

## **An approach to the training and training model based on knowledge management**

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**ABSTRACT:** *The main objective of this paper is to generate the proposal of a model that combines Traditional Training with Automated Knowledge Management, in order to stimulate the efficient application of a learning process that supports the labor and competitive performance of employees. and achieve with it all the possible benefits. A theoretical foundation about the research topic is presented. Through a SWOT analysis, strengths, opportunities, weaknesses and threats were identified, completing this analysis based on the internal work carried out by the Human Resources training area and using as a tool a brainstorming session, it was graphed using an Ishikawa diagram. Then, the proposal of the proposed model is presented, to close with the conclusions of the paper.*

**KEYWORDS:** *Model, training, training, knowledge management, intellectual capital.*

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### **I. INTRODUCTION AND LITERATURE REVIEW**

#### **1.1 Conceptual Definition**

Albert Einstein defined knowledge as pure experience, and even asserted that everything outside of experience was only information. And being faithful to this idea, Knowledge is considered as the accumulation of experiences of the human being, what is observed, what is lived, what is captured of the world, the way in which it relates to the environment, relationships with other beings and objects.

In any company, knowledge is essentially generated and accumulated in a massive and disorganized manner, but ultimately it is human knowledge, it is the so-called Intellectual Capital of the organization, simply and simply, the knowledge that employees have stored in their minds and that has emerged of the experiences that are lived day by day within the company. This Intellectual Capital is beginning to be sufficiently valued to be considered a business asset and not just another resource, which undoubtedly requires a complete change of mentality, since it is about all human resources at all levels of the organization starting at provide the true procedures to carry out each activity and stop being seen as a simple rigid structure without talent and intelligence (Dumay, 2016).

The Training-Learning Process as a model that must constantly adapt each activity of the company towards improvement and improvement, depends on the observer capacity of the human being, of his innate curiosity, of the controlling tendency of the context. And in many ways, the Training model reflects these primordial and more essential human characteristics that invariably have transported man towards progress and growth (Bompa & Buzzichelli, 2018).

Training uses Intellectual Capital as a raw material and Knowledge Management aims to systematize the identification and control of this Intellectual Capital (Wiig, 1995).

Knowledge Management implies, on the one hand, the formal business structure and the way in which information is stored, classified and distributed throughout the organization, and on the other hand, aspects related to the identification of talents, best practices and processes that they involve an increase in global competitiveness (Hislop & Helms, 2018)

The ideal of administration or knowledge management can be defined as the identification of high performance employees and the implementation of tools that allow these employees to share their knowledge with the rest of the organization (Mao, et al., 2016).

#### **1.2 Review of the context**

When reviewing, redesigning and re-implementing each administrative or productive step of an organization, the processes of Personnel Training and Development should be considered paramount and

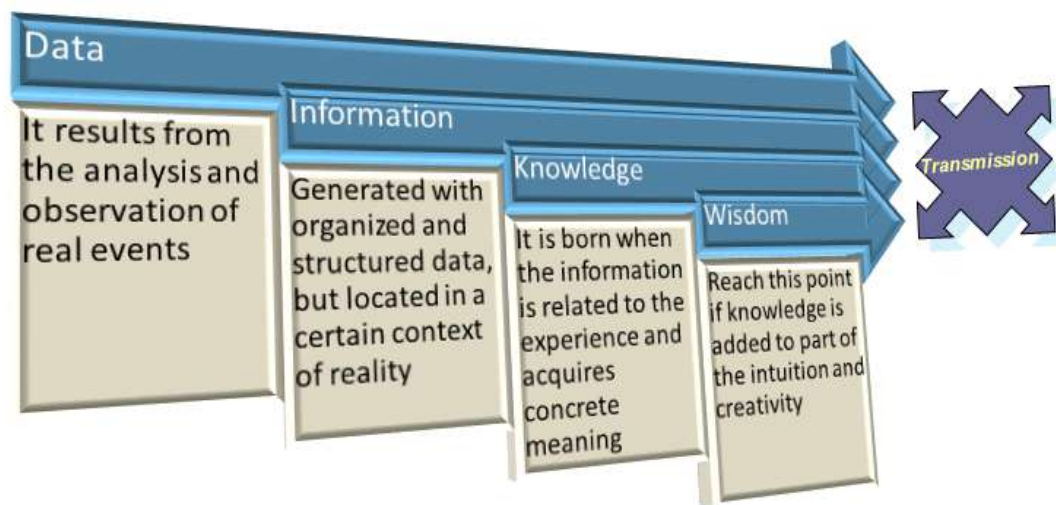
therefore should be directed to continuous improvement, through the application of modifications that optimize each task.

For the organization, the understanding of its processes, services and products represents something extremely valuable, however, until now, they have begun to systematize knowledge and experience, having the clear perspective of recognizing them as the most appreciable, the active more useful and fruitful of all, in a few words: the key to the success of the organization.

This will give the opportunity to revalue the appropriate methodology to offer an effective Training that reevaluates the main productive processes of the company and therefore its performance through an efficient training, maximizing the main benefit of the Training: the potential to be competitive.

It will not be enough to have data, information or certified processes, it will be necessary to have the ability to systematize the knowledge of the company, in order to have better tools and ways to ensure its transmission, as can be seen in figure 1. In this way, there will be an environment of effective continuous improvement.

**Figure 1. Systematization of knowledge in the company**



The leading role is played by organizational memory; so, to understand, harvest and disseminate all the necessary knowledge, you must see inside the company itself, that is, towards your memory, your daily processes, towards the experience accumulated in the minds of each of your employees, towards the informality and the reality of the daily activities of the organization. And it is precisely at this point, in which the subject of Training and Knowledge Management are crossed.

Some of the main strategies of the Knowledge Administration are information tools such as data warehousing, groupware, document management and data mining. Which applied to the databases of any company undoubtedly inject robustness to the storage and data processing platforms (Hislop, et al., 2018).

At some point in the evolution of technological tools, it was possible to have systems and programs with the ability to manage knowledge, by means of control techniques, registration and management of diverse, unstructured and extensive information, both text, graphic and sound. A methodology based on the organized and systematic record of the data, which efficiently supports the interpretation and visualization of reality, provides the extraordinary characteristic of dynamism, supports constant changes and different types of data, supporting the generation of new ideas and continuous progress.

### **1.3 Problem Description**

It is very common that in EIL technological tools are developed, firstly, as if it were something isolated, only for the benefit of a particular area and secondly, total priority is given to the handling of precise data, for example: statistical data, data structured that it is necessary to store, regardless of the usefulness that such data could provide when relating and becoming information or even knowledge. Much less importance is given to the handling of unstructured, subjective and intrinsic data.

On the other hand, up to now, the EIL Training process has not been addressed in a systemic way, on the contrary, only the direct impact in a specific area has been considered and never all the implications for the organization as a whole. In this research, it is proposed that with a comprehensive strategy the performance of all the areas would benefit in parallel. This is something that knowledge management technologies could also abate, offering opportunities for information management and collaboration between individuals. In this way, with the support of an innovative technology, the benefits will be ensured and maximized.

The Knowledge Management will provide what is being sought in this case: centralized and fast access to data of the daily activities of each of the EIL posts. At the same time, many of the products already on the market promise new levels of collaboration and functionality from an integral point of view focused on Intellectual Capital.

These Knowledge Management technologies seek to capture, store and efficiently use, for the benefit of the entire company, the knowledge and work experiences of employees. At the same time that these objectives are met, efficiency is achieved in the control of information and stimulate feedback that often is not carried out, but which facilitates the continuous improvement that both the company's management seeks and injects many benefits to the company. human resource of the entire organization.

This will give the opportunity to revalue the methodology used for Organizational Training and Development. Currently the reliability in the performance of the process tends to be lost and this happens when it is not possible to affirm that the process is being carried out efficiently and effectively, that is, ensuring the satisfaction of the learning objectives of the employees and the competitiveness requirements of the company.

#### **1.4 Statement of the Problem**

After reviewing the context and describing the research problem, this study aims to respond to the following approach:

What will be the best proposal to generate a model of training and training based on knowledge management?

#### **1.5 Research Objectives**

Generate the proposal of a model that combines Traditional Training with Automated Knowledge Management, in order to stimulate the efficient application of a learning process that supports a work and competitive performance of employees and achieve all the possible benefits.

#### **1.6 Current situation**

##### **1.6.1 Analysis of the current situation**

The staff of EIL has staff trained enough to perform their functions at all levels, as well as staff who do not yet have the necessary training or who, despite having taken it, did not take advantage of it in the best way and its performance can reach to be low and at the same time dangerous to himself and to the security of all EIL. However, you can also find people who have a high job performance, due to their seniority or simply their daily effort and excellent ability to do their job.

The EIL Training and Development Department is part of the Human Resources Department and its fundamental functions are to receive annually the proposals of each area for the annual training program and to give form to this document to later carry out all the actions necessary for its timely compliance, based on:

- the limited educational infrastructure resources available to this business center (only 2 relatively improvised classrooms with a capacity of 20 students each),
- the budget that is defined at the central level,
- and the infrastructure of the R & D area and the instructors that this area can facilitate for such purposes.

This annual program is divided into operational training and professional training, which are commonly taught to the staff of plants and workshops or to administrative and office staff, respectively, trying to comply as much as possible with the current collective bargaining agreement and the Federal Labor Law. This program establishes a calendar defined according to the needs that are reflected in the document delivered by the Chiefs for each area, however many times this document is prepared quickly and disinterested to meet the delivery requirement on the required dates, without considering the opinions of the middle levels, nor of the operational levels of EIL, which have first-hand information in relation to the real requirements of instruction in their respective areas of competence.

This is a fundamental point because the lack of a broad vision in planning is evident, often the needs of the different areas are sent to human resources with a totally myopic approach, where the requirements of Real training, this results in annual planning based on unfounded requirements, wasting resources and efforts of a whole team and also eliminating the opportunity for workers to receive appropriate training.

As if this were not enough, many groups that are trained to take a training course throughout the year are also disposed of suddenly and hastily, due to one or some of the following situations:

- Headquarters does not receive notification from Human Resources with the necessary time to carefully arrange which workers have the minimum skills necessary to take advantage of the course,
- bosses are not interested or do not know how to identify staff who have these minimum skills,
- and / or the bosses themselves prevent workers who occupy certain positions that they consider critical from attending training courses because they consider that there are no more workers who are sufficiently capable of performing in these positions.

After the workers have taken a certain course, there is no mechanism by which the company realizes that either the performance or the skills of this employee improve after taking a certain training course, nor is there any way to bring a monitoring and control of the training that worker has received and will continue to receive throughout his career within EIL.

At the same time and giving partial fulfillment to the Federal Labor Law, scholarships are offered for workers (and even children of workers), which allow them to carry out studies from secondary level to doctoral level in institutions recognized by the *Secretaría de Educación Pública* (SEP), however, there is not the slightest dissemination and / or motivation in relation to this labor benefit, nor are there agreements with educational institutions that facilitate the completion of their studies to employees who decide to make this effort.

In relation to the technological tools that EIL has to support the training process, these tools are currently limited to a computer room (with 10 computers) in the facilities of the IT department and to provide the necessary software installed in these computers when the course requires it.

To know the current situation of EIL, the study was developed based on two techniques that help to know the situation of an organization, results that are presented in the following sections.

### **1.6.1.1 SWOT Analysis**

For this case, it was decided to conduct an EIL analysis using tools and diagnostics that should be useful to reach a series of consensus on the future of the EIL Training process.

One of these diagnoses is obtained through the SWOT analysis (Strengths, Opportunities, Weaknesses and Threats), which has been carried out in this business center, resulting in a series of key issues as shown below:

#### ***Strengths***

- Qualified Personnel: The staff of this business center has trained and trained personnel to perform their work in a competitive manner.
- Two lines of training: one is the operational training in executing functions of the company and the other is the professional training that is imparted to develop the executive skills of the personnel, taught for the operational levels of the company and the managerial levels.
- Scholarships: Scholarships are provided to the personnel of the plant for secondary, preparatory, technical, university, masters and doctoral studies.
- Compliance with the programs in established calendars: through the information provided by the heads of each area, the annual training plan is developed, which is executed under the supervision and follow-up of the Management, in fact, an executive presentation is made monthly to the Decision Management Group of EIL.
- There is an area dedicated to scientific research and technological development (R & D), which provides EIL Training through five lines of products and services that make up its portfolio of solutions: Manual and support training, Update and professional development, Update and executive and managerial development, technical service in human and professional development, technical services and educational media.

#### ***Opportunities***

- Improve its process of Operational Training and Professional Development, with the support and commitment of each area, department and superintendence of EIL.
- Identify and take advantage of the experience and knowledge of the best performing workers.
- Increase the signing of agreements with educational institutions and greatly improve the link with those that already exist.
- Training Agreements with leading companies: Taking advantage of the experience of successful companies in the same area in the region.
- Interactive training: Development of a new concept of interactive training through the use of the company's technological infrastructure and the newest human knowledge management tools that are capable of supporting each phase of the training process.
- Transform the teaching-learning process, towards a process that takes advantage of and applies to 100% the knowledge and experience that already exists within EIL.

#### ***Weaknesses***

- Non-Qualified Personnel: In the same proportion as there are trained personnel within the EIL staff, there are also personnel who perform their duties with total ignorance of the best operational practices and directives.
- Insufficient resources: the human resources area does not have sufficient resources, neither budgetary nor infrastructure (classrooms and tools), to simply comply with the training schedule according to the needs of the company. This of course disturbs the entire process, because the efforts that are daily devoted to be scrutinizing resources, could be used to significantly improve the overall process and identify and meet more efficiently the needs of each area of the organization.

- Lack of Interest in the Training Program: Through the training needs detection program, the heads of the different areas of EIL provide the training and training needs of their area to the Head of Human Resources, but many of them do not they show interest and send those needs to comply with the administrative requirement that this implies.
- Lack of follow-up to the offered training: Monitor the performance of the trained personnel, verify if they are using the tools learned.
- Inadequate selection of personnel for the training courses: Some workers are sent to be trained without having the basic skills that allow them to take advantage of it. For example, in an advanced Excel course, they send personnel who have not taken basic Excel, which also does not allow to develop the program established by the instructor.
- Lack of pedagogical knowledge in the instructors: Many of the instructors are workers with great experience in their area of performance, however, they are sent to give courses without having bases or didactic tools that can be useful to transmit their knowledge.

#### **Threats**

- Demotivation of the staff: The labor framework restricts the opportunity of training to certain personnel (which in many cases are the most recent entry to the company), since it is governed by ladder movements, this causes demotivation of the staff because they can't access to higher positions, due to the fact that Training is required to fill these positions.
- Term of the work cycle of qualified personnel: Staff who are about to retire have a high degree of knowledge and experience in their functions (which they have performed for around 30 years), and that knowledge is simply lost at the end of their Laboral time. The administrators still do not recognize the importance of recovering and / or conserving this knowledge within the company, which would give the possibility of having the necessary tools to renew the personnel with the adequate training to occupy these same positions.
- The delay in training and technological tools for pedagogical support, in comparison with the companies of the same domain at the international level, some of which are situated at a highly competitive level.
- The eminent need for certification of labor competencies: there is a need for personnel to be certified in order to be able to position themselves at a competitive level nationally and internationally.

#### **1.6.1.2 Ishikawa diagram**

The human factor is a fundamental element for any company, however, it is even more so when it comes to large companies in the national industrial productive sector, due to the specialization of the functions, that is why it is important to design training courses with the needs in mind. specific to EIL.

The development of the human factor has become a fundamental aspect for the industry, in such a way that the success of the operations necessarily involves security, environmental protection and competitiveness in each function, as preponderant factors, which must be contemplated in the training of all those involved in the operation of EIL.

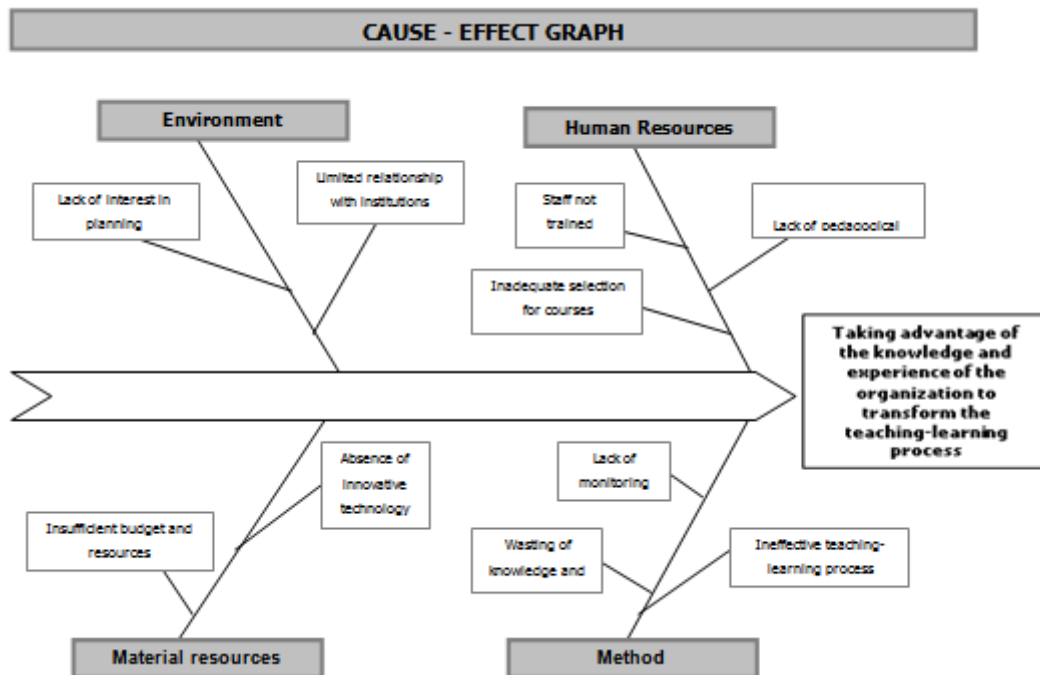
#### **Cause effect**

We analyzed the internal work that the Human Resources training area had done and using as brainstorming tool, the following problems were listed:

- New staff not trained to face the activity.
- Lack of follow-up on the use of the training offered.
- Inadequate selection of personnel for training courses.
- Lack of pedagogical knowledge in the instructors.
- Insufficient budget and resources.
- Total absence of innovative technological support in the training process.
- Lack of interest of all parties to offer real and correct planning.
- Insufficient relationship between the company and educational institutions.
- Disappointment of the knowledge and experience of the workers with greater seniority.
- Limited and ineffective teaching-learning process.

With this information the focus of the situation will be made through a Fishbone Diagram (See Figure 2).

Figure 2. Focus on the situation of the company through a Fishbone Diagram



After performing the analysis and becoming aware that the Training despite promising numerous and valuable benefits to any company, is not applied as it should be in all cases; in EIL some of the key points of the current scenario are:

- That it is reported and said that efficient training is being done, but that it is not really so (this executive report is presented monthly at a meeting scheduled for this purpose with the Decision Management Group, in which the program is followed up annual, but not to the performance of workers, nor to the application of an efficient training model).
- Absence of a real follow-up of the needs by area, since there is only a simple database with the characteristics of each position and with some of its functions and learning needs, without really taking into account the details, nor the requirements real.
- Devote most of the time and resources to teaching the current situation, instead of focusing on redesign and optimization.
- Not having the support and leadership to ensure the correct application of an efficient instruction that takes advantage of the knowledge that already exists in EIL, through an innovative technological tool.
- Lack of creativity and encouragement to motivate and really support workers to be educated in their area of performance and to follow a successful trajectory within the organization, which greatly benefits them and transforms the company into efficient and competitive.
- Allow the implementation of the Training to be too slow and bureaucratic.
- Ignore the comments and concerns of the staff, not having an adequate tool to do it systematically and preferentially.
- Do not take into account the psychological aspects that should be fundamental, including resistance to change.
- Adopt a totally conventional teaching-learning style, without resorting to any of the numerous tools or support models currently available.
- Focus only on the technical aspects of the training, leaving aside the fundamental aspects of motivation, participation, supervision, leadership, teamwork, safety and environmental protection.
- To involve as instructors personnel who have sufficient experience and knowledge in the area, but without giving them any training in basic teaching and exposure methods, which has the consequence that the valuable knowledge and minimum experience required is not transmitted. to mark a real change.
- Schedule courses and put together last-minute groups to "comply" with the minimum required in the annual program, without taking into account the real needs of the area and each of the workers. At the same time, employees with very different levels of knowledge and experience of the subject are included within the same group.

## II. PROPOSAL

### 2.1 Proposed model

The present project will show a model that combines the Traditional Training with the Automated Knowledge Management, in order to stimulate the efficient application of a learning process that supports the labor and competitive performance of the employees and achieve with it all the possible benefits. Carrying out the research under the conditions, situations and the environment of a large industrial production company located in the southern region of the State of Tamaulipas, which due to considerations of security and confidentiality of the general information, and at the request of the management of the same, will reserve its commercial name, using the fictitious name "EIL".

With this, it is intended to obtain an innovative Training and Training model both in the operational and administrative areas within EIL that promotes, through the application of advances in information systems and technologies, adequate storage, timely use and efficient use of knowledge of employees who have more wisdom and work experience.

The model aims to efficiently collect and take advantage of the information that flows through the company day after day and thus have more opportunities to take advantage of this intangible capital to transform itself through the Teaching-Learning process; mastering a tool that provides the opportunity to have the information required for each course concentrated in the same place, ordered under the same patterns and structured in a coherent manner, so that the development of the EIL Training Program is given much more consistently year after year .

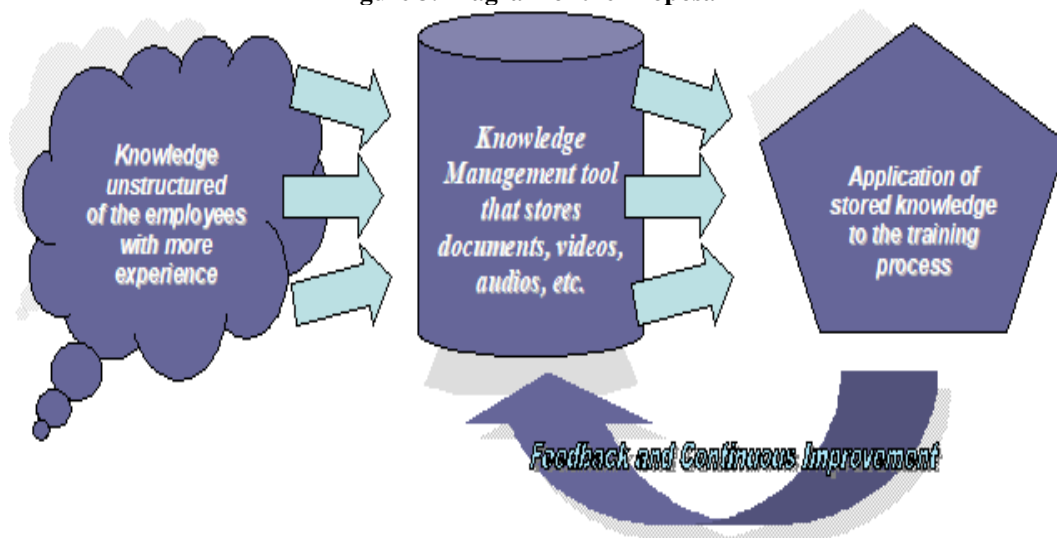
It is to be expected that modifications will have to be made throughout the process, with which obviously a careful change management will have to be applied, in order to introduce confidence and achieve understanding of the true mission of the project and the true goal of continuous improvement, which among other things covers the safety of the employees themselves, productivity as a company and the feasibility of each labor action being facilitated through a friendly model that allows the dissemination of knowledge and experience as throughout the company.

The proposal is that each of the stages included in the Training is supported, complemented and evolved by means of knowledge management tools, whether it is chosen from among those available in the market or created by developers of systems of the same organization (See figure 3).

The model must also validate itself annually according to certain pre-defined criteria or objectives, in order to facilitate decision making. It will also analyze the situation of individuals and organizational groups in relation to their environment, by studying the behavior within the Training cycle and its possible variants, the project in some way represents an extreme situation, because it is a national industrial productive sector and it involves processes and factors that do not occur in less large and complex companies.

Similarly, in a qualitative research will be the description of information that is impossible to quantify in some cases, in addition to seek flexible design that is able to face a changing reality. Definitely it will be taken into account that in EIL there are groups of workers that present diverse basic characteristics, according to their main operational activity, the area in which they operate and the department to which they belong.

Figure 3. Diagram of the Proposal



### 2.1.1 Resources

To carry out the project described in this document, the necessary basic resources will be of a human and institutional nature (focused on the information and data that will have to be managed).

Firstly, when developing the hybrid model of Knowledge Management for Organizational Training, a great dedication of time and effort will be necessary in order to find the adequate automated tool to achieve the objectives or to determine if it will be necessary to develop a tool with own resources of the company. For this, one of the options is to resort to the support of recently graduated professionals, who require hours to accredit their professional practices and have the necessary dynamism and even with new ideas that can be used. They will also use talks with members of the IT department of the same company to exchange ideas, perspectives and seek the mutual support required.

When having a tool selected or designed, it will be necessary to verify the efficiency of its application in each of the steps of the training process, make some adjustments and obtain the finished model, including all the recommendations and considerations to be effective in all areas of the company.

Most of the resources involved will be institutional and will seek to obtain, through previous agreements with the indicated persons, arguing the potential benefits that the success of the application of the new model will bring.

### 2.1.2 Proposal for a solution

The solution to many of the points detailed above is in the identification of personnel that have an outstanding performance and the use of their knowledge and experience, which should be considered an invaluable asset of EIL and be disseminated through a training model. that is based on a technological tool of knowledge management that allows supporting the process from the gathering of needs to the monitoring of the performance of the workers after having attended each course. You can find personnel who have the desired characteristics, due to their seniority or simply their excellent performance, in either of the two situations, the techniques used to perform their work should be used and disseminated among workers who already occupy or aspire to occupy similar positions.

The idea for this project is to have an information system that allows capturing the knowledge and experience of high-performance workers through computer files that contain descriptive documents of the actions carried out by them daily, audios that support said descriptions and videos of their daily work activity. In addition, as already mentioned and as shown in Figure 4, they have the ability to use this information to transform the teaching-learning process and at the same time support in the capture of requirements and in the monitoring of acquired skills. for each employee in their courses.

Figure 4. Diagram of the personnel training and development process



Complementing the previous proposal for the implementation of a model based on Knowledge Management technology, the recommendations and suggestions that can be given are:

- Financial support, request an extension of the budget allocated to meet the training needs that are required.
- Have a program that encourages real commitment on the part of all areas and all levels, which allows for long-term vision and not having short-term short-sightedness.



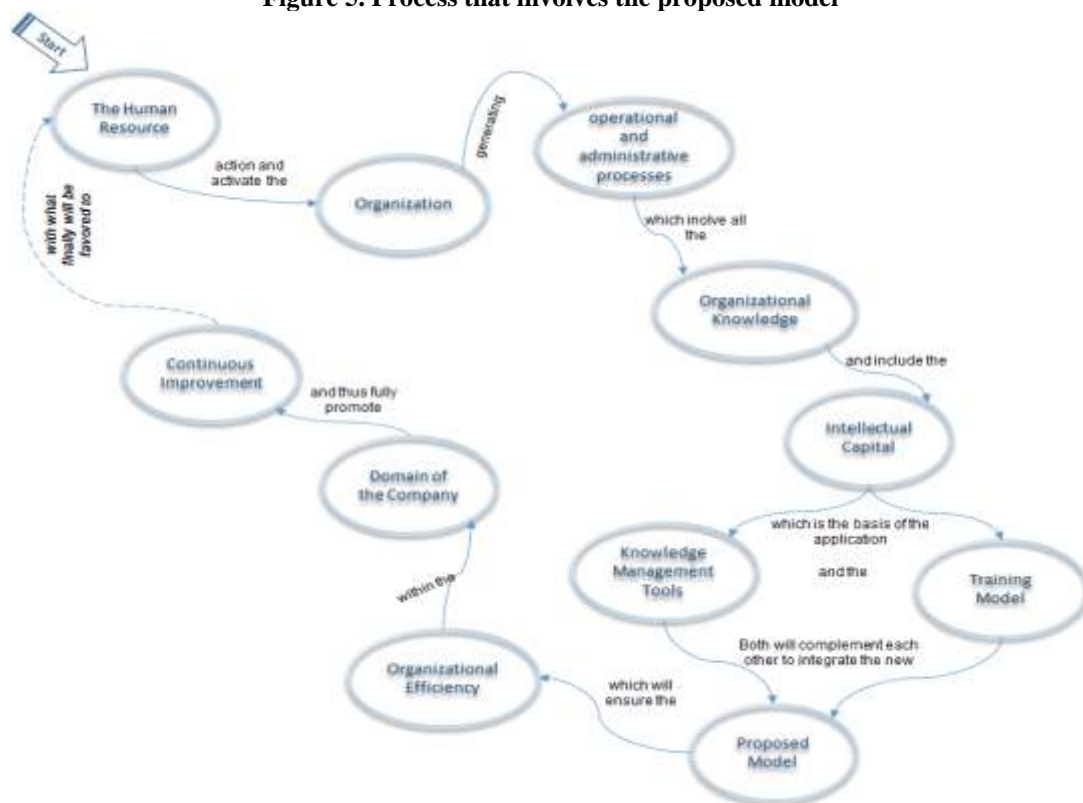
- Design and plan training programs, define and implement strategies on the real needs of EIL.
- Raise awareness among the Heads of the importance of selecting personnel for Training.
- Promote more strongly the training and training projects.
- Make alliances in the field of Training with leading companies.
- Stimulate the agreements with educational institutions.
- Promote the scholarships to which you are entitled among the staff.
- Motivate the staff to use the learning acquired in the Training.
- Increase the motivation of trained personnel to fill new positions.
- Pedagogical training for instructors.
- Make EIL a competitive and efficient company, relying on highly qualified personnel with excellent performance.

EIL is a unique company with acceptable levels of profitability, but it needs to transform itself and adopt the dominant strategies in the international industry. This depends not only on EIL, but on the realization of institutional changes that allow these transformations and one of these transformations can be based on the actual use of the intangible resource of knowledge and the experience of the workers through an innovative technology.

### 2.1.3 The main objective of the model

The main objective of the study is to obtain a training model driven by a knowledge management tool. From this approach, it can be said that the fundamental intention is aimed at providing a model that stimulates and promotes the real and efficient use of Training within the company, through the injection of dynamism offered by an automated tool of Knowledge Management, as can see in figure 5.

Figure 5. Process that involves the proposed model



In one way or another, either directly or indirectly, the general objective will be to avoid or at least fight as much as possible each of these points, strengthen the development of the model and ensure the reach of the greatest number of benefits. At the same time, the basic conditions that should be part of the new model are:

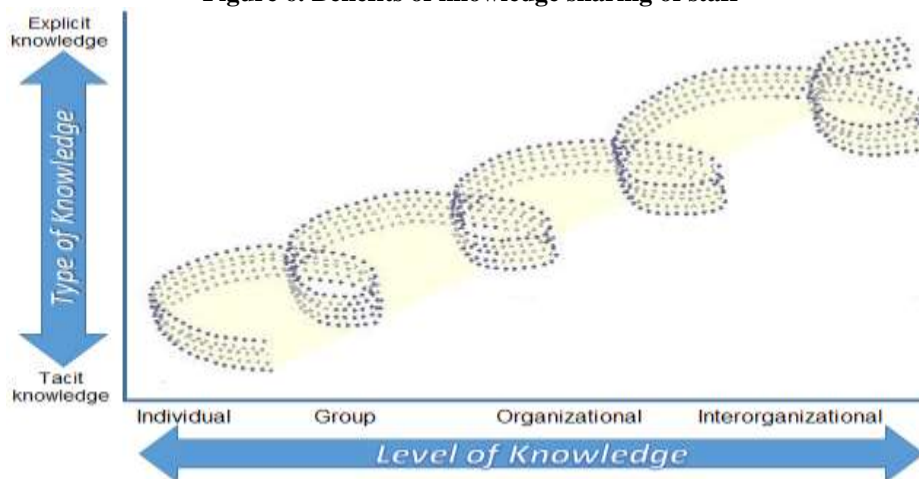
- Guide each stage of observation, analysis and redesign, systematically and extensively applying the knowledge management tool.
- Manage coordinated and substantially change for all areas that are involved in greater and lesser degree in the change.

- Take special interest and time to evaluate, plan and implement change based on continuity and permanent feedback.
- Do everything possible to visualize the changes and, if possible, simulate what the company would be already with the changes implemented.
- Use the models with an approach that it is possible to consolidate the continuous improvement, if it is given the appropriate importance from the beginning.
- Have the ability to complement the administrative parameters of both models.
- And of course to see the organization as a whole.

A detail that must be taken into account is the organizational culture, a culture expresses the core values shared by the vast majority of its members and is defined by the denomination of departments and the geographical division of each of them. In this case, the interest of the study will be to influence said culture so that the concept of collaboration and cooperation is accepted first as part of the Knowledge Administration and secondly as part of the Training. Generating stability, collective commitment, sense of identity, and clear perspective of teamwork.

At the same time each individual will feel satisfied to offer and receive new knowledge to support the design of their functions and those of their colleagues. In this way, the aim is to create a virtuous circle through which both integrated models are promoted, that is, while employees are motivated to share and receive new experiences, knowledge management will be able to function optimally and promote, support and complement the Training process within the organization. This model will offer such benefits to the same workers that they will remain motivated to continue exchanging their knowledge and so on, as outlined in figure 6.

**Figure 6. Benefits of knowledge sharing of staff**



As part of knowledge management one of the essential objectives will be to ensure that the members of the company realize the great importance of the intangible, so that it is feasible to obtain all the benefit and impulse from the Training towards the continuous improvement of the same.

#### **2.1.4 Application of the Model**

A process is a series of related activities that start from one or several inputs of materials or information and in the end generate one or several outputs of materials or information, as appropriate, but with added value. Training requires identifying each of the steps of EIL processes, and for this it will be of great support to have a knowledge system that is able to clearly distinguish such series of activities and that also provides an efficient tool for organize information, and friendly to feed the knowledge databases.

As part of this process, the control and feedback indicators will be the basis for the success of the proposed model, which makes this information a new strategic asset of the company, a detail that must be taken into account when establishing indicators and of course when analyzing them.

Some of the variables to be taken into account are mentioned below:

- Resources. Having to consider information systems, human resources, hardware, networks and interconnectivity, data, economic resources.
- Processes. Where they should be taken into account from inputs, processing, outputs, products, storage of information.
- Quality Which will depend on time, content and form.
- Control. Within each of the stages of the model application scheme.

- Feedback. One of the most significant points, regardless of whether it is done through the system or not.

The training process will be strengthened by having a favorable combination of the above variables, applied through the automated knowledge management tool and its corresponding systemic strategies. At the same time expecting to positively influence variables such as efficiency, efficiency and obviously the overall productivity of the organization, although without being the main purpose of the proposal. At the same time, there will be influence on global variables that must expressly mean an improvement at the time of implementation.

On the other hand, and with the approach of creating knowledge itself, one of the fundamental indicators of the project can be defined, making reference, precisely, to this creation of knowledge that in an interesting way becomes a continuous spiral that self-motivates generating a global perspective and real feedback throughout the entire company.

In the same way, the following are the main indicators that can be assumed as a scale of success of the project:

- Increase in the satisfaction index both of the people who work in the company and of the external ones in terms of service and response times to requirements.
- Elevation of the growth rate between the process and the employee.
- Reduction of costs directly and indirectly involved.
- Increase in the participation and individual and group interest of the employees.
- Growth in leadership observation as part of the daily functions of each position.
- Increase in the motivation index of each area and of each individual.
- Expansion of the database of both information and knowledge.

And in addition to all the above, of course, as the main indicator, growth should be taken in the actual application of Training within the company and in the number of courses redesigned and re-implemented successfully.

### **2.1.5 Variables**

The variables that can give margin to the measurement of the results of the project will be classified according to the moment of the data collection, some of them will be used at the beginning of the project in order to determine the general conditions in which the company is, in terms of Training and Knowledge Management, a series of data compilations will be carried out later on throughout the project in order to measure progress through both quantitative and qualitative variables. The first variables to use would be:

- Opinion in relation to organizational knowledge
- Opinion regarding the way of transmitting this knowledge
- Opinion regarding the possible application of the new model
- Opinion in relation to personal participation in the implementation project of said model
- Opinion regarding the possible benefits of the application of the new model

Actually these variables are totally qualitative because their purpose is not to measure an advance of the project yet, but only to capture the appreciations and feelings of the members of the company, both senior managers and middle and operational managers in relation to the general criteria involved with the new model, and in this way have a reference with which to plan favorably the steps to follow in the project itself and in the administration of the change, which will be a fundamental factor for success.

Regarding the variables that will be used throughout the project to measure progress and to discard or accept compliance, they are:

- Number of processes identified as generators of competitive advantages.
- Number of activities involved in the project.
- Number of beneficiary departments.
- Willingness to use the new model.
- Level of use of the tool.
- Ease of use of the tool.
- Satisfaction of employees towards the use of the tool.
- Number of participants involved.
- Number of tools provided and used by employees to share knowledge throughout the organization.
- Satisfaction of the workers in relation to the administration of the change.
- Level of culture change towards knowledge sharing.
- Level of availability of workers to share their knowledge.
- Productivity increase.

### III. CONCLUSIONS

When reviewing and redesigning the steps of the administrative or productive process of EIL, the Training should aim to apply modifications in order to optimize each function. In this way, an organization that is not capable of efficiently carrying out training is at risk of losing its competitiveness in the market by minimizing the quality of its processes and activities, by increasing response time and, in general, by becoming unproductive.

With these risks, you can give an idea of the importance of the Training, but not only of its application, equally important is to take advantage of it by identifying all the steps involved and associated with the whole process, keeping in mind what could add value, observing the flows global activities and of course doing all this in a structured, constant, focused on the objectives, goals, visions and values of the company.

Sooner or later, for EIL, it will not be enough to have data, information and knowledge in your files or in the minds of your employees, since the need to transform all of this into one more asset will be extended, which, although intangible, will eventually be the most appreciable asset, above assets as valued today as physical and infrastructure assets (machinery, process plants, etc.)

Outside of what could be thought, it is glimpsed that EIL can understand these implications, that is: recognize the importance of knowledge, in the short term and consequently develop new measures for performance, provide the transforming technology to grow their training process, ensure learning through effective practices and systematically raise the creation of knowledge.

The privileges that can be glimpsed when using knowledge management in this model proposal, can not be found in traditional tools. The use of knowledge and the intellectual capacity of people within the company, in order for talent to become a competitive advantage, is a transforming archetype that will invariably generate a transcendental change in EIL, which will bring countless benefits for all

Technology provides the opportunity to manage the concept of "Squared Training", which maximizes the potential of a process transformation to achieve efficiency in the control of information and stimulate feedback that often does not take place in the traditional process, but that injects many benefits and facilitates continuous improvement. This continuity in the evolution and updating of the company's activities is often complicated by the traditional Training process, since the management of such unspecific data, as the activities and daily experiences of the workers, their way of solving problems, the vision of its function within the company, etc., is not at all simple, much less if tools are used that are not designed to manage this type of information. Specifically, they are not designed to handle human knowledge.

The human factor is fundamental within the business environment, in fact, it must be considered the basis of everything. The knowledge of man and its proper dissemination within EIL, is an organizational resource that should start to be taken more into account and in that sense the administrators have begun to notice its enormous importance and to appreciate the competitive potential that it contains. It is the most productive asset of all, in short the key to the success of the organization. However, often in spite of recognizing it as such, it is not known how to take advantage of it and disseminate it, the proposed model presents an effective way to reach this objective through the use of the appropriate knowledge management tools.

These tools will continue to evolve, but before paying too much attention to that speed, you will have to understand their application form in each type of knowledge, in each particular company, in each specific situation and of course in each determined model, and it is part of what is intended to be done in EIL. In addition, of course, the opportunity that is given to the knowledge of being administered and taken advantage of to the maximum, use that can be focused to the Training in a simple and effective way.

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