Porter (1982) indicates that market signals make it possible to know the future intentions and actions of Competitors. In the case of anticipation of information in strategic management, it is not what the sender wants to explicitly communicate what interests us most: it can be a sham or a common Information. conversely, what may potentially interest us is not always the subject of a deliberate emission of the emitter. What we are most interested in and of the greatest importance are the involuntary, unintentional emissions and manifestations of the "authors" of the change we wish to Anticipate. In this case, we can say that we are facing **clues/alerts**.

The word ' sign ' according to the signal theory described by Shannon and Weaver (1949) would apply to the weak signals of Ansoff, which would allow the possibility of establishing exhaustive lists of signals, which would be possible to identify communication channels to be observed and define the limits of receptivity from which one should be alert. This analogy would be dangerous, as it would lead to the privilege of selecting poor weak signals (Lesca and Blanco, 2002).

The criteria of the signs of Shannon and Weaver, such as, trust, sufficiency, completeness, controllability, etc., are not usable in the case of the weak signals of Ansoff, so we are faced with a situation where we do not know in advance what signs and Which sources of Information. thus, we focus our interest only on the signals, that we will be able to obtain pertinent and anticipated information, so we speak in **early indications/alerts**, which do not have an immediately evident meaning, on the contrary, its meaning is constructed during its interpretation. By interpreting a weak signal, we have the possibility of getting to the "early indications/alerts".

"early warning" is an information whose interpretation allows us to think that an event likely to have a great utility and a great impact on organizations will be to occur (discontinuity, opportunity and or threat). Such clues may originate in two main sources: documented sources (databases, publications, internet, etc.) and relational sources, as well as informal or formal, internal, or external Sources.

Second (leszczyńska and Lesca, 2004) the information of relational origin is often accessible mainly by employees with external activities to the organizations, although the internal employees of the organizations, through their Relationships and their contact with the surroundings (customers, suppliers, competitors, researchers, meetings, congresses, fairs, seminars, etc.), may also be able to be attentive to the informal, qualitative, subjective information, etc.

Strategic surprises

According to Ansoff (1975) managers prefer the strong signals and quantitative information in strategic decision making, but suddenly discover that they have missed an opportunity or that the product line is in danger of surviving. In these situations, managers are faced with unfamiliar, unpredictable, sudden and threatening events that can be called strategic surprises.

The surprises (discontinuity's, opportunities and or threats) are announced by clues/alerts or weak signals from the immediate surroundings (industry/sector) and or global that the author defines as fragmented information and that when used in the making of Strategic decision are not sufficiently accurate to ensure a comfortable level of certainty.

This definition shows us a paradox about the use of this type of information in the strategic decision-making aiming at the anticipation of "surprises". A strategic decision-making based on complete and accurate information, would lose the opportunity.

If the context of the decision is immersed only in information characterized as weak signals, managers may be faced with two conflicting situations: or take the decision based on such information (weak signals, indications/alerts), at a high risk of err, or expect to gather more information, at a strong risk of losing the right moment (opportunity or threat) for decision Making.

According to Lesca (2003), a weak signal is characterized by the information in relation to which there is fragility pertinent to its integrity, visibility, meaning, familiarity, perceived utility, relevance and Reliability. Although the weak signs other of these weaknesses and apparently lose importance, they may be useful in formulating information of anticipation, if it is able to give adequate treatment of amplification to these signals. In this case, signal amplification is the process by which undesirable information (noises) is filtered and, eventually, some weak signals are associated with Others.

The option for anticipation has a theoretical and practical consequence as to the type of information we are interested in. This is about information containing, themselves, an advance character: they must indicate clues to trends about the future, not about the past or present. And more specifically, they should constitute early manifestations of eventual breakage or discontinuity. It is in this context that Ansoff used the expression *Weak Signals* (1975).

Surveillance as a mode of information research

Depending on whether the managers believe that the surroundings can be analyzed and understood, four modes of surveillance and information research can be identified:

- **Not directed** – When managers have reactive behavior. The information needs are poorly defined, and much is formal and obtained through the changes already passed, i.e. Managers are limited to the available and quantified Information. The managers are accommodated, and the opportunities appear casually and opportunistically, do not seek them. They rely more on personal and irregular contacts. The information used in support of strategic decision making is related to the reduction of the high levels of misconceptions of the surroundings (Weick, 1979, Miles and Snow, 1978, Cyert and March 1992).

- **Conditioned** – This situation occurs when managers understand that the surroundings can be analyzed but are passive in obtaining information about it. Information gathering needs focuses on a small number of

relatively well-defined questions or research Areas. The information used is mainly historical, for example the information officially published about the industry and the performance of the resources of the Organization. This view is conditioned in the sense that it is limited by the historical information quantified over the years (Daft and Weick, 1984, p. 289).

It is assumed that the surroundings can be known, there is less need to reduce uncertainty by establishing rules and rules that allow the construction of a plausible interpretation. Managers tend to adopt defensive strategies by concentrating on internal efficiency to protect their positioning (Miles and Snow, 1978, March and Simon, 1993, Cristensen, 1997).

- **Innovative** – This situation occurs when managers realize that it is difficult to analyzethe surroundings, but which have a proactive attitude, that is, seek to influence it. The information needs are the ones required by the experimentation and testing of the Surroundings. This involves identifying potential markets. The information sought comes mainly from the external sources and the channels that managers create to have the *Feedback* Of the actions they have Taken. They acquire information through tests of new behaviors of potential customers, experience, test, stimulate and ignore traditional expectations, that is, organizations create their own future (Prahalad, 1995, Grant, 1998, Daft and Weick, 1984).

The information is used to reduce uncertainty about the surroundings, through testing and simulations of products and or services, so that managers adopt innovative strategies, through the introduction of new products and or services on the market and thus Gain competitive Advantage. The decision-making process tends to be phased and incremental, involving creative and experimental cycles (Mintzberg et al, 1976, Miles and Snow, 1978, Prahalad, 1995, Grant, 1998, Daft and Weick, 1984).

- **Active** – This situation occurs when managers perceive that the surroundings can be analyzed and have a determined attitude in gathering information about the surroundings. The need for information is based on well-defined objectives but that are vague and open. Organizations are ready to be surprised with new needs for relevant Information. The information researched is formal, quantitative, and typically resulting from market studies, institutions or credible specialists who are objective and rigorous.

Organizations have formal structures that systematically analyze information, make simulations and analyze trends and emit "*Reports* Smart. Organizations tend to adopt positioning strategies based on the analysis of the surrounding environment carried out by the Analysts. Decision making follows a formal, rational, and logical process and often use quantitative techniques (Andrews, 1965, Ansoff,

Figure 2 – Integrated model of strategic information filtering
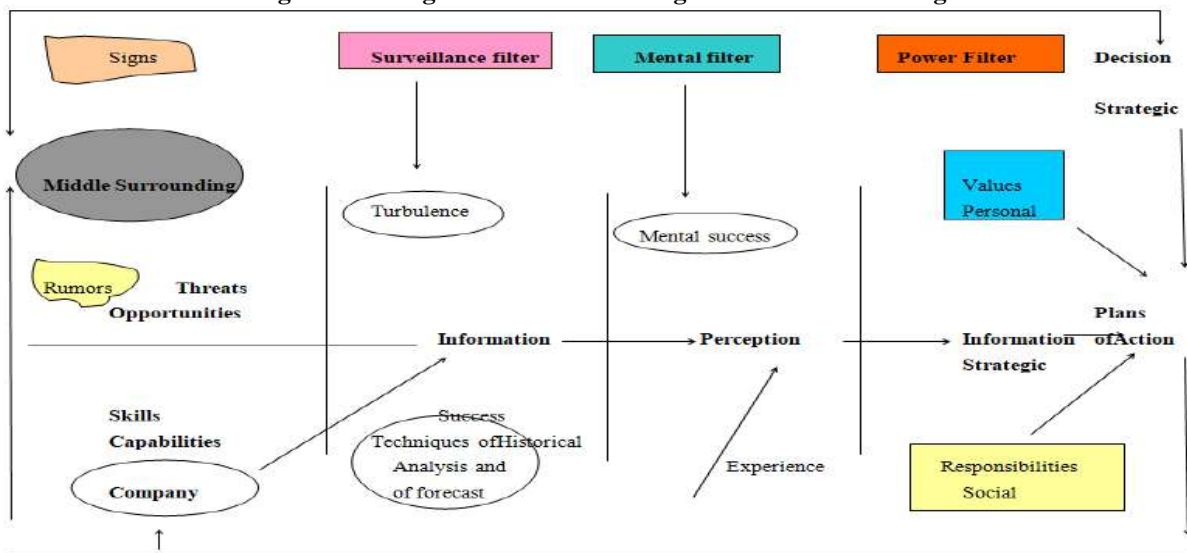
Evaluation and control of the implementation of the strategy

Source: adapted from Ansoff, (1978), *Strategic Management* Macmillan Press, Uk

The input information before reaching the decision is subject to three filters, the thorough analysis of future opportunities, the filter of the perception of the surroundings and the filter of the performance forecast, which can be coalesced into a single to which We will call the filter of the management capacities, which we name by M. When the performance prediction reaches the decision, it is re-filtered by the manager's perception filter, which we shall refer to as K. if M = K then the manager is incredibly pleased with the forecast, because it confirms its beliefs and prejudices, even if it is totally devoid of reality. If K > M considers the prediction too

simplistic and restrictive and will look for ways to enrich it. If K < M considers that the forecast is unrealistic and will seek to make predictions closer to their experiences and past Perceptions.

however, organizations differ in the process of filtering the strategic information, depending on the credibility of the managers in the analysis of the surroundings and the ability to understand it. Organizations that believe it is possible to analyze the surroundings and quantify the events and processes that are decisive, seek to discover the "correct" interpretation through the acquisition and analysis of information in a systematic way. On the contrary, managers who understand that the surroundings cannot be analyzed in a quantified manner, create or believe to be reasonable an interpretation of the signals that can explain the past behavior and suggest future actions (Daft and Weick, 1984).

The differences in the perception of the analysis of the surroundings are due to the characteristics of the surroundings, combined with the experience of interpretation of the Managers. The analysis is related to the perception of the concept of Uncertainty. The perception of uncertainty is a variable that measures the totality of the perception of change and the complexity of the surroundings (Daft and Weick, 1984). There are two dimensions of the surroundings that can determine the perception of uncertainty (Duncan, 1972):

- **The Simple dimension** – The number of factors in the environment considered in strategic decision-making.
- **The dynamic dimension** – The degree and frequency of change of determining factors in the surroundings.

The managers in engaging media that are dynamic, and complex acquire greater experience in the perception of the uncertainty of the surroundings, although the perception of uncertainty is determined by the perception of complexity (number of factors, opacity of relationships and the perception of the dynamics of the surroundings (frequency of change). The combined effect of many factors and actors, unclear relations between the causes and effects and the rapid frequency of change leads to the perception that the surroundings are difficult to analyses. The managers with more experience in the analysis of the surroundings tend to do greater vigilance (Choo, 2002).

Besides the uncertainty of the surroundings, the level of knowledge and the information available about it is also an important factor. Some industries collect and analyze information about products, markets, and competitors. The information that is available and which is sufficiently detailed and timely for decision making can lead to the perception that the surrounding environment is Par sable.

Organizations with active behavior in relation to the surroundings allocate substantial resources in the collection of information and Signals (strong and weak), test and manipulate the Surroundings. Those who have a reactive behavior consider information about the available surroundings and try to interpret it with the information they have.

The difference between organizations actively seeking new opportunities and others lies in the degree of conflict between the organization and the surrounding Environment. When the surroundings are more hostile or threatening or when organizations are more dependent on it, they allocate more resources in their vigilance. The hostility of the surroundings increases vigilance due to the need to identify new problems and new Opportunities. On the other side, organizations in unfriendly engaging media have little incentive to have active behavior in the search for new opportunities, (Wilensky, 1967, Daft and Weick, 1984), which is in line with the theory of resource dependence (Pfeffer and Salancik, 1978).

In the theory of resource dependence, the surroundings are a resource of the resources that organizations depend On. Resource dependence is affected by the abundance of resources, the concentration of power and authority and the degree of relationship between industry organizations. The degree of dependence will be greater when resources are scarce and or when there is a great concentration in the Industry.

An organization can define its strategy from the outside in by adapting to the surrounding environment (E.G. diversification, niche market, leadership by Price) or can define it from the inside out, so as to influence this same surroundings (E.G. new Products and markets) depending on their resources (Ansoff, 1965, Porter, 1980, Andrews, 1965, Grant, 1999, Prahalad and Hamel, 1990, Pfeffer and Salancik, 1978, Miles and Snow, 1978).

Management of strategic knowledge

The fundamentals of strategic knowledge management are based on three aspects: strategy, knowledge, and Management. The strategy is one of the most discussed topics in the business sciences, from Sun Tun (1971), through the schools of strategic management:

- **The school Harvard 65/Design (Andrews et Al)**, **Approach is a process of conception,**
- **The Carnegie school (Ansoff et al, 1965)**, formally systematizes the problem of the strategy to meet the needs of companies, at the global level of management,
- **The school Harvard Post 80 (Porter et al),** Known as the positioning, because the strategic analysis is based for many years on the concepts developed until Then: growth, internationalization, and

Diversification. Developed the model of the five forces, based on the analysis of the competitive context that manifests the entry of the industrial economy into strategic thinking

- **The Resource-based school (Hayes, 1985)** is based on Creation and support of competitive advantages, capacities, and organizational Skills.
- **The resource-based strategy (Grant, 1991),** The organization must first consider what it can do and then identify the industries and strategies it can adopt through the development and exploitation of its capacities and skills
- **The Entrepreneurial school (Schumpeter, 1959),** It was born of the economy, like that of positioning, since the entrepreneur has a prominent role in economic theory. The entrepreneur is not the capitalist, but the one who has the ideas of the business, that is, the entrepreneur has vision and Creativity.
- **The Cognitive school (Herbert Simon, 1947, 1957),** It uses the field of cognitive psychology, in which the process of formulating the strategy is a mental process, that is, means that the strategy is formulated in the sphere of human cognition. Quarterback develops its knowledge structures and processes of thought, mainly through direct experience. This experience gives way to what he knows that, in turn, forms what he does, thus shaping his experience subsequently. This duality has a central role, giving rise to two different wings. A more positivist who treats the processing and structuring of knowledge as an effort to produce film*objective*of the world. The other wing sees everything as subjective: the strategy is a kind of *Interpretation* of the world.
- **The School of Learning (Mintzberg 1972, 1978, 1985, 1989, 1991, 1995),** *B*asie the principle that managers and organizations learn over time, in other words, it is based on the description instead of the Prescription. The proponents of this school ask a simple but especially important question: how in fact the strategies are formed in organizations? Not how they are formulated, but how they form. They claim that people informed in any part of the Organization can contribute to the process of training the Strategy.
- **The School of power, (Bolman and Deal, 1997**), describes the exercise of influence beyond purely economic, that is, brings it closer to politics, a term we use broadly. Politics becomes synonymous with the exploitation of power in a way that is not purely economic. If the formulation of the strategy can be a process of planning and analysis, cognition and learning, It can also be a process of negotiation and concessions between individuals and groups.
- **The School of culture, (Pettigrew, 1985),** The culture is essentially composed of interpretations of a world, of the activities and artifacts that reflect the Same. In addition to cognition, these interpretations are collectively shared in a social process. Some activities may be individual, but their importance is Collective. The organizational culture is associated with the collective cognition and becomes the "mind of the organization", that is, the common beliefs that are reflected in traditions and habits, as well as in the more tangible manifestations, such as stories, symbols, buildings, and Products.
- **The environmental school, (Mintzber, 1979, Hannan and Freeman, 1977, 1984),** It treats the set of forces outside of organizations, the environment, as an actor, while other schools see it as a Factor. This school positions the environment as one of the three central forces in formulating the strategy, alongside leadership and organization.
- **The School of configuration, (Miller and Friesen, 1980b, 1982a, 1984, Mintzberg and McHugh, 1985),** Describes the states of the Organization and the context that the fence, such as configurations and on the other hand describes the process of formulating the strategy, such as transformation, that is when an organization adopts states of being, then the strategy becomes a process of Jump from one state to another, that is, the transformation is an inevitable consequence of the Configuration.

The management of strategic knowledge is based on information science and is concentrated in the process of how analysts and strategic decision-makers act in this process and what are their knowledgeable behaviors and what are their Skills and skills that influence the formulation of strategic alternatives and the choice of strategy.

While knowledge management is focused on all the knowledge generated in the organization, for example in the creation of a new product/service, process, or system the management of strategic knowledge focuses on the process of formulating alternatives Strategic decision-making, supporting the explicit and tacit knowledge (accumulated).

The process of strategic knowledge management requires information and knowledge, preferably accumulated, at different levels, quantities, and qualities. It is necessary to use the methods and techniques of information management, knowledge management and management to "work" strategic information and strategic Knowledge. Management style and personal power are relevant elements that influence the process of strategic knowledge management, which are related to the psychology and sociology of Organizations.

Operation of the model of Management of strategic knowledge

We propose a model of operationalization of strategic knowledge management based on Research. There is a surplus of reflection on the strategy formulation models that are fixed on what managers should do and how they should respond when the intervention initiative has already occurred. We have learned within the organization that an important ingredient for the success of strategic management is the effort that begins much earlier to prepare, train, and motivate people on the process of formulating the strategy based on a model already previously Set.

The preparatory work outside the organization is at least as important as the other, if we want the demands of the surrounding environment on strategic decisions to be **Better Informed** and reasoned, more sympathetic to the business system and more balanced about the impact on the future options of the Company.

What should be done by managers to gain awareness of the dimensions of the strategic problems affecting people and businesses? What should be done to achieve a higher level of knowledge and a greater mastery of the problems faced by society and managers who make strategic decisions? How can the levels of trust and credibility be established between the company and the stakeholders, levels that the company today knows should establish between managers and employees?

The answer to these questions challenges the traditional way of managing, so it is necessary to better understand reality and capture this perception, to increase human understanding about the tremendous complexity that is the real world. An approach to understanding the real world is to identify, within the same, the **Strategic information** That corresponds to the future optics of the surroundings, as a way of feeding accumulated knowledge.

A second element of the approach is to make managers understand that using **Best information** in support of strategic decision making can reduce risk, uncertainty and the least likelihood of failure. This method is an empirical heuristic that has been proven, through an experimental verification process, since the information and knowledge society is becoming progressively turbulent and interconnected, and its problems become increasingly More complex and give rise to new models of complexity Approach.

The approach to the complexity of strategic problems has important systemic properties, since reducing the complexity of problems reflects the recognition that the complexity of the real world is often greater than the human capacity of Handling complexity and therefore the synthesis of complexity compensates for the limited rationality of the human brain. The systemic approach focuses on the nature of relationships and the interrelationships between key information to feed accumulated knowledge, so no matter what the complexity of the strategic problem is, it is usually possible to identify a Small number of strategic information That determine the basic configuration of the Solution.

The surroundings determine the mode and conditions of behavior necessary for the survival and the realization of the aspirations of the organizations, so success depends on a two-way alignment:

- Information about their behavior in the surroundings and information on the conditions of success in the surroundings (accumulated knowledge-opportunities);
- Information about your behavior and information about your internal configuration (accumulated knowledge of skills and capacities).

Managers must be prepared to respond to the challenges of the increasingly competitive, changeable, and unstable surroundings. The response to this broader vision of strategic intervention means new efforts to create a process of monitoring strategic information about the environment, to identify in advance, the future possibilities of the organization, (accumulated knowledge).

In Figure number two, a proposal can be seen to operationalize the strategic knowledge management Model.

Figure 2 – Model of operationalization of strategic knowledge management
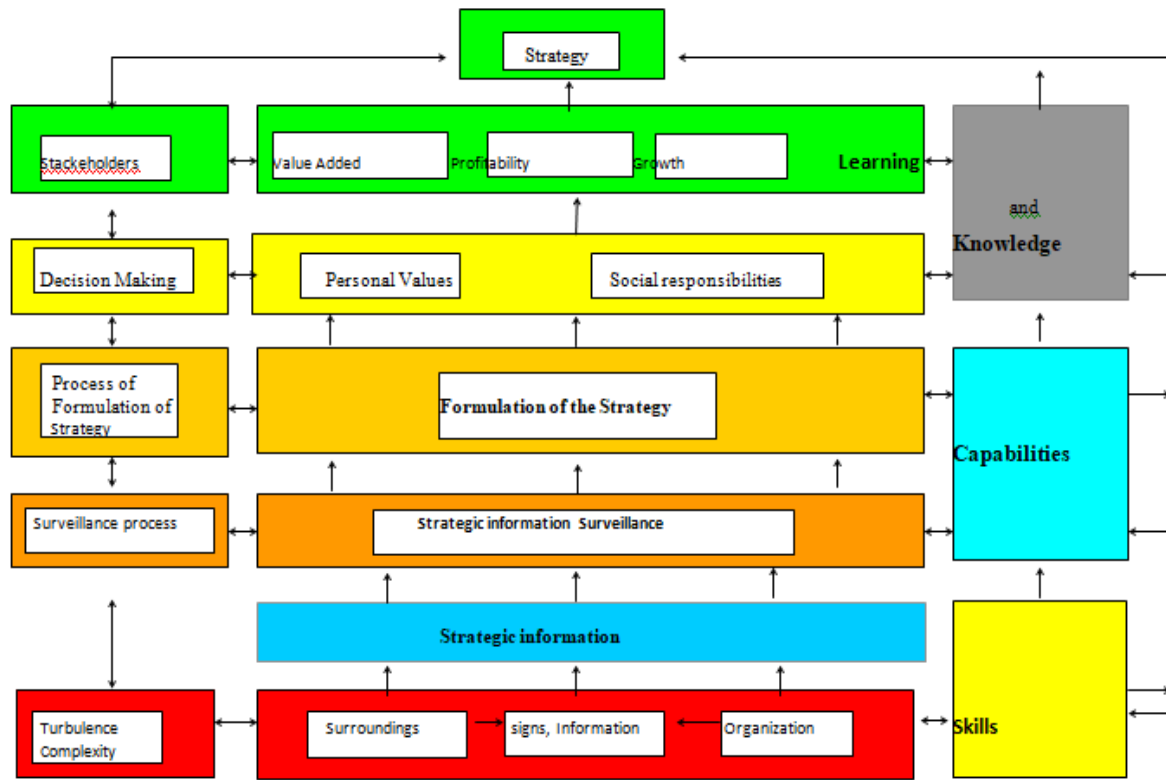
Source: own design

IV.   DISCUSSIONANDCONCLUSIONS

It is important to note that the management of strategic knowledge is primarily focused on pragmatic and non-theoretical aspects, i.e. its applicability is focused on concrete actions in the processes of formulation and strategic Decision.

The management of strategic knowledge is related to competitive intelligence. According to Porter (1985) it is necessary to have a methodology to capture and analyze crucial information about the Surroundings. Jacobiak (1996), states that competitive intelligence is an important part of strategic management, as strategic decision-makers need relevant information about market trends and competitors ' positioning. Tyson (1998) affirms that it is the intelligence that transforms the information dispersed in strategic knowledge of decision Makers.

Differentiation must be made between the management of strategic knowledge and the strategic management of knowledge that can be viewed in the following table:

Table 2-comparison between strategic knowledge management and strategic knowledge management

Comparison Topic	Management of strategic knowledge	Strategic knowledge Management
Type of knowledge	Strategic knowledge	Knowledge about the Organization
Focus	Knowledge related to strategy formulation and strategic decision making	Knowledge of managers who support them in decision making
Process	Only the processes related to the formulation of the strategy and the strategic decision-making	Any process of the organization
Type of managers	Analysts of strategic alternatives and strategic decision-makers	All decision makers and managers and collaborators in general
Systemic factors	Human cognition, context, technology, organizational culture and style/management model	leadership, culture, technology, Measurement and rewards

Source: adapted from Miranda and Costa (2005)

Managers manage people in addition to other resources-including the **Information** which is subject to **Cognitive Capabilities Filter** And the game of influences and Alliances. The definition of the strategy can take

the form of a **Perspective** Rooted in collective intentions and reflects the patterns of use of the Resources and capabilities As *Competitive Advantage.* The **Information** tends to be a *Substance* It is likely to be acquired, stored and possessed (accumulated knowledge).

In the process of formulating the strategy the strategic tend to give greater emphasis to the social and cognitive processes – the process requires creativity and synthesis, exactly what the formalization of positioning discourages; The strategy when it is oriented by supply and not by demand tends to be defined for a period of x years with periodic revisions. Managers actively exploit the imperfections of the Information[1] Through product and market factors as a way of achieving *Competitive advantages*.

The process of monitoring the strategic information includes, among others, the following aspects:

- **Be systematic and ethical** – It should not be guided by unethical actions and not only a process of responding to punctual questions.
- **be formalized and evaluated permanently** – Without formalization it becomes a sporadic and unimportant process within the organizations; It requires a permanent assessment to verify its effectiveness and its efficiency for organizations.
- **Possess the necessary resources (human, material and Financial)** – The information to be collected and analyzed is intended to identify opportunities and business threats; No clear objectives and adequate means will be a waste of time and Resources.

The process of monitoring strategic information (weak, Strong signals, quantified Information) includes among others the following aspects:

- **Social surveillance** – Information on socio-cultural and environmental changes and trends, such as information on social infrastructure, workforce and its qualification, security in the region, population growth or decrease, age distribution of population, Life expectancy, Career expectations, lifestyle changes, etc., (accumulated knowledge);
- **Economic surveillance** – Information on the evolution of the economy (local, regional, world), such as financing, taxes, interest rates, unemployment rate, inflation rate, wages, prices, exchange rates, etc., (accumulated knowledge);
- **Technology surveillance** – Information that may affect business on the technological point of view, such as information on new technological advances and advances in its transfer to the market, etc., (accumulated knowledge);
- **Political surveillance** – Information that could affect the business of the political visa, such as the government's economic, fiscal and labor policy, (accumulated knowledge).

A timely response to changes is only possible if the changes are perceived before the strategy is formulated, that is, to respond to the signals (weak and Strong) produced by a change in the initial state of their development, (accumulated knowledge). This assumes that organizations have the necessary skills to deal with this information (skills and capacities) to initiate the response or to have the perception of the necessity of strategic decision-making, by identifying the opportunity (s) (discovery phase).

As for the process of formulating the strategy there are some practical implications to the extent that in schools of strategic adequacy, the strategy is defined from the outside in and the process is ensured by the "analysts" who take the proposals "in a Tray "to the strategic decision (s) and bring the strategic decision (the strategy). The brain of these "analysts" and the Strategist is limited to the cognitive capacities of them to "discover" all the changes in the Surroundings. In fact, the information on which "analysts" is based is the information (quantitative) on the past performance, by extrapolating the known Information.

In the models of schools of movement or strategic intent, the strategy is defined from the inside out, that is, the strategy is resulting from the use of the resources of the organizations in one way or another, to achieve and maintain competitive advantages sustainable, since they have valuable (human, material, technological or financial) resources that are difficult to buy or imitate and so are rare, (accumulated Knowledge) resulting in an above-average Return.

Regardless of the model adopted by organizations to formulate the strategy, the concepts of strategic information and strategic information surveillance can be used in the process of formulating the Strategy. however, the profitability of strategic information implies the active exploitation of information imperfections of product and market factors, but whose identification is dependent on the cognitive capacities of the "analysts" and the Strategist.

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[1]Truijens, Onno, (2002), *Twoards a Resource-based Theory of Information Strategy,* Britsh Academy of Management Annual Conference 2002, September 9-11, Hammersmith,

The observation/surveillance of strategic information is an open and orientated attitude, that is, seeks to identify discontinuity's, opportunities, and threats. Systematic research of strategic information (weak and strong Signals) actively seeks business Opportunities. They both consume time; This is a function of the knowledge of Strategist (observers, vigilantes, "analysts" and decision-makers); Knowledge is more complex than information, but there is no knowledge without Information.

The available time of managers for strategic decision-making is inversely proportional to the available information and knowledge; The use of the process of observation and surveillance of strategic information (weak, strong signals) allows them to increase the time available for strategic decision-making. "he who occupies the battlefield first and waits for his enemy is at ease; Who comes after the scene and rushes to fight is tired "(Sun Tzu, 1971); (Porter, 1980).

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