deben figurar en el carnet de cría de la ganadería ecológica. Únicamente en machos de menos de un mes podría realizar la operación el propio ganadero. Si la Comisión no admite la castración el jamón ibérico sería un producto ecológico sin reconocimiento oficial. Una muestra más de la importancia del bienestar animal en la Unión Europea.

Con el mismo tesón que todos los sectores se empeñaron en la lucha contra la P.P.A. deben empeñarse ahora en colocar el jamón ibérico de calidad en las mejores mesas del mundo junto a los manjares acreditados de la gastronomía mundial, como son el salmón ahumado, el caviar y el foie gras. Ninguno de ellos reúne sin embargo las condiciones ecológicas del jamón ibérico. El salmón se produce cada vez más en granjas intensivas con todos los problemas y tratamientos propios de este tipo de explotaciones. El caviar está poniendo en peligro la propia existencia de alguna de las variedades de esturión y el foie gras está siendo muy contestado por los proteccionistas debido a la alimentación forzada a que se somete a los patos con el fin de engrasar el hígado. El camino está marcado y de nuevo libre de obstáculos. Pero hay que recorrerlo y nadie lo va a hacer por nosotros y teniendo en cuenta que ya existe el jamón de Parma de muy inferior calidad al ibérico, pero que nos puede dar lecciones para su comercialización.

La puesta en marcha es compleja en su ejecución pero simple en sus principios: dar a conocer por todos los medios las cualidades nutritivas, gastronómicas y ecológicas del cerdo ibérico y en cada pieza garantizar el nivel de calidad y marcar el precio según este nivel. Actuar de otra manera es matar a la gallina de los huevos, o lo que es aún peor, no descubrir lo que son.

Ante tal situación el escepticismo de los industriales cárnicos de la provincia de Huelva se hace más que palpable. Las ochenta y cuatro industrias entrevistadas (100% de la muestra) se han mostrado reacias a proceder a la castración del animal: ello reduciría el engorde del animal en un 20 % y no creen que el mercado pueda absorber un aumento de precios que al menos compense ese aumento de costes. La diferenciación como ventaja competitiva está al alcance de la mano del sector cárnico del porcino ibérico onubense. Falta como siempre una cultura emprendedora y políticas a largo plazo. El día a día sigue estando presente en la gestión de todas las empresas cárnicas del porcino ibérico onubense. Ese ha sido, es y seguirá siendo su principal problema.

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GE-40. EVIDENCE-BASED MANAGEMENT FOR MANAGING KNOWLEDGE IN LEARNING ORGANIZATIONS

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RESUMEN:
Knowledge is the most important resource an organization can have. In this paper we present a model that intends to facilitate the creation, transformation and transmission of knowledge in Learning Organizations. Said model is founded on Evidence-Based Management (EBMa), as a process that bases managerial analysis, actions and decisions on the best possible external evidences. Finally, we try to confirm the advantages of EBA, through an empirical work carried out in two organizations.

PALABRAS CLAVE: Knowledge Management, Evedence-Based Management.

1.- INTRODUCTION

Knowledge Management is in the confluence of information, management and organization sciences, basically at the human resources level. It intends to capitalize knowledge and experience, but also to give new insights and to better exploit them to let the organization develop in a constantly evolving world. So it does not mean simple information storage and access (Leloup, 1997), but a process of handling, selecting, improving and preparing the information, to give it added value. The endeavor organizations are making in this sense, is taking them to become genuine "factories of information and knowledge".

The added value knowledge produces is not an invention of present times, as Greek philosophers created schools of thought as motors of the development of humanity. For instance, the School of Alexandria, which was the most important promoter of knowledge in the 5th century, expanding itself towards both East and West. They were the first to point out that experience only illuminates the way having been covered and that in order to imagine the future it is necessary to create.

But, if we get situated in our times, the declarations of Keerstetter and Nobel (2000: 14) are revealing, where stating that "it is now, after so many years, applying knowledge technology, developing problem solving processes... and it is now that I can find a "place" by means of knowledge management".
The perspective of the analysis of knowledge-based firms, known as the school of knowledge management, is an extension of the firm theory based on the resources (Conner, 1991), which considers knowledge the most important resource an organization can have.

Now, it is necessary to take into account that knowledge is something that cannot be isolated, that stems from thought and action impregnating all the activities of the organization. Where is the main problem in its management?, in its intangibility (Carr, 1999). That is to say, in how to turn knowledge from tacit into explicit, so that it becomes intellectual capital (Chait, 1999).

In this context, the so-called Learning Organizations are the most concerned ones about making Knowledge Management a reality. An organization that is learning must make the most of all the intellectual strength, all the knowledge and the experience it has in order to continuously evolve in benefit of all those groups or people having any interest in the organization: owners, managers, employees, clients, suppliers, etc. A Learning Organization "is a place where people constantly expand their capacity to create results they really long for, where new and growing models of thinking are cultivated, where collective aspirations are free" (Senge, 1990:78) and we also add, where people are constantly learning about how to learn in groups.
A more complete definition is the one given by Garvin (1993: 111), for whom "a Learning Organization is an organization that has the ability to create, acquire, and transmit knowledge, in order to modify its behavior as results of the new knowledge".

In this paper we are trying to show a model that facilitates the creation of tacit knowledge, turning it into explicit knowledge. So it converts in intellectual capital, under the condition of getting developed in the scope of a

Learning Organization, as that is where a "critical mass" is more likely to exist, making Knowledge Management a reality.

More specifically, we intend to present three contributions:

1. The general theory for organizational knowledge development (Nonaka and Takeuchi, 1995; Nonaka, 1991 and 1994), starts from the premise that knowledge is created when a transformation of individuals' tacit knowledge into explicit knowledge takes place in the organizational world. This is why our work, by means of Evidence Based Management (EBMa), intends to provide a guide for action in knowledge transformation, by a process consisting of a number of steps that we call "fosterers of the sustainable development in the training" of the organization's workers.
As a synthesis, the epistemological dimension (the interaction between tacit and articulated knowledge) is intertwined with the ontological dimension (knowledge transference), which is a fundamental aspect, as all knowledge in the organization turns around these critical and simultaneous processes.
So we must motivate the generation of tacit knowledge in individuals, and foster the nature of the organization as a social context, where communication and interaction processes between people take priority. Finally, provide the organization with flexibility by the creation of highly performing teams, in order to generate opportunities of new organizational knowledge.

2. EBMa offers a multiplying effect. That is, tacit knowledge remaining at the individual level is shared within the team, generating what we call "a critical mass". Thus tacit knowledge of the organization's members increases, and therefore shared knowledge is created, potentially generating higher levels of explicit knowledge. We say potentially, as it has not yet become explicit. This is a fundamental aspect in the development of highly efficient teams (Brown and Duguid, 1991).

3. We also expect to obtain the design of a systematization to provide the organization with competitive formulas (Garud and Kumaraswamy, 1995). The reason is that we can obtain more advantage of the organization if we provide it with the necessary resources to fend for itself in information society, by a better familiarization with information and communication technologies, which consist of sharing, combining, and transferring platforms of explicit knowledge, and which so increase the likelihood of creating intellectual capital in the organization (Meyer and Utterback, 1993).
From another point of view, and following Nobeoka and Cusumano (1997), we try to design a new, unifying proposal that has the quality of expanding and combining new knowledge, and the ability to make quicker knowledge transference within the organizations.

On the following pages we shall explain where the bases for the EBMa process rise. Next, we carry out a field study with the aim of confirming the earlier established goals. Finally, we expose the results of the corroborating analysis and the conclusions we reached.

2.- PREDECESSORS OF THE EBMA: EVIDENCE-BASED MEDICINE.

To understand why EBMa arises, it is convenient to get back to its sources, the Evidence Based Medicine (EBM). Its origins can be found in the middle 19th century in Paris, in what Louis called a "numerical method". At that time, bloodletting was a habitual therapeutic practice for a great number of pathologies and he decided to apply his method to evaluate the effectiveness of bloodletting in cases of different diseases. He compared the results obtained with patients who had the same pathology and who had not undergone therapy. He did not find any difference. In 1834 Louis founded a movement he called Medicine D´observation, contributing to the eradication of useless therapies as bloodletting. His findings had great repercussion at that time, as much in France, as in England and the United States (García Alonso, 1997).

A more recent example (Ruberman et al., 1977) can be found in an observation carried out on patients suffering from ectopic ventricular beating after a myocardial infarction. Having a high risk of sudden death, together with the demonstration that these extrasystoles can be suppressed by specific drugs, was enough justification for the massive prescription of these drugs to patients having suffered a heart attack and presenting arrhythmia (Morganroth et al., 1990).

However, by controlled randomized tests, he demonstrated that several of these drugs raised death risk for such patients, instead of reducing it, which is why routinely use is inadvisable at present (Echt et al., 1991). It was not until 1992, that Sackett and his research group, settled at the McMaster University of Ontario (Canada),

published in the JAMA review (EBM Working Group, 1992) the foundational article for MBE. They declared themselves inheritors of Louis' Medicine D´observation, proposing a change of paradigm in medical practice.
The practice of EBM is a self-directed lifelong learning process, in which the care of the patient himself creates the need for clinically important information about diagnosis, prognosis, treatment and other clinical issues where information needs become questions that are susceptible of answers. The best evidences of response are located, later the validity and use of these evidences are critically evaluated, and the results of this evaluation applied to the practice and the performance are assessed (Sackett et al., 1997).

In summary, EBM is the aware, explicit and judicious utilization of the best scientific evidences available to make decisions about individual patients' care (Sackett et al., 1996).

3.- THE BASES OF EVIDENCE-BASED MANAGEMENT.

The statement of the precursors of evidence-based medicine that EBM's principles, strategies and tactics are universally applicable to all sanitary professions (Sackett et al., 1997), supports its application outside the clinic and sanitary fields, trying to apply these principles to other areas and disciplines where similar problems are faced such as the case of business management, and more concretely, managerial practice.

The best available evidence is any relevant research about the exactness and precision of the available explicative models, about the effectiveness and the efficiency of certain options to resolve specific problems, about the reliability of prediction techniques, etc. in any of the business management fields.

EBMa supposes founding the managerial analysis, actions and decisions on the best possible evidences, but it is based on business administration techniques, including those having been adapted from other fields of knowledge, and on the judgement, experience and managerial abilities, as it cannot substitute either of them, but it does reinforce and maintain them permanently updated.

Besides, EBMa requires a systemic focus that integrates the best external evidences with know-how and experience. It cannot lead to a handbook of consults, based on an extensive collection of typical cases. External evidences can conform, but never replace the necessary capacities of a good administrator. Precisely knowing how to administrate effectively and efficiently will let us decide if external evidences can be applied to the internal decisions and the way in how to integrate them in decision making.

The definition made, even if inspired on Sackett's works (1995, 1996, and 1997), expresses the intended meaning of EBMa: "The aware, explicit and judicious utilization of the most useful evidences available at decision making. It means integrating in the task of management the best evidence available, proceeding from valid and reliable information".

There is no doubt that the task of management is not an exact and reproducible phenomenon. The mechanisms ruling decision-making are difficult to understand. No doubt there are effective and very satisfactory decisions, and the mechanism to know which are these decisions is not evident, this supposes that the world of administration develops within a environment of work of high levels of uncertainty (Eddy, 1984).

4.- THE JUSTIFICATION OF EVIDENCE-BASED MANAGEMENT.

There are at least five important reasons to expound EBMa as a philosophy on which to set down managerial practice and as a tool of support for Knowledge Management. The first reason is that in the managerial world constant innovations are taking place, new forms for problem solving are being put into practice, new cause-effect relations are appearing, or new forms of analysis are being improved in the different fields of the firm (financial, commercial, strategic, productive...). As a consequence, managerial knowledge and abilities can quickly become obsolete, so much that many times the knowledge and abilities that people possess are not only useless for the firm, but can also become harmful. It is then necessary to carry out the task of 'unlearning' what is out-of-date (Hamel and Prahalad, 1995). So it is necessary to be aware that managerial knowledge deteriorates by time, and as a consequence, managerial performance can also weaken.

The second one is that managers daily find gaps in their knowledge and they are not usually able to manage to fill them easily. Managers try to carry out analyses or decision making with the maximum information related to the issue, they normally consult their stock of professional knowledge or other nearby managers or ask for

reports and secondary data about the issues that are adjacent to the problem set forth. Nevertheless, they are used to find themselves without precise information about the best solution to the problem, about what specific consequences are going to derive from this solution or about what other alternative solutions could have been applied.

The third reason is related to managers' learning and constant training. Usual programs of managerial development and constant training, due to their nature, do not manage to bring them up to date about the novelties appearing in the different fields and about the best managerial practices for problem solving. Thus managerial training becomes necessary, fundamentally based on self-learning, guided by the executives themselves and starting from the needs they detect in their daily practice. So they must consult the best knowledge resources, which are those that are sufficiently contrasted, rigorously elaborated and follow scientific principles. This learning is based on understanding the principles of EBMa and on learning to look for and to apply the best evidences possible in the different fields of business administration.
The fourth one is that innovation and new problems rising in the organizations must be dealt with in function of new information and communication technologies (ICT). EBMa, as an element connected in new managerial systems, founded on new technologies, pursues the following objectives:

a) "Optimizing" the utilization of ICT in organizations.
b) Offering a managerial tool, which from its roots contemplates the need for its utilization, to getting adapted to a new concept of environment.
c) Overcoming the trivialization of business information and communication tools, which is something more than the mere commercial aspect.
d) Laying the bases for integrating new telecommunication resources in the training given by any type of organizations.
e) Specifying and fostering a receptor-compiler center of organizations' principal information needs, to structure them next and offer easily accessible solutions.
f) Offering an updating in principal theories, techniques and managerial data of specific fields, presenting a practical, real and viable perspective, which requires a filtration, carried out by external agents.
g) Offering a tool for management and training to the organizations of poorest possibilities, as small, medium-sized and non-profit firms can be, not having either the resources or information availability that big corporations have.

The last reason is related to the implications of EBMa teaching, as it motivates the search for information and requires knowledge in the field of computer science, databases and the use of new technologies. Moreover, it forces people to practice employing these new technologies at a basic level of knowledge, promoting considerable familiarity with them, which is an aspect that sooner or later would become essential in a global economy.

Therefore, EBMa propitiates the utilization of ICT as a decision making tool and obtains its effectiveness from handling technology (communication channels), computer science (hardware and software) and information (storage and digitized processes). The impact of the tools we have referred to will lead to better and quicker decisions, getting to transform business operations. The use of technology, computer science and information (T.C.I.) improves decision making, evaluating various alternatives and so helping to assure that the decisions made are more likely to be optimal (Tapscott and Caston, 1995).

5.- EVIDENCE-BASED MANAGEMENT AS A PROCESS.

According to what we have pointed out until now, the practice of EBMa is a continuous process of self-learning, led by the executives themselves, and that is going to last all their professional life. It is guided by the needs of knowledge appearing in their unit, department or company at the time of analysis, decision making, and problem solving or putting into practice an action.
In order to propitiate the comprehension and practice of EBMa, it can be conceived as a process consisting of a series of steps or stages (Sackett et al., 1997), which we are going to see next and is represented on figure 1:

In any case, EBMa is above all an iterative process, so that if in any phase of the process the evidence has not turned out to be applicable, then we must begin the task with the second best evidence we have found. To establish the way in which EBMa can be applied in Knowledge Management and in information searching for decision making, all the different steps shaping the process must be followed. Next we are going to study thoroughly each of the steps.

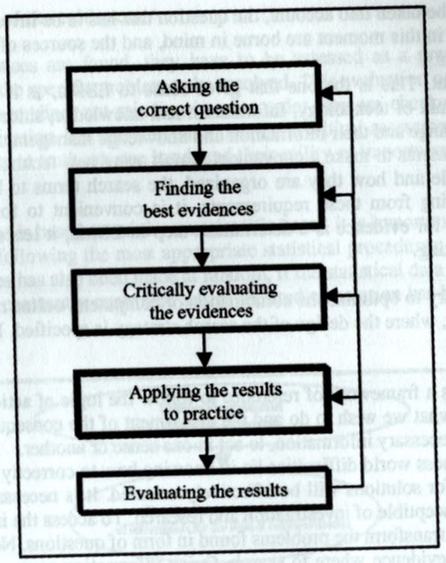

Figure 1: EBMa as a process.
Source: Sackett et al. (1997).

Phase 1: Formulation of effective questions.

It means turning managers' needs for information and new knowledge in precise questions so that they are answerable. This question is going to be the guide to start searching for the best evidence or answer. Detecting a problem creates the need for making specific decisions. These arise in any managerial task and require answers and decisions in different periods.

Among the main difficulties organizations pass through is their insufficiency to manage knowledge. They cannot face a reality that reclaims a change in attitudes. They think that ignoring change it will disappear (Allsopp, 1995) or, if regrettably enough, it doesn't, then it will be eluded in some way.

The sort of question to conveniently center the problem and its analysis can be more easily constructed if we try to split it up in four elements:

a) Defining the problem more precisely and exactly, putting special emphasis on the subject, subjects or the units affected by it.
b) Specifying the proposed action.
c) Comparing between several lines of feasible actions, when pertinent.
d) Establishing variables that are going to measure and assess the outcomes of the action.
A correctly formulated question will allow us getting to the center of the problem, in addition to reflecting the precise knowledge about the information we need to find.

Therefore, they are directly related to the problem of the company and built in a way so as to lead the research towards pertinent and precise responses. The better we know the information we look for, the more appropriate will be the diagnosis to be made.

Phase 2: Selective search for evidence.

Now it is about trying to find the best evidence or the best information. The answers to the proposed questions do mainly exist or, at least, so does the information that most can help in making a right decision.

Therefore three issues must be taken into account, the question that has to be investigated and answered, the best answers to the problem that in this moment are borne in mind, and the sources of evidence we would consult in order to find the best answers.
The latest one is a key point. This is the one that gives sense to EBMa, as it tries to make the most of the synergies generated by the mix of technology, information and knowledge, since any organization increasingly depends on technological change and their information and knowledge management systems (Ormaetxea, 1999).
There are a series of requirements to make a convenient search using new technologies. It is important to know which databases are available and how they are organized, the search terms to be used and how to make the search software work. Starting from these requirements, it is convenient to formulate a general strategy of search. The so-called search for evidence is a determinant step in EBMa, it lets us locate the most appropriate information for decision making.

This is the moment when to try to optimize the combination of computers, online networks and information. It is in the general search strategy, where the design of the search strategy is specified. Both can be seen systematized on Figures 2 and 3.

The general strategy provides a framework of reference to follow the logic of action. For example, the problem requires knowing very well what we wish to do and the assessment of the consequences of a wrong decision or the pertinent election of the necessary information, to act in one sense or another.
Most of the times in the business world difficulties lie in knowing how to correctly define the problems, this it is when behavior in searching for solutions will be effectively oriented. It is necessary to work out the questions and that are important and susceptible of investigation and research. To access the information we wish to locate, the first thing is being able to transform the problems found in form of questions. Next, the likeliest resources are to be chosen; the sources of evidence where to search. Quick information sources are to be found -textbooks, databases, electronic means, floppy disks, CD-Rom, or Internet-. The design of the search strategy is analyzed on Figure 3. Once the search is finished, a summary of the evidences obtained has to be worked out, making them operative. EBMa intends to elaborate and access those evidence sources that are really effective for the company, or, in other words, it tries to get rid of redundant and superficial information for the subject being searched. This is why the application of evidences is the final outcome of the search process.

But, as we earlier said, it is an iterative process; this is why when checking in the summary that evidences are too few or not good enough, it becomes necessary to get back to a previous step of the process, choosing the second best likely resource and establishing for it a new search strategy.

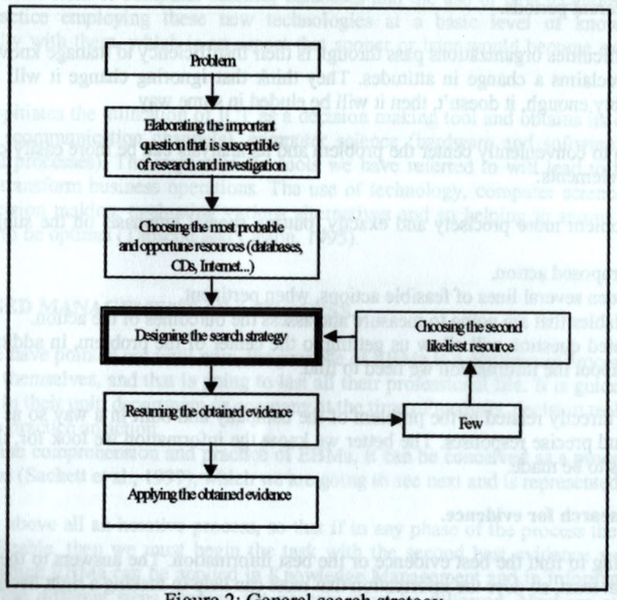

Figure 2: General search strategy.
Source: Based on Sackett et al, 1997

Phase 3: A critical evaluation of the evidences.

Once the best available evidences are found, they have to be assessed as a previous step to checking the suitability of said evidences to the specific problem to be resolved. This evaluation or critical assessment focuses on two aspects that have to be studied, not minding in what order they are checked. It is not about making a thorough and exhaustive examination, but carrying out a quick and critical assessment of the evidences to get to know their validity or proximity to truth, on one hand, and their utility or importance in problem solving, on the other.

In order to check if the evidence is based on minimum scientific bases, it is important to examine if samples have been obtained at random and following the most appropriate statistical procedures, if the assignment to control groups and experimental groups has also been made at random, if the statistical data treatment has been rigorous, if each of the cases have been constantly controlled where the studied solution has been intended to apply to the problem, etc.

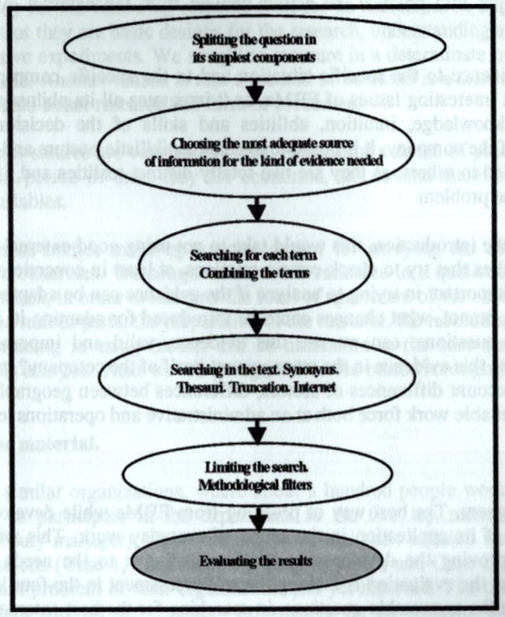

Figure 3: Design of a search strategy.

What is most recommended is to find evidences that present the principles of chance and statistical rigor, but if none have been found in the search, decision-makers can consult other studies having dealt with the same problem, even if less rigorously. In this case, they could find evidences whose outcomes very conclusively assure that a certain action supposes a solution to the problem and, even if not made by a random study, it is possible to suppose that the bias of chance does not detract from the outcomes. This supposes an election for the decision-maker, where his or her experience, skills and ethics also take part. Less compromising is the case of negative studies showing that the action does not take to the desired solution, in this case there is a lower risk of using this evidence little rigorously in its elaboration. A last possibility remaining for the decision-maker is to make an 'N-of-1' test, if it is considered interesting for the company and for the learning of the manager who is trying to solve the problem.

An 'N-of-1' test implies the trial of a solution or action to resolve a specific problem at the firm using an only case, but using chance. The idea is to submit the company, department or subject of the problem to pairs of periods when the solution to be assessed is either applied or not. The order of the periods is established at random. Always, if possible, the individuals put to the study should ignore if one type or another of solution is

being applied. The goals and outcomes of the action are submitted to control (by measurements, interviews, and diaries...), and the application of the solution lasts as long as it is necessary in order to distinguish between the results of application and non-application. Regarding validity we finally have to point out that it can be considered both in probabilistic terms and of intervals of trust.

The second issue to evaluate is the importance of the solution set forth for business management. It basically consists of comparing, both in relative and absolute terms, the differences of results, applying the solution proposed by evidence and without applying it. This will quantitatively measure if the evidence supposes a substantial profit for the company.

Phase 4: Application of the evidence to the specific case.

Once that valid and important evidence is found for the resolution of the problem being studied, a double question must be considered: if this evidence is applicable to the particular case of the firm and if managers can integrate this evidence within their abilities and solve the problem set forth. If the answer is doubly affirmative, the only thing left is to put into practice the action derived from the external evidence found in business literature.

The application of the evidence to the specific situation and to the specific company of the problem-solving persons is one of the most interesting issues of EBMa, as it integrates all its philosophy and its way of solving problems with previous knowledge, intuition, abilities and skills of the decision-maker. Starting from a contingent point of view of the company, it is possible to adapt a nihilistic posture and deny that the evidences of one company can be applied to others, as they are two totally distinct realities and, if each firm is different, so must be each solution to the problem.

But, as we pointed out in the introduction, this would take to not using good external practices and to despising some rigorously made studies that try to check certain relations, at least in concrete or similar contexts. This is why managers' role is so important in trying to analyze if the evidence can be adapted and applied to his or her specific situation, and if it cannot, what changes could be introduced for adapting it. Decision-makers must ask themselves the following questions: can we use this evidence, valid and important, for the issue we are analyzing?, can we integrate this evidence in the management itself of the company?, and decide consequently. It is important to take into account differences of sectors, differences between geographical and cultural contexts and the diversity of the available work force both at an administrative and operations level.

Phase 5: Assessment.

The last step is self-assessment. The best way of profiting from EBMa while developed at the company is by means of an examination of its application in the scope of everyday work. This will allow the correction of possible mistakes and improving the development itself, adjusting it to the needs of the organization. One ordered way of carrying out the evaluation is making the self-assessment in the four keys sustaining the EBMa, that is, in relationship with the answerable questions, in searching for the best external evidences, in the critical evaluation of the validity and potential utility of the evidences, and in the integration of the critical evaluation in the application of the results to management. About each of these four aspects it is possible to ask a series of critical questions, which can be a good guide for the initial assessment, even though in posterior steps each executive, team or company could adjust their evaluation and process and control of EBMa to their own traits.

Next there are four sorts of questions to appear (Sackett et al., 1997):
A) Self-assessment related to the formulation of answerable questions:
1. Do you ever ask any questions?
2. Are you asking your colleagues about what evidences do they use?
3. Has your success level improved in the formulation of answerable questions?
B) Self-assessment related to searching for the best external evidences:
1. Do you ever make a search?
2. Do you know the best current sources of evidence for management?
3. Are you obtaining satisfactory results in searching for hardware, software and the best sources for their management?
4. Can you find useful external evidences in an increasingly wider range of sources?
5. Are you improving your searching effectiveness?
6. Are you using thesauri, limiting words and free text in your search?
C) Self-assessment related to the critical evaluation of the validity and potential utility of the evidences:

1. Do you ever make a critical evaluation of external evidences?
2. Do you have your own criteria to make a more effective critical evaluation?
D) Self-assessment related to the integration of critical evaluation in the application of the results to management:
1. Do you ever integrate your critical evaluation in management?
2. Are you increasing your precision and effectiveness in adapting some of the measures of critical evaluation to your needs in management?

6.- THE DESIGN OF THE EMPIRICAL WORK.

We carried out a fieldwork consisting in the elaboration of two case studies, each of them written by a different organization. The case studies served as a support for the experiment, together with the persons who had to work on them. Two observers assessed the results, instructed to give different reports, which would allow us to analyze the contrasting of the results expected from using EBMa.
We have made a cross-study for the following reasons: first, for its usefulness in answering questions of great relevance. We understand that they are basic designs for the research, understanding and application as supports to exploratory-type qualitative experiments. We sought to measure in a determinate moment the practical usage of a certain model, the EBMa. Another reason is that a method of this kind is a starting point for analytical and experimental studies that could better research this form of processes.

The third reason is that cross-studies are very widely used because of a series of practical advantages: they are easy to carry out in a short period of time, they are economic, and several situations can be analyzed being characterized by distinct variables.

A fourth reason is that cross-studies make up a good design for studying the concordance in a diagnosis established by two or more observers. We sought to measure variables in a qualitative way, which is why we have employed the Kappa index, in order to interpret the level of agreement of the observers.
The experiment was divided in four parts, the preparation of the material, the resolution of the case study without applying the EBMa, the training in using EBMa, and its utilization in the case resolution and gathering the evaluators' reports and their analysis. Next we are going to describe more thoroughly each of the phases of the experiment.

Part A: Preparation of the material.

1st. We selected two very similar organizations, where about a hundred people work, dedicated to social-labor reinsertion. We proposed to participate in the experiment to the two top managers of both organizations (executive manager and deputy manager), who were explained that their mission would be to elaborate a case about each of the organizations (Case 1, "Asociación y Participación", and Case 2, "Leeo"). Each case would have to contain an important problem of their organization, not yet resolved. The case should be written down and presented in a document with all the necessary information for its posterior study and debate in a work group.

2nd. All four executives were instructed about the case method and the opportune techniques for case writing during 12 hours, split in three-hour sessions. Afterwards, the cases were tried out and tested in a postgraduate course with students of Business Administration and Management, which let us both check their quality, detect their redundancies, contents that could lead to confusion, and compare the lack of data for their correct analysis and later debate.
3rd. The cases were definitely redacted for their later edition.

Part B: Resolution of the case without applying EBMa.

1st. We selected three persons from both organization 1 and organization 2. The characteristics of the persons participating and working at the organizations were seniority (five years of experience) and a high level of preparation (technical and medium level).
2nd. Each group was given the problem of their organization. The work was typical to a case study in groups. They were asked to work out a final report with the proposed solution. We called this solution "report I".

Part C: Training in EBMa, and its utilization in the case resolution.

1st. Three persons of each organization were trained in the EBMa process, that is, a total of six persons.
2nd. Later on they spent a whole day resolving the case, using EBMa as a tool. As the other groups, they were asked a written report about the whole process, which we call "report II".

Part D: Gathering the evaluators' reports.

1st. We turned to two experts of recognized international prestige in the field of business consulting. They offered taking part in the experiment. They had the role of observers. Both the group of control, part B of the experiment, and the reference group, part C of the experiment, ignored the mission of these observers, only knowing that they were taking part in an experiment.
2nd. They were asked to study the case. They were also given the reports worked out (Report I and Report II). They were also given a questionnaire containing 10 items to be scored the following way: value 1 means that the EBMa method is superior to case method, 2 that there are doubts about what procedure or method is better, and 3 that the case method is superior to EBMa. The results and items appear next, on Table 1.

ITEMS	SCORING	
	OBSERVER 1	OBSERVER 2
1. Which of the two methods generates a greater potential of tacit knowledge in individuals?	1	1
2. Which of the two methods develops the nature of the organization as a social context to favor knowledge management in the organization?	1	1
3. Which of the two methods gives more opportunities to create high performance teams in the organizations?	1	1
4. Which of the two methods facilitates explicit knowledge in the organization in a higher proportion?	1	1
5. Which of the two methods favors the use of new technologies in decision making, in the framework of information society?	1	1
6. Which of the two methods increases the capacity of information aggregation at knowledge transmission, that is, the capacity of knowledge absorption in the group?	3	3
7. Which one allows a better orientation in the reflection and preparation for the action?	1	2
8. Which one helps more to the creation, renewal, construction and organization of knowledge actives?	3	3
9. Which of the two methods facilitates the appropriating of the knowledge generated in each of the processes?	1	1
10. Which of the two methods favors the transmission of platforms of explicit knowledge?	1	1
Kappa index	0.75	

Table 1: Items and result of the experiment.

The percentage of agreements between observers can be calculated through the index of agreements between observers (P):

P = Number of Agreements / (Number of Agreements + Number of Disagreements)

Even if this index is very extensively used, it has the inconvenient of tending to overvalue the agreement reached, as it does not take into account the possibility that some of the agreements are due to chance. To correct this problem, Cohen (1960) proposed the use of a new coefficient which he called Kappa (K):

K = ((Po – Pe) / (1-Pe)) X 100, where

Po: proportion of the agreements reached.

Po = Number of Agreements / (Number of Agreements + Number of Disagreements)

Pe: proportion of agreements due to chance.

Pe = (Pi1 x Pi2) where

n: number of categories.
i: category from 1 to n.
Pi1: proportion of occurrence of category i for observer1.
Pi2: proportion of occurrence of category i for observer 2.

7. RESULTS, INTERPRETATION AND CONCLUSIONS.

First of all we would like to make it clear that, neither the experiment nor the results following from it do question at all, in any of its aspects, the high effectiveness of the case method of which, by the way, we are fervent followers. We have called the problem set forth a case study, because in short, most of the problematic situations of the company are cases even if they are not written down or not called so.
The outcomes obtained give an important value to EBMa in the framework of Knowledge Theory. If the level of agreement among judges is 90% before applying the Kappa Index[1], said concordance diminishes to 75%, a more than acceptable value in the margin of high level of concordance, according to the specialized literature. We can synthesize the analysis made, as for a contribution to setting forth the EBMa for organizational learning, in the following points:

- At an individual scale

1. As a cognitive instrument, it constitutes a fairly effective tool for the organization. The results deriving from the application of EBMa are important, insofar as it attributes context to the information, making the cognitive aspects of any situation easier to grasp.
2. As an instrument of perception, the organization's members can see certain things but cannot see others, being based on their mental models and the expectations following from them. EBMa not only increases the extension of what the organization's personnel can see, but also expands their mental models.
3. As an instrument of cognitive reflection, the EBMa process helps people to think more effectively through the ideas generated in the development of the same process.

- At a group scale

1. As a supplier of useful information, it supports strategic conversation by handling information sources that so far have not been considered, generating both tacit and explicit knowledge, so encouraging the creation of intellectual assets.
2. As a vehicle that fosters knowledge transmission; the exposition by EBMa constitutes a systematization to discuss relevant aspects of the organization in a context that handles knowledge with rigor.
3. It supports the development of radical learning, which provides an exploitation of new alternatives related to incremental learning.

As for a corollary, EBMa seems to us a good tool to be implemented in organizations, allowing Knowledge Management to handle techniques that let them get down to the field of operations, given its extensive degree of intangibility. In the research done on this tool there is still a long way to cover to get the answers to questions such as, how does it affect organizational structure? How does it affect the role of leadership? What costs does it generate to the organization? Who can get from it a better performance in the organization: supervisors, middle managers, strategic apex...etc.?

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[1] The Kappa index can vary from –1 (total disagreement) to 1 (total agreement).
From 0 to 0,2: weak agreement. From 0,2 to 0,4: moderate. From 0,4 to 0,6: good. From 0.6 to 0.8: substantial. From 0.8 to 1: a nearly perfect agreement.

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GE-41. LOS FONDOS SOCIALES OBLIGATORIOS: ORIGEN DE LA ESCASA AUTOFINANCIACIÓN DE LAS COOPERATIVAS ANDALUZAS

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RESUMEN:
La obligación de dotar los Fondos Sociales Obligatorios que tienen las sociedades cooperativas en general, y las andaluzas en particular, es motivo de que buena parte de las cooperativas existentes carezcan casi por completo de fondos propios con el que poder financiarse. La adjudicación de buena parte del haber social a la Administración Pública para que lo destine de modo exclusivo a fines de educación y promoción de las sociedades cooperativas provoca que los socios manifiesten en la Asamblea General el deseo de perseguir un objetivo de beneficio cero o en su caso el mínimo posible. El resultado es obvio: dependencia total de la financiación ajena con el riesgo que ello puede conllevar.

PALABRAS CLAVE: Cooperativa, Autofinanciación, Fondos Propios

1.- LA ECONOMÍA SOCIAL.

La expresión Economía Social entendida en el contexto actual es muy reciente y, quizás por ello, contiene un concepto todavía impreciso, sin una delimitación uniforme, no ya en diferentes países o estados sino incluso dentro de cada país concreto.

De cualquier forma sí que existen unas notas definitorias comunes que caracterizan a los agentes de la Economía Social y que serían las siguientes:

a) Son sociedades de personas y no de capitales, existiendo una clara subordinación del capital a la finalidad social.
b) Participación de los socios tanto en su actividad como en su gestión democrática.
c) Distribución de los excedentes en base a las aportaciones de trabajo, servicios o actividades económicas que cada socio realiza con su organización y nunca en función de sus aportaciones de capital.
d) Carácter solidario, tanto con sus propios asociados como con la comunidad en la que están implantadas. Este carácter solidario se manifiesta en la obligatoriedad para los Entes de la Economía Social de destinar al menos una parte de sus recursos y beneficios a la consecución de objetivos sociales y culturales.

Tanto la legislación cooperativa portuguesa como la española se rigen por el Modelo Sociológico de Regulación Cooperativa, según el cual las cooperativas son expresión de una categoría ó clase de personas que tienen las mismas necesidades económicas que satisfacer y por ello actúan asumiendo en primera persona el desarrollo de la necesaria actividad empresarial[1]. Con esto persiguen satisfacer no sólo los intereses económicos de los propios asociados sino también los culturales, sociales y educativos, y además los de la comunidad en que actúan, prevaleciendo por tanto el carácter social sobre el económico. .

El despegue que en los últimos veinte años el Sector Cooperativista Español se ha producido ha girado en torno a tres aspectos fundamentales:

1. El rápido crecimiento del cooperativismo de trabajo asociado, consolidándose como la clase de cooperativa con mayor peso dentro de la Economía Social.
2. El papel del motor de la Economía Social desempeñado por el Cooperativismo de Crédito, tanto en el sector agrario (Cajas Rurales) como en el de las PYMES.
3. La utilización de las estrategias de crecimiento, tanto interno (incremento de las inversiones, acceso a las nuevas tecnologías, etc.) como externo (concentración en base a las fusiones y a la cooperación).

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