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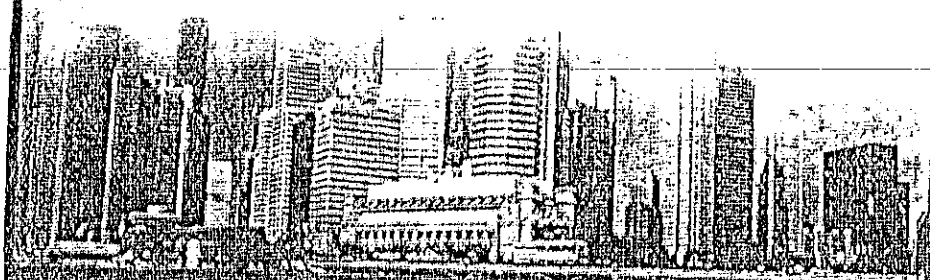
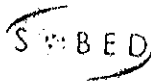
Proceedings of the 12th International Conference
of the Society for Global Business & Economic Development
Singapore • July 21-23, 2011



OF COLLEGE
Business



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For First Contributions to the Participants of the Conference
ISBN: 978-0-9637698-0-2

Evaluation of Methodologies As Applied To Knowledge Management in a Business Setting

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Abstract

This paper addresses the issues of knowledge management from practitioner perspectives. In this paper "knowledge management" is defined as: a process that promote identify, capture, processing and transmit knowledge within a company. We consider, from the start, the need for a methodological approach that will allow its application in a practical setting. The authors proposed a methodology using a case study approach to analyze knowledge management in an industry setting.

Keywords: Methodology, knowledge management, systematization of practice

Theoretical considerations

Knowledge Management defined is a discipline that promotes the full use of a process for identification, capture, processing, transmission and evolution of knowledge within a company (Breedt, 1999), the knowledge was introduced to the world of business to help companies create, share and use knowledge effectively (Davenport, 2000). Within our society and at present, knowledge is considered a key resource (Szyperki, 2000). Increasingly, companies are becoming aware of the importance of knowledge in their daily activities, this daily practice has become the largest new form of capital and, as stated by many authors it is the only source of sustainable competitive advantage in the global market (Drucker, 1992).

Most companies that leverage their knowledge do not have to repeat the tasks, or waste time in realizing them; they are ready to show their profitability, to share and not hoard knowledge in the organization (Nieves, 2001), a good application of the model will result in high productivity in various processes and over all, the manager will be able to make a transfer from the traditional capital model to the intellectual capital of the members of an organization (Arteche, 2003), therefore activities that are formerly reserved for staff with many years of experience can be performed without much difficulty by those with little or no experience in the field (Cabins, 2003).

Among all the items that cover knowledge management, intellectual capital is the most important because the knowledge that is transformed into intellectual capital is, along with information theory and the network model, the central structural element of civilization (Vicario, 2006), when these two concepts converge, we say that the organization becomes a learning organization. These theoretical models become a task from individual ideas and knowledge in pure capital, highly exploitable by firms (Boisot, 1995). The need for organizations to maintain and develop in environments that are subject to constant change have been the main concern of theorists of organizational learning (Basque, 2000) the close relationship between knowledge management and intellectual capital makes the main features easily recognizable.

The key differences between knowledge management and intellectual capital are summarized in only three, however, more than differences that mutually exclude concepts, differences that include the benefits of both crops to learning organizations are considered. Nevertheless, saying that the two are linked as a whole, is undeniable, one must also recognize that the processes are independent and that for obvious reasons must be implemented at key moments.

Table 1: Differences in Knowledge Management and Intellectual Capital

Intellectual Capital Knowledge Management	Capital Intellectual
<p>Tries to formalize and systematize the processes of identifying, managing and controlling knowledge.</p> <p>It is a process of organizational management</p> <p>It involves two variables</p> <p>Hard: hard and formalized aspects of management. Includes formal communication systems and computer systems.</p> <p>Soft: soft or less formalized aspects of management, talent identification, formalization of best practices and standardization of skills.</p>	<p>The intellectual capital defines the set of non-material inputs that in the information era are seen as the main asset of companies in the third millennium.</p> <p>Represents the organization's intangible assets (human capital, structural capital and relational capital).</p> <p>It is a soft variable of Knowledge Management: knowledge treasured in the brains of employees, product of experiential learning.</p>

Source: Gopal, G., & Gagnon, J. (1995). Knowledge, Information, Learning and the IS Manager. *Computerworld*, 5 (1), 1-7.

We propose that, knowledge management (KM) will facilitate the generation of intellectual capital, and in turn intellectual capital will intervene in management knowledge control. Thus, the process will become an endless circle that would generate new knowledge as applied to the organization.

In order for all this knowledge to work in an appropriate way, a three area division must be done for the efficient administration (Gopal, 1995), the first area is KM, the second, Information Management and the third Learning Management, this concept is applied in pair with the six-step method for the cohesion of individuals (Nonaka, 1995): construction of auto regulated equipment, increase individual knowledge through knowledge sharing, convert tacit knowledge into explicit, transform the knowledge of a product or system, creating new concepts and integrate new concepts in the knowledge base. These steps permit that the individual reinforce his knowledge through team works and to develop the mind skills to get theoretical knowledge into practical knowledge in order to obtain new concepts, ideas and development of products.

Methodology and Knowledge Management

When one examine the knowledge is acquired, or when trying to find new knowledge, it is possible to come and different approaches used to resolve those issues become a part of the Methodology field.

It will be difficult to define the term "methodology" without alluding to a context to the problem.

This paper is addressing methodological issues from two perspectives: one that addresses how the scholars organize research related to knowledge management, and a second perspective based on a method than links the application of this methodology accepted by the scientific community.

KM involves the identification and analysis of the available and needed knowledge, as well as the subsequent planning and control of actions oriented to develop knowledge assets and as a consequence to meet organizational goals (Kim 2000). For Darroch(2003) Knowledge management is defined as the process that creates or locates knowledge and manages the distribution and usage of knowledge within and between organizations.

There is a new form of Knowledge Management, which is based on the approach to customer; it focuses in the achievement of better results, seeking the increasing of company's revenues. In this sense, KM refers to the process of organization that handles the creation, storage, retrieval and application of knowledge (Alavi and Leidner, 2001).

A Framework of the methodology for systematization of the practice

Briefly stated. A method is a set of procedures that allow the achievement of a particular purpose.

The methodologies proposed by several author are presented in Table 2.

TABLE 2: METHODOLOGY OF KM PROPOSED BY AUTHORS

Relevant Criteria	Identify	Capture	Organize	Apply	Combine	Create	Develop	Distribute
METHODOLOGY (1998) LIEBOWITZ/ BECKMAN	Skills, strategies and knowledge	Formalize existing knowledge	Evaluate relevant knowledge with precision and value	Retrieve and use knowledge to make decisions, solve problems, automating work		Discovering new knowledge through research, experiments and creative thinking	Develop and promote new knowledge	Distribute knowledge automatically to users
METHODOLOGY (1996) MARQUARDT	Acquire knowledge					Create and develop	Use it	Transfer it
METHODOLOGY (1993) WIIG						Knowledge	Develop it	Develop it
METHODOLOGY (1993) VAN DER SPEK AND SPEJKERVET				Develop knowledge	Combine it			Distribute it
METHODOLOGY (1993) RUGGLES		Capture and represent				Creation, acquisition synthesis, fusion, adaptation		Transfer it
METHODOLOGY (1997) HOLSAPPLE AND JOSHI	Extract, Interpret, Transfer	Locate, recover, transfer	Evaluate, deposit object	Apply it		Monitor it, Evaluate it, Produce it, Transfer it		Set goals, produce and transfer it
METHODOLOGY (1998) DATAWARE TECHNOLOGIES	Change issues	Prepare for change	Integrate knowledge management team Show:	Do audits and analysis		Define solution options	Put knowledge together	
METHODOLOGY (1998) VAN DER SPEK AND DE HOOG	Conceptualize: Make an existing knowledge inventory. Analyze		Decide on required improvements Make plans to improve processes		Assure and combine		Develop it	Distribute it

	weaknesses and strengths.							
METHODOLOGY (1996) O'DELL	Conceptualize: Make an existing knowledge inventory. Analyze weaknesses and strengths.	Recollect and adapt	Organize it	Apply it		Create it		Share it
METHODOLOG (2000) LIEBOWITZ	Identify and verify it	Capture and assure knowledge	Organize it	Recover and apply it	Combine it	Create it	Knowledge information	Distribute it

Source: Authors

Based on the framework of methodology presented in figure 1, this paper examines knowledge management using the following criteria:

1. Identify - skills, strategies and knowledge.
2. Capture - formalize existing knowledge.
3. Select - assessing value-relevant-knowledge and precision.
4. Store - a repository of knowledge.
5. Share - distributing knowledge automatically to users.
6. Apply - retrieve and use knowledge to make decisions, solve problems, automating or supporting work.
7. Create - discovering new knowledge through research, experimentation and creative thinking.
8. Sell - develop and promote new knowledge.

Research method as applied to the private sector

For this research, the authors have used proposed by Liebowitz (2000) and that of O'Dell (1996) and the approaches used to define the steps to be taken in order to reach or establish an organizational culture where knowledge can be shared.

In order to go on with "identifying and recollecting knowledge", this case examined a series of characteristics of one or more people in the Systems area of a manufacturing company. In order to add more realism to this study the data gathered were analyzed and compared with stored data and the study ensured the information gathered synchronizes with the organizational culture.

With the "field study" application, the following survey was performed with a sample of 40% sample of the executive population of a firm used in case study. Knowledge Management survey instrument used in the study is presented below:

KNOWLEDGE MANAGEMENT

1.	Have you ever heard the term Knowledge Management? If so, please describe the concept.
2.	Have you received orientation about places, sites, data bases, etc. where you can consult information necessary to do your job? Explain briefly the way you received it.
3.	Mention at least three specific sources of information/knowledge that you constantly consult and that you consider useful in your job. (Assign priority, 1 first, 3 least).
4.	When having an issue, how do you identify who can help you resolve it? Mention how long you have been working for the company.
5.	In practical terms, what helps you more when you need help? In practical terms, what works better for you? Select your opinions assigning them priority (considering 1 as your primary source, and so on until the one that has the least priority)
	A) Web Pages _____ B) Books/manuals _____ C) Intranet _____ D) Co-workers _____ E) Data Bases _____ F) Chat _____ F) Others: _____
6.	Is information exchange within departments and work teams motivated? Briefly explain.
7.	In new activities, what percentage of your time a week do you dedicate to search information to perform your tasks (requirements, documentation, processes, etc.)
8.	How do you share your knowledge with others? Select your options assigning priority to them.
	Verbally _____ By e-mail _____ By chat _____ Using a forum _____ Giving a class _____ Using Data Bases _____ Other: _____
9.	What kind of technologies, procedures or methodologies do you suggest for the efficient knowledge flow in the organization?

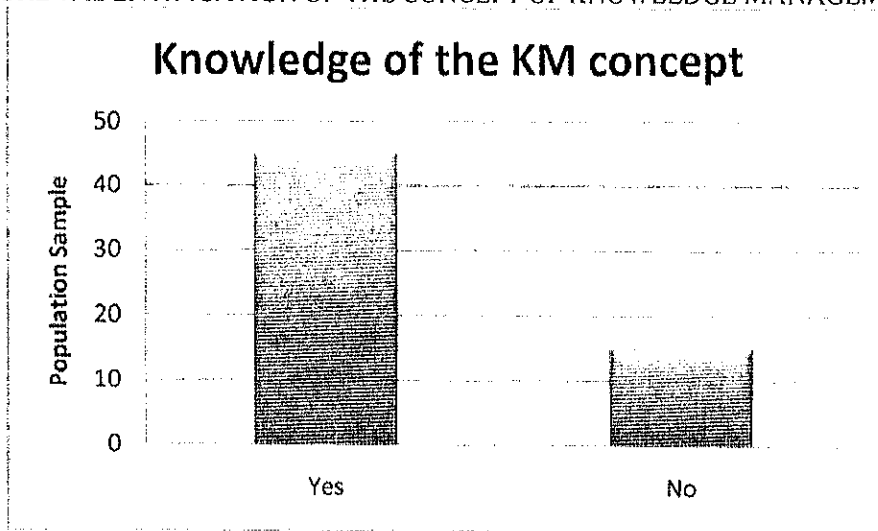
Analysis of the Results of the Surveys

This section presents the results obtained for the questions used in the survey and an in depth discussion of the results will be presented in a later part of the paper.

1. - Have you heard of management and/or Knowledge Management? If yes, please describe the concept.

YES	NO	TOTAL
45	15	60

FIGURE 1. IDENTIFICATION OF THE CONCEPT OF KNOWLEDGE MANAGEMENT.



Source: Authors

As shown in Figure 1 above, the sample of 75% of the population indicated that they were familiar with the concept of knowledge management and also if they were able to give a clear definition of this concept, while the other 15 people said they did not know the concept.

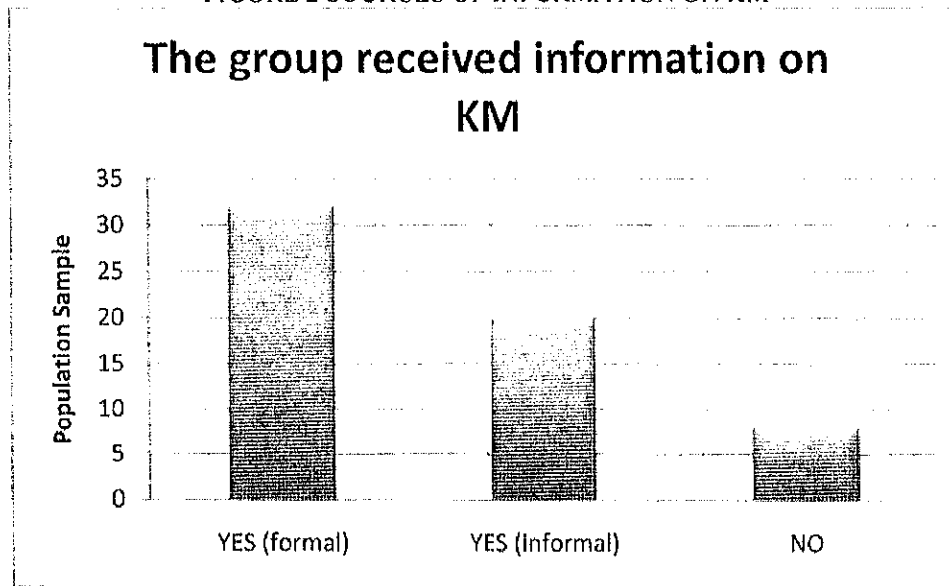
✦ The sample's response indicate lack of familiarity about knowledge management and this require better dissemination of information on knowledge management among the employees.

2.- Have you received guidance about the places, sites, databases, etc., where you can check the necessary information to do your work? Briefly explain how.

From the responses to the above question, it noted that some of the respondents received some formal guidance, while others received it informally, which is why the results were classified for the type of "yes" as formal and informal guidance, as shown in Figure 2.

YES (formal)	YES (informal)	NO	TOTAL
32	20	8	60

FIGURE 2 SOURCES OF INFORMATION ON KM



Source: Authors

As it can be seen, a good percentage of sample population received informal guidance on the sources of information they need to do their job: it is important to strengthen this process so that it can gradually become a more formal process within the area and that way we can reach out to those who do not receive guidance.

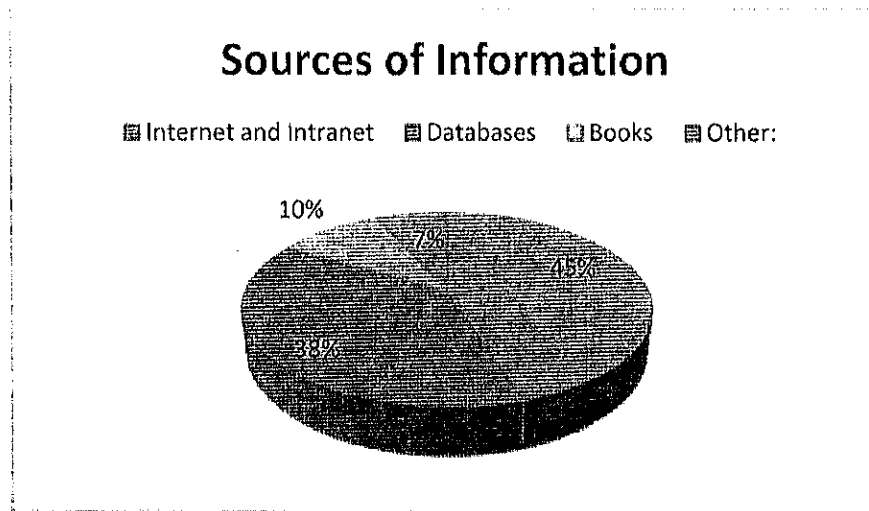
3.- Mention at least three specific sources of information / knowledge often consulted which you consider are useful for your work (assign priority 1- most used, 3- less used).

Information Sources	Sample population
Internet and Intranet	27
Databases	23
Books	6
Other:	4
Sample Total	60

Based on the obtained data, it is shown that the main source of information is the Internet, where there is information available on any topic, and intranet, where you can find specific information that only applies to the organization and its competence.

In the category of "other" forums and communities of practice were mentioned; these concepts are reinforced later in this case study, shown in Figure 3.

FIGURE 3. INFORMATION SOURCES IDENTIFIED IN THE AREA OF SYSTEMS

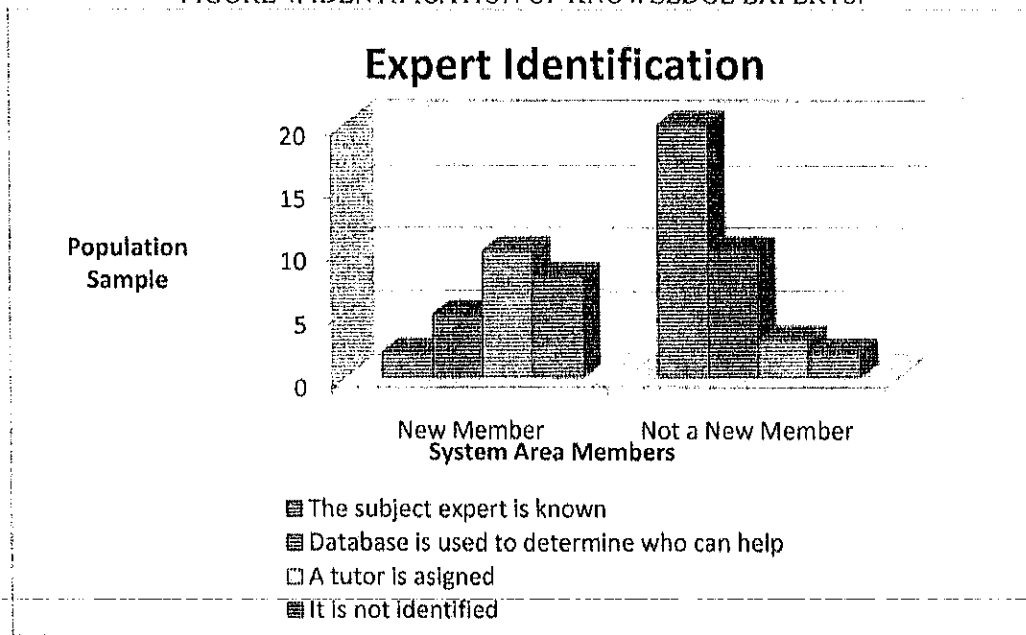


Source: Authors

4.- When you have a problem, how do you identify the people who can help you solve it? Mention how long you have been working for the company.

Options	New Member	Non New Member	Sample Total
The expert on the subject is known.	2	20	22
The database is used to identify who can help.	5	10	15
A tutor is assigned.	10	3	13
Cannot identify who can help	8	2	10
Total	25	35	60

FIGURE 4. IDENTIFICATION OF KNOWLEDGE EXPERTS.



Source: Authors

The result of Figure 4 indicates that new members in the area, in most cases, did not identify the experts in the area, but they are assigned a tutor who will help them in their integration process. On the other hand, the senior members in the organization, mostly identify who can help them solve the problem for which they are seeking or needing an expert on the subject.

5.- In practical terms, what works best when you need help? Select your options assigning a PRIORITY (consider as 1 your first source and so on until the lowest priority).

FIGURE 5. INFORMATION SOURCES

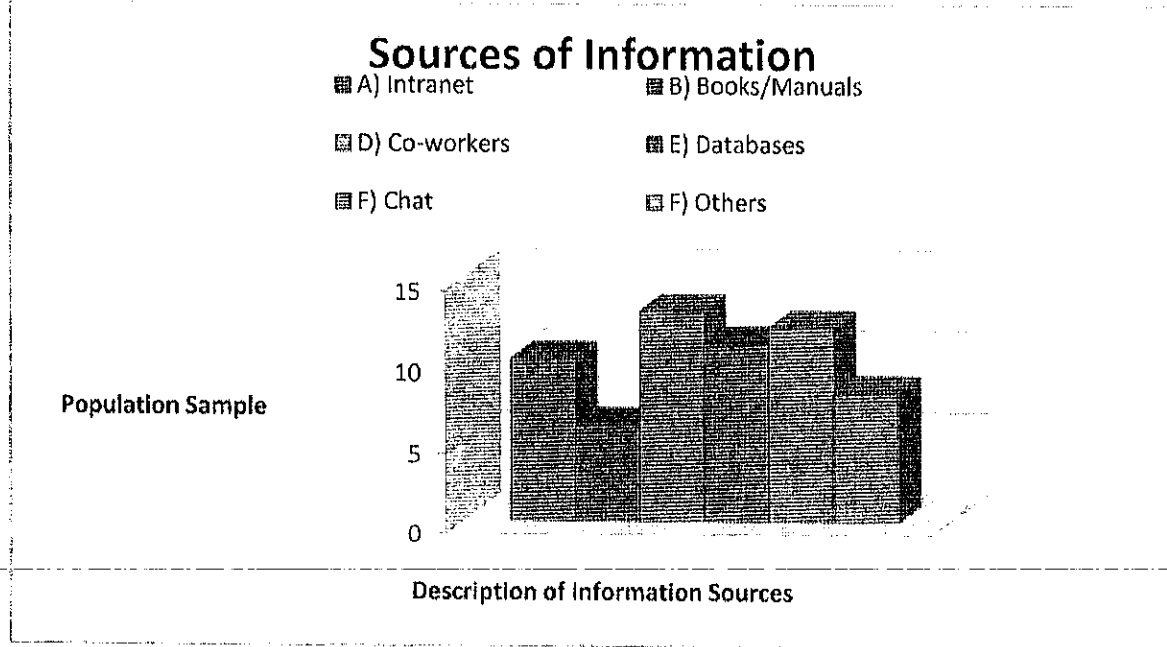


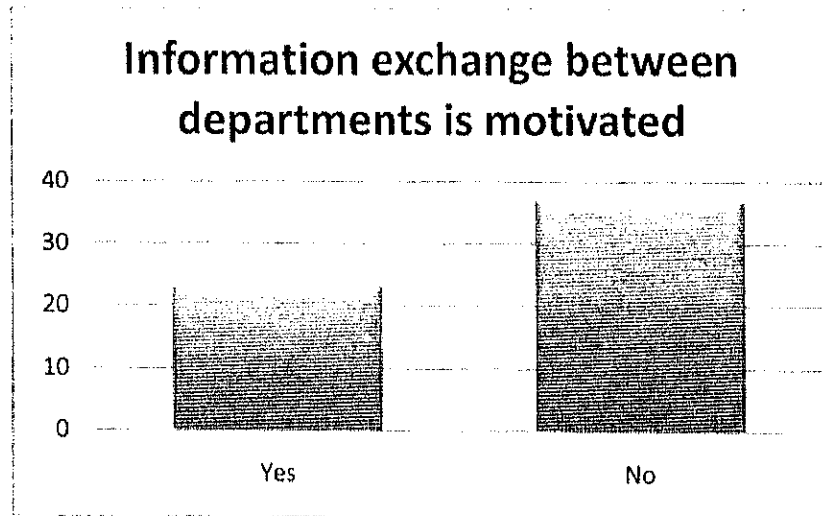
Figure 5 shows the main sources of information which happen to be the direct contact with people either face to face or through a chat that allows the establishment of direct contact. On the other hand, when time-saving for problem solving is a primary issue in the workplace, we can see that books are being consulted less often in cases where people know that someone in the organization has faced a similar problem and already has found the same solution helps in saving time and avoids unnecessary mistakes.

Within the "other" response, the following sources were identified:

- Tools or applications.
- Magazines
- Certifications and/or courses
- Personal notes, and
- Forums

6.- Is the information exchange within departments and working teams motivated?

FIGURE 6. INFORMATION EXCHANGE WITHIN DEPARTMENTS AND WORKING TEAMS.



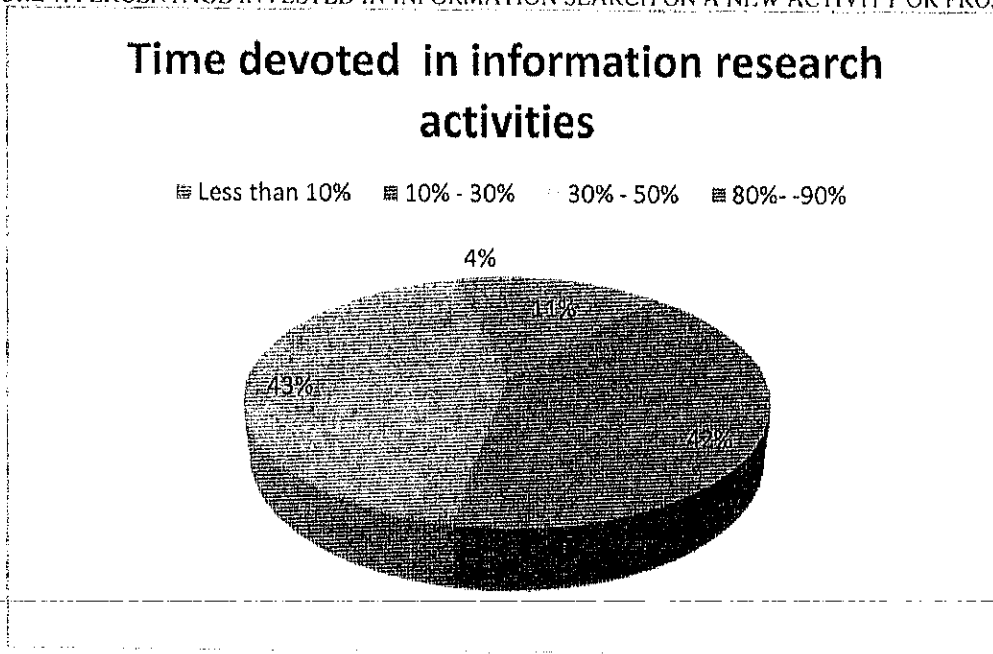
Source: Authors

The result of Figure 6 indicates that the exchange of information between departments, for some reason do not reach everyone and, perhaps only certain information is shared between departments or between teams working in the same systems area.

↓ This approach will search the way information can flow within the department, as well as within departments.

7.- In new activities, what approximate percentage of your time do you spend weekly **looking for information** to do your work (requirements, documentation, processes, etc.)?

FIGURE 7. PERCENTAGE INVESTED IN INFORMATION SEARCH ON A NEW ACTIVITY OR PROJECT.



Source: Authors

Study Percentage	People
Less than 10%	6
10% - 30%	22
30% - 50%	23
80%-90%	2

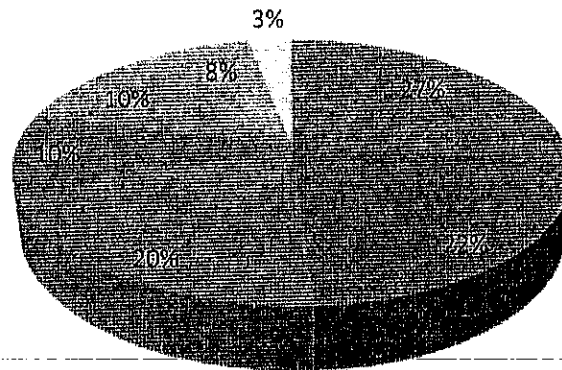
Figure 7 shows that within new activities or projects, people provides between 30% and 50% of their time to seek or receive information to help them carry out new tasks. What makes the other 6 people to only use 10% of their time? Perhaps, they know where to find information more quickly or have identified experts who can help them with their tasks; these, and some other questions are issues for the research analysis.

- * Propose how can new people invest less time in searching or obtaining information for the realization of their tasks.

8.- How do you share your knowledge with your co-workers? Select your options assigning a **PRIORITY**.

FIGURE 8. WAYS OF SHARING KNOWLEDGE WITHIN THE SYSTEMS AREA.

Ways of sharing knowledge



■ Verbally ■ Mail ■ Chat (sametime) ■ Through forum
■ Teaching course ■ Using Databases ■ Others

Source: Authors

Figure 8 confirms that the best way of sharing knowledge is verbal and face to face communication.

Within the "other" option, creation of educational CD's and telephone meetings with all the members involved in the Project – indicate the importance of contact with the experts.

9.- What kind of technologies, procedures or methodologies do you suggest for the efficient Knowledge Management within the organization?

Here the answer was a little more open as to avoid influencing the respondent about the options he/she had. Based on the results, these tools were preferred for effective knowledge management:

- Databases
- Forums
- Teleconferences
- Chat
- Practice communities
- Conferences between business units

Once referred to the results of the case study case in the area of systems, more details about each point of interest in knowledge management will be discussed in the subsequent sections of this paper



TABLE 3 STRENGTHS, WEAKNESSES AND IMPROVEMENT PROPOSALS IN TERMS OF KNOWLEDGE MANAGEMENT

QUESTION	STRENGTHS	WEAKNESS	IMPROVEMENT PROPOSALS
Have you ever heard the term Knowledge Management?		The results show that there is a point to watch as 25% of the sample proved to have little or no knowledge about the concept and all activities that come with handling an efficient knowledge management approach	<ul style="list-style-type: none"> • Establish courses and training in the systems area to introduce every aspect involving knowledge management before it is formally institutionalized in the area. • To bring experts in the field, whether inside or outside of the organization, to speak about their experiences and all the benefits they have found within an efficient knowledge management.
Have you received orientation about places, sites, databases, etc., where you can consult information necessary to do your job?	The response showed that the majority of the population was given guidance to do their jobs either formally or informally.	It is important to approach the part of the sample who feels isolated from the information needed to perform their tasks more efficiently, as well as to analyze the 34% who are receiving informal guidance, and verify if this information is properly received and how to encourage for it be transferred through one channel, and for it to be measurable for the organization.	Establish an education plan so that the area can be aware on where they can find the information needed to do their work (databases, links, etc.) as well as procedures, methods, best practices, etc.. Assist them in their work. These points will be addressed in detail later.
In the applied survey questions number three and five, it was intended to identify the information sources used constantly in the area, identifying the following as strengths and weaknesses:	<ul style="list-style-type: none"> • When people identify that they need help to carry out their tasks, its main source of information used is direct contact with people: <ul style="list-style-type: none"> ◦ Seeking help in the co-workers. ◦ They have fully identified the expert on the subject and rely on their advice. ◦ If they need a far knowledge transfer, they draw upon the use of Chats, notes, teleconferences or directly via telephone. • The organization has not only Internet, but also has its own intranet where all information pertaining to each organization can be found and it is very useful when members of the organization are looking for specific topics or tasks that are being performed. • There are several query databases to locate specific information to help with different tasks and those who do not know how to exploit this information from them. 	The Practice Communities and the Forums are not institutionalized, so as it has been discussed, is important to identify the information being managed in these groups as well as continue to motivate more people to participate in these activities and tools, but in a way so that the area can take control of the running knowledge.	<ul style="list-style-type: none"> • To be certain that the community has a purpose. • Setting the resources of the company within a company aligned community. • Make it easy for members to remain engaged and involved, and to attract new members to participate. • Using known technology easy to use for everyone. • Accommodate technology to tasks, i.e. to know when it is more effective making a call rather than holding a meeting. • Making an easy entry and exit to the community and their responsibilities and required skills. • Help participants understand which of their tasks have responsibilities. • Keeping facilitators aware of the efforts of the community to achieve an identity between them and other communities within the company. • Make it easy for prospective participants, not only to store information but for anyone who likes to participate and has an understanding of the problems.
When having an issue, how do you identify who can help you resolve it?	<ul style="list-style-type: none"> • Members who already have some time working in the area fully identify the subject experts and seek it directly when in need of help. • If within the area they do not identify the expert who can help them solve a problem, they know they can make use of the databases or search on the intranet for an expert that can be reached. 		<ul style="list-style-type: none"> • Setting "Home Plans" at the time of incorporation of a new person in an organization means recording many of the keys to the future behavior. A good host plan must determine the values and culture of the organization and achieve shortening of the adaptation period. • Encourage experts to share knowledge.

	<ul style="list-style-type: none"> • Include performance factors on the knowledge implementation as part of an annual project, reviewing reports and providing structure recognition to motivate employees to share what they know. • It was identified that there is a Mentari program focused on new members, with this the old master-apprentice relationship is recovered, and it is one of the best ways of transferring tacit knowledge. Similarly, this program does not exclude any member of the area who wants or needs to participate in it. 		<p>not only informally as they currently do, but in a more measurable way for the organization so that it can be profitable for the experts to share their knowledge.</p> <ul style="list-style-type: none"> ○ Institutional awards and recognition programs to demonstrate what the behavior of sharing knowledge brings to the company. ○ To evaluate the behavior of knowledge sharing as part of employee evaluations. ○ Develop internal leaders to share knowledge within a team or individually. <ul style="list-style-type: none"> • Establish a database for general access to all areas and departments within the organization, curriculum staff, so, based on a keyword, the tool may yield the names of those mentioned have that knowledge.
<p>In information exchange within department and work teams motivated?</p>	<ul style="list-style-type: none"> • Most respondents replied that there is no motivation for the exchange of information between departments. 		<p>Put an end to the cultural factors that inhibit knowledge transfer. These inhibitors also called frictions due to the delay or possibly prevention of the knowledge transfer as it tries to progress within the organization. The following proposals are intended precisely to overcome those frictions.</p> <ul style="list-style-type: none"> • Often the sharing of knowledge does not happen because of a lack of confidence; an important thing here is to establish trust relationships between areas and departments so that it can be so easy to share knowledge. These meetings can be called "Knowledge Meetings" where teams talk about what is done in their areas and thus the other groups identify which knowledge can be transferred. • Create a common interest between departments through training, dialogue, publications, work (cross-functional teams) working for the same purpose, job rotation, etc. • Establish times and places for knowledge transfer fairs, break rooms, conference reports. • Evaluate performance and provide incentives based on the sharing attitude. • Educate employees for flexibility; provide time for learning. • Establish within each department someone who will receive education from communities of practice, best practices, lessons learned, etc. and that individual will be responsible for raising the information in his area to other levels so that the information can be shared.

			<ul style="list-style-type: none"> • The area managers will have to submit basic routines as presenting tutors or tutorials and tips for their areas, about the findings and identified information when shared up to another level. • Establish a knowledge sharing team management, in knowledge businesses, self-organizing teams are an essential part of the working method.
<p>In new activities, what percentage of your time a week do you dedicate to search information to perform your tasks (requirements, documentation, processes, etc.)</p> <p>The result obtained here was also dispersed, since people who work or are assigned on a new project, spend most of their time looking for information that helps them in their tasks, while people who already have been working a longer time in the same project, know how and where to locate information quickly to accomplish the tasks.</p>		<ul style="list-style-type: none"> • The staff spends much time looking for information to do their job. 	<ul style="list-style-type: none"> • Establish courses to guide people on the knowledge technologies that exist in the area and that can help them in their activities. • Ensure that every employee has the necessary technology to access these knowledge management systems. • Plan and structure the knowledge in the area, establishing a knowledge map or a database, which are a simple guide and not a repository of knowledge itself. In this map users can search by subject or keyword, making it simpler for the comparison and location of possible sources of knowledge. • Start to develop the Intranet tools for knowledge management systems, which include: lessons learned, knowledge maps, proper documentation of processes, case studies, expertise location, etc. • Establish a portal for "Knowledge Management" in the area, which allows access to all the generated knowledge in other departments and the organization as such. • Be aware that every member of the area has a complete manual of the current processes either via Web, or that can be accessed through the databases where this information is stored. <p>This knowledge portal will be created Intranet / Web so that it can have an entry point for all the different aspects of the knowledge seeked, including the location of experts, communities of practices, lessons learned, best practices and eventually technical aspects of the final product deliverables of the organization.</p>
<p>How do you share you knowledge with others?</p>	<ul style="list-style-type: none"> • There are multiple channels for sharing and accessing the knowledge of the organization, mentioning some: the forums, communities of practice, databases, etc. 		<ul style="list-style-type: none"> • Establish rewards and recognition policies. Rewards and recognitions are weapons that have a decisive influence on the behavior of individuals, for example, rewarding teams, not individuals sends a strong a message, as well as surveys by willingness to share knowledge. • Set bonuses and incentives for contributions and participation in forums, communities of practice,

			contributing to best practices and lessons learned, etc.. • Creating career plans within the organization is one of the best ways to retain valuable people, giving important stability to themselves and the organization.
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Source: Authors

Measurement of the factors that are being used in Knowledge Management

If it is wanted for the high management to get involved in the process of Knowledge Management, it is important to generate measurable data results that reflect how much knowledge management contributes to achieving organizational objectives in a more structured, higher quality, efficient and effective way to create both a knowledge value chain inside and outside the organization.

The way in which achievements are measured, as well as the errors, leads to a decisive impulse to the people. The indicators themselves are pivotal to a change. The elements that comprise knowledge management are rather intangible items or measurements difficult to measure, but it is important to find a measurable factor that can be shown to the management.

One way to provide the measurement of intangible assets to manage them is an important way to explicit the value-generating business. If traditional accounting reflects it, the selection of some indicators would be a healthy organizational exercise.

Some proposals about intangible considerations (Arbonies, 2001) include:

- Identify individual learning
- Identify team learning.
- Identify learning by tutoring.
- Organizational and Cultural Learning
- People Management
- Identification of information systems.
- Identification of knowledge technologies
- Identifying communities of practice

Some indicators for human capital to consider mentioned by the same author might be:

- Middle sized jobs
- Middle graduates and seniors
- Indirect people
- Training hours
- Fidelity jobs
- Performance evaluation
- People satisfaction
- Improvement suggestions.

Customer Satisfaction Measurement

Measuring customer satisfaction besides surveys must enable segmentation, determination of the most valued attributes within each segment and consequently the design of adequate products and services, customer retention and loyalty. Customer knowledge capabilities can awaken many capabilities within the company and break inertia in the organization.

Some identified measurements that can be used based on this study case are:

- ↓ Measuring the success of the program where there has been shared knowledge in the area and use the metric system to gain support of the organization.
- ↓ Measure the time that people spend accessing the databases in search for information.
- ↓ Measure the number of times that a mentor is assigned to the members of the area.

Conclusions for the Knowledge Management applied to the Organization

Based on the case study presented in this paper, we can conclude that knowledge management is not only an important area of research, but businesses are actively involved in implementing knowledge management in an informal and implicit way so that all the people within the organization, at any level in any organization who function, at different levels in an organization may contribute their best to the firm. Firms recognize how important it is to focus, so that it will enrich the intellectual capital of the company.

References

- [1] Alaví, M. & Leidner, D.E. (2001). Knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, 25, 107-136.
- [2] Boisot, M., & Mack, M. (1995). Estrategia tecnológica y destrucción creativa. *Revue Française de Gestion*, 4(103), 5-19.
- [3] Breedt, M., & Van Rensburg, A. (1999). Knowledge Management Principles. *South African Journal of Industrial Engineering*, 1(10), 1-3.
- [4] Cabañas, J., & Garito, M. (2003). Capital Intelectual, Gestión del Conocimiento y Comunicación: Factores Clave del Desarrollo de las Organizaciones en el siglo XXI. *University of Puebla Journal*, 5 (9), 13-17.
- [5] Darroch, J. (2003). Developing a measure of knowledge management behaviors and practices. *Journal of Knowledge Management*, 7, 41-54
- [6] Davenport, T., & Prusak, L. (2000). *Working Knowledge*. Boston, MA: Harvard Business School Press.
- [7] Drucker, P. (1992). The new society of organizations. *Harvard Business Review*, 70(1), 95-105.
- [8] Gopal, G., & Gagnon, J. (1995). Knowledge, Information, Learning and the IS Manager. *Computerworld*, 5(1), 1-7.
- [9] Kim, K. (2000). The roles of knowledge professionals por knowledge management. Presentado en la 1999 *IFLA Conference*. *INSPEL*, 34(1), 1-8
- [10] Lévi Manguin, J. P., & Varela Mallou, J. (2003). *Análisis Multivariante para la Ciencias Sociales*. Madrid: Pearson Prentice Hall.
- [11] Martínez, N. (2006). Gestión del Conocimiento: Aprendizaje individual versus aprendizaje organizativo. *Intangible Capital*, 2(13), 308-326.
- [12] Nickols, F. (2001). The Knowledge in Knowledge Management. *Knowledge Management Yearbook 2000-2001*, 1(1), 2-8.
- [13] Nieves Lahaba, Y., & León Santos, M. (2001). La gestión del conocimiento: una nueva perspectiva en la gerencia de las organizaciones. *ACIMED*, 9(2), 121-186.
- [14] Nonaka, I. (1991). The Knowledge Creating Company. *Harvard Business Review*, 7(9), 96-104.
- [15] Nonaka, I., & Takeouchi, H. (1995). The knowledge creating Company: How Japanese Companies. *Oxford University Press*, 4(8), 1-10.
- [16] Polanyi, M. (1958). *Personal Knowledge: towards a post-critical philosophy*. Chicago, IL: University of Chicago Press.
- [17] Sáenz, F. (2004). Inovación tecnológica de las empresas. En F. Sáenz Vaca, O. García, J. Palao, & P. Rojo, *Innovación tecnológica en las empresas*. (1-29). Madrid: Universidad Politécnica de Madrid.
- [18] Scarabino, J. C., Biancardi, G., & Anabel, B. (2007). Capital Intelectual. *Invenio*, 10(19), 1-14.
- [19] Steward, T. A. (2008). *Capital Intelectual*. Washington D.C.
- [20] Szyperski, N. (2000). *Was ist wirklich neu an der New Economy?* Berlin: ZFW.
- [21] Vasco, G. (2000). *Gestión del Conocimiento y Capital Intelectual*. San Sebastián: CIDEC.
- [22] Vicario Solorzano, C. M. (2006). Gestión del conocimiento, desafío de la educación. *Banco Medios*, 1-8.
- [23] Zorrilla, S. (1989). *Introducción a la Metodología de la Administración*. Mexico: Aguilar León y Cal editores.