

THE PEOPLE AND THE INFORMATION TECHNOLOGIES IN THE MANAGEMENT KNOWLEDGE: THE ENANCIB AS “ENABLING CONTEXT”

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ABSTRACT

Each time less considered a fad the knowledge management (KM), as more present in the organizations. Some definitions of the KM point out the technological solutions through the concept turned to the knowledge storing others value the human element due to the knowledge sharing. The goal of this research was to raise similar characteristics in the way the organization have worked the KM, supported the research presented at the *Encontro Nacional de Pesquisa e Pós-Graduação em Ciência da Informação* (ENANCIB), considered an "enabling framework", fitting them to two possibilities of management: people and technology. The research is characterized in relation to the design, as exploratory and descriptive study, and in relation to the nature as research of qualitative and quantitative approaching been defined as a kind of bibliographic and field study, with the intention to analyze the scientific production about KM. They were defined like variable, the characterization of the articles published in the ENANCIB in the period 2008/2009, about the insertion of the KM in the WG-4, the evolution of the KM in the WGs, the role of the people in the KM and the role of the IT tools applied to the KM. The results permitted to conclude that the KM has been spreading in a testimonial way, not only in the corridors of the organizations but also in the “enabling context” promoted by the managers and researchers who produce the ENANCIB, adopting as central and defining characteristic – the human capital – and his interfaces with the IT and the Information Science (IS).

Keywords: Knowledge Management; People in the Knowledge Management; Information Technologies in the Knowledge Management.

INTRODUCTION

The knowledge started to represent an important differential to the organizations which know how to acquire it and keep it in an efficient way. The new economical and social order, centered in the people and in the information technology, prepared the necessary base to make it possible for the revolution based in the knowledge to effect. This covers not only the new technologies incorporated in the productive processes but also new ways to organize and to manage the information and the knowledge, demanding from the organizations an adaptation to new scenery.

There is not agreement about the definition of the knowledge management (KM). This reflects the several ways that the organizations are taking: some emphasizing the technological support, others the human element. While in some definitions the technological solutions are more pointed out through the concept of storing and reusing the knowledge, in others the human element is more valued due to the sharing and generation of new ideas. Although the technology represents an important role, because it enables the storing and the dissemination, it is not exclusive in the KM.

As Holtshouse explains (*apud* WAH, 2000), leader of the initiative in the knowledge management, the human aspect is always present on it. The Information Technology provides the structure, however it does not provide the content. On this case, it deals with a topic related to the people. "Certainly the information technology is a facilitator, but alone it does not have the ability to extract the information out of an individual" (CHASE *apud* WAH, 2000, p.54).

Each time less considered a fad the knowledge management has been marking attendance in the organizations. Although the concepts are not still completely structured and the ways adopted are different from one organization to another, the common characteristic is the one that the organizations are trying to the possibility to generate and acquire a resource which may bring innovation and competitiveness. The disagreement of concepts raises certain doubts about what really means 'knowledge organization', 'organizational knowledge', 'knowledge

management', and the way that the organizations have worked the knowledge management. These evidences, in the science, are considered essential for its natural growing, mainly when they leave from distinct views to the same problem.

In the program of Pos-Degree in Information Science (PPGCI) of the *Universidade Federal da Paraíba* (UFPB), one of the stages of the discipline Organizational Knowledge was developed during the period from August to November 2009, been adopted as didactic resource, the reading, the articles discussion and the development of a research. The themes recommended to reading showed the theme of 'knowledge management' as element indispensable to the people and to the organizational development through a process of creation and sharing of knowledge.

Parallel to the other academic activities mentioned, it was developed a research in the scientific production, specifically in articles published in the Annals of the *Encontro Nacional de Pesquisa e Pós-Graduação em Ciência da Informação* (ENANCIB) with the intention to identify the approaches of the KM in the literature published in the Work Group 4 (WG-4), denominated *Information Management and Knowledge Management in Organizations*, of this event.

As the X ENANCIB took place in the year of 2009, in João Pessoa city, Paraíba state, the teachers and students of the PPGCI of UFPB, members of the Research Group 'Information, Learning and Knowledge' could act directly in the 'enabling context' from the event, living during the days of the event with the researchers/authors, producers of knowledge in the area, getting personally the reflection of them about the evolution of the theme 'KM' in the context of the ENANCIB.

To prepare the groundings about the KM in the scientific production of the WG-4 of ENANCIB we formulated relevant issues to the objectives of the research, which permitted to construct the theoretical referential, during the environment in which the event happened, in an 'enabling context named by Nonaka and Takeuchi (1997) of "Ba".

The "Ba" is a place where the participants share the same contexts and create new meanings through interactions. The participants of the "Ba" bring their

own contexts, and through the interactions with the other participants, the environments change (NONAKA; TOYAMA, 2003). The “Ba” (enabling context) is understood as a place of creation of knowledge. The knowledge needs a physical context to be created in located action. Then the “Ba” is a mechanism created in a continuous way as a generator which creates mechanisms that explain the potentialities and the tendencies which stimulate creative activities (BARBOSA, 2009).

On this document, the concept of “enabling context” is enlarged to cover the interdependent interaction among the authors who produced the scientific knowledge about KM, whose information is found registered in the Annals of the IX ENANCIB, and the face interaction among the authors who present works in the X ENANCIB, been configured as environment of sharing of tacit knowledge.

We searched yet in the context of the event, to get in a registered and authorized way, the understandings of the authors/presenters of the research communications, about the people and the technology in the scope of the KM, first, with the intention to prepare a literature review.

The goal of this article is to identify similar characteristics in the way the organizations have worked the knowledge management, according to the reports of the research broadcast in the Annals of ENANCIB fitting them into two possibilities of management – people and technology.

2 CONSIDERATIONS ABOUT THE KNOWLEDGE MANAGEMENT

The knowledge has been object of reflection and study in several areas of the knowledge, since the Earlier Times, and key-element in the great changes faced by humankind. In the Agricultural Society, the social memory was stored in the human brains. The knowledge and the culture were accumulated by the elderly and transmitted to younger generations, through stories, legends, songs, speeches and others. Then, the social memory was limited due to the capacity of mental accumulation of the population (TOFFLER, 1997).

In the Industrial Society, the social memory is extended and transcends the mental limits of the individual with the appearance of new ways of storing. The machine of written print makes it to promote the dissemination of knowledge and of the memory through books, newspapers, photographs, films and others. In the Society of Information and Knowledge, currently, the social memory passes by new quantitative and qualitative change. Along with the advances in the information technology and of the communications and their use to the processing, storing and data and information dissemination, the limits of the social memory were extended and became more dynamic (TOFFLER, 1997).

Nonaka and Takeuchi (1997) define the knowledge as a dynamic process used to justify the personal belief about the truth, produced (or sustained) by information. Angeloni (2003) agrees with this thought, when he defines that the knowledge is not only a group of information, but a group articulated through the empiric, cognitive and emotional legitimating. However, first it is necessary point out the knowledge, as resource, so that it can be managed.

Probst et al. (2002, p.24) define the knowledge as a

Set of cognitions and abilities with the ones the individuals solve problems. It comprehends the theory and the practice, the daily rules as well as the instructions for the action. The knowledge is based in data and information, but, different from them, it is always connected to people. It forms integral part of the individuals and represents their beliefs in the causal relationships.

To Sveiby (2001) the knowledge has been interpreted both as object and as a process. When interpreted as object, understood as synonym of information it is worth to invest on it or it is meant, in information technology and related. The author states that this is the faster way to lose money, as the investment is being done in a wrong way. However, when interpreted as a process, it is being admitted that it resides in the people, and it is on them that the investment should be done.

Davenport and Prusak (1998) point some initiatives that may be related to the possibilities of knowledge management proposed in this article – through technology (pointing out the ways of storing, sharing and use of knowledge) and the

valuation of the employees/people (promoting the generation of new knowledge as well as its sharing) and by the accounting (by the try to measure the knowledge).

Then, in the view of Sveiby (2001), the goal and the obligation of the companies in relation to the management knowledge is to nurture, to lever and to motivate the people to share their ability to act. This way, the knowledge management becomes a task of all the organization, what the author names strategy based in knowledge.

In this sense, Nonaka and Takeuchi (1997) developed the theory of creation of knowledge, basing in the classification of human knowledge as explicit and tacit, the one which is defined by Michael Polanyi (1996). The explicit knowledge is the one which may be expressed into formal language and, then, be transmitted in an easier way to people. This knowledge may be stored in many ways: in reports, manuals, documents, audiovisuals, CD-ROMS, among others. The tacit knowledge is more difficult to be formatted and expressed into formal language, so that it is more difficult to be transmitted. It corresponds to the personal knowledge, to the individual experience and involves subjective elements such as beliefs, values and intuitions.

According to Choo (2003) the main activities of an organization of knowledge are the processes creation of meaning creation, the construction of knowledge and the decisions taking. "Starts with an analysis of how to process the meaning creation, isolating experiences and interpreting situations, it guides the dynamic of knowledge and the organization adaptation" (CHOO, 2003, p.351).

Cross and his employees identified four factors which promote the sharing of knowledge in social networks, which are: the knowledge about what the other person knows; the ability to get fast access to the other person; the interest and the engagement of the interlocutor in the solution of the problem from the requesting; the security perceived by the one who requires the knowledge. In this situation of safe relationship, the people tend to promote in a more effective way the learning (BARBOSA; SEPÚLVEDA; COSTA, 2009). Such Learning which may happen with the use of technologies or not, in social networks.

3 THE PEOPLE AND THE IT TOOLS IN THE KM

The theoretical foundation which is followed was prepared with base in the theoretical constructs presented by the authors who based the texts produced and presented in the Annals of the IX and X ENANCIBs, which constituted the analyzed units.

Considering that the central thematic of the KM shows to be the good use of the intellectual resources existing in the organizations to make people search, find and use the best practices, and not the reinvention of what already exists, it is understood that the component processes of the KM can and should be applied in the environment of any organization (DUARTE et al., 2009).

According to Ziviani et al. (2008) in the knowledge and information management there are some processes which deserve special attention. One of them is the sharing essentially in the moment of crisis in the organizational environment to permit the diffusion of knowledge in the team, provoking the attraction of talents wherever they are to the epicenter of the problem.

The human capital, represented by the tacit knowledge which the employees have constitutes the main competitive advantage of the organizations because this is difficult to be copied due to the fact that it exists in the people. On the others side, the knowledge detained by the organization is also result of the relationships it keeps over time with their clients, providers and partners. It is strongly defended the transference of knowledge, through face to face and narrative reunions, besides more structured ways.

The signs which convince the people that they can effectively communicate are better transmitted personally. Great part of the organizations work is done because the people are continuously asking one to the others, through informal networks, who knows how to do the work. The informal networks are dynamic and carry update information (DAVENPORT; PRUSAK, 1998 *apud* ZIVIANI et al., 2008)

The network is, precisely, the context in which the individuals interact and accumulate their knowledge, constituting dynamic process of sharing (ISSBERNER, 2008). It is know that to the knowledge be shared among humans, it is necessary to

make use of words and symbols and other elements characteristic of the language, and this is as in the case of the most simple knowledge as the knowledge more prepared as the one sported by experts of a determined scientific area (LOYOLA; ALVARENGA, 2009).

Cunha, Ribeiro and Pereira (2009) consider the learning networks as a necessary condition to a collaborative, democratic and social management. Such condition requires a configuration which potentiates the interchange of data and information articulating the cognitive processes, individual or organizational, through technologies of networks and information. The virtual social networks work through the social interaction, searching to connect people and provide their communication and, therefore, they may be used to forge social relations.

Woida and Valentim (2008) understand that the information and communication technologies are constituted in a tool which permits and facilitates the performance and fulfillment of part of the tasks exercised by the people in the organizational environment, acting in different segments and environments of the organizations, and having as principle to improve the access and the use of information and knowledge.

The authors still point out that, besides the advance of the information and communication technologies and of the expressive reduction of their limitations, they still depend directly on the action of people, seen that only the individuals accomplish the creative processes of knowledge. This means that the cognitive processes are inherent to people. While the information and communication technologies are insuperable in quantitative questions, the people occupy the main post as creators of knowledge.

Silva and Gomes (2008) propose some actions to reduce the barriers to the process of transference of knowledge in the organizations, such as: development of automated system of information to manage the flow of internal and external information defendant by companies, to improve the communication between them, for example, an intranet or corporative portal; the development of a data base; besides the provision of services and products generated by the researchers/employees and their respective performing areas.

In the social perspective of the knowledge management, Szabó and Silva (2009) searched to reflect and witness the use of the cyberspace by some social movements for the articulation of ideas and actions to the construction of a more fair, conscious and balanced society. Although the use of the internet to this proposal is still emerging, it is believed that there it resides the potential of contribution of the cyberspace and of the collective intelligence to the Knowledge Society.

Strengthening what the authors have been disseminating about the initiatives of knowledge socialization promoting, Wersig (1993) understands that the individual or group, in the state of need and providing of external knowledge have to be considered as a system of actions, in which the activities of information should be incorporated in a context very wide whose involvement between the participants is characterized by the strong sense of citizenship.

4 METHODOLOGICAL PROCEDURES

Continuing the development of the research they were defined the methodological procedures which made it possible its accomplishment.

4.1 Characterization of the Analyzed Document

The ENANCIB is considered the biggest scientific event of the area, because it reunites renowned researchers, and students from the program of post-degree in IC from several institutions of the country. The ENANCIB is a scientific event organized by *Associação Nacional de Pesquisa e Pós-Graduação em Ciência da Informação* (ANCIB), produces the Annals, considered gray literature all that is produced in the academic scope, with the participation of students and teachers, as well as the researchers.

The ANCIB is a nonprofit association, in activity since June, 1989, created from the initiative of some Courses and Programs of Post-Degree in the Information Science (IS) area; it has as members the brazilian Programs of Post-Degree in

Information Science, as well as individual partners (teachers, researchers, students from post-degree and graduates from the programs).

The gray literature is defined by Santos and Ribeiro (2003), as a kind of literature which is not acquired through the formal channels (bookstores). These documents possibly will not be published in a formal way, although they have information of interest to a reasonable number of people. Población (1992), focusing about gray literature theme, states that these documents are transparent fugitives (which are not seen in the editor catalogues, bookstores, libraries, etc) of difficult finding, and that, most of the times, contain relevant data.

In this context of understanding, the communications in annals of event coming from sponsoring associations and generators of scientific production are fit in the concepts presented. This way, in Brazil, the ENANCIB is considered the biggest scientific event of the Information Science area which reunites renowned researchers and students from the post-degree programs in IS, from several institutions of the country.

The nine Work Groups which compose the ENANCIB constitute an instance of discussion and of network formation and experience and knowledge sharing, disseminated by scientific communication. "The Work Groups is a way to promote the alteration of the isolation among the Brazilian researchers, permitting dialogue, opportunity of debate and stimulus to the reflection" (MARTELETO; LARA, 2008, p.10).

4.2 Research Characterization

The research is characterized about the delineating, as exploratory and descriptive study, and about the nature, as research of qualitative and quantitative approach. It aimed to describe the categories which identified the theoretical focuses of the KM, defined as bibliographic study of documental and field character, with the intention to analyze the scientific production.

The scientific production generated by a researcher of any area, needs to have a social commitment, to be known and useful to the academic community and

the society in general. Lourenço (1997 *apud* PAIVA; DUARTE, 2004, p.42) consider the scientific productions as:

[...] all the documental production about a determined topic of interest to a scientific specific community, which contributes to the development of the science and to the opening of new research horizons, not being important the support on which it is.

Therefore, from then on, it is possible to realize that the research is an endless process, something procedural, considering that actually it will always exist something to be discovered. The important is that the results of the researches are disclosed in order to maintain the progress of the Science with the generation of new knowledge.

4.3 Definition of the Analysis Corpus

The research involves the “enabling contexts” surrounding the ENANCIB. For the definition of the analysis units, we adopted as criteria of selection the latest articles published during the period of 2008/2009, and which deal with the KM theme, characterizing the sample as intentional. To the selection of the articles in the collection, they read the titles, the key-words and the abstracts to identify relevant writers.

To the field collection, in the “enabling context” on which ENANCIB was accomplished in the year of 2009, we applied a questionnaire with open questions, on which we require the informants, the researchers who presented their reports, to identify themselves with their signatures, motivated by the intention to raise a theoretical referential in the environment of exhibition and discussion of the research reports. Considering the characteristic succinct of the answers given to the focused questions, we decided to analyze them inserting them to context of results, elaborating the theoretical founding in accordance with the authors who produced the texts about KM in the Annals of the period 2008/09.

4.4 Instrument of Data Collection

The data collected in forms previously prepared, contemplating the categories defined during the phase of research planning, were organized and analyzed focusing on the methodology qualitative/quantitative, which, as research exercise, allow to the researcher to propose new focuses to be researched. This search is closely related to a constant effort to interpret the human reality and to get closer to it. To one part of the data, they were adopted simple statistic calculations.

In order to create opportunities for data in real time, it was applied a questionnaire with the participants of the WG-4 of the ENANCIB, and who presented work during the event of 2009, accomplished in the João Pessoa city, Paraíba state. In that moment they were approached questions about the insertion and the evolution of the KM in the WG-4, to the role of people in the KM and to the role of the IT tools in the KM.

5 RESULTS

To collect the data, it was necessary the participation of all the members involved in the research in the X ENANCIB. We made an approach *in loco*, what means, in the room of presentation of work from WG-4, where we applied a questionnaire to the presenters of work with some questions related to the objectives of the research, which permitted to obtain the necessary information in an “enabling context”, named by Nonaka and Takeuchi (2007) from “Ba”.

The results here presented are referred to the characterization of the articles produced in the Annals of the ENANCIB 2008/2009 and to the results referring to the information provided by the researchers in the questionnaire applied during the ENANCIB 2009 accomplishment.

5.1 Results Referring to the Characterization of the Works Published in the WGs about KM, in 2008 and 2009

To the data collection, it was prepared a spreadsheet (Frames 1 and 2), whose content covered information such as: authorship and articles title, institution of

author's origin, focus of the approaches and the Work Groups which is inserted in the ENANCIB.

a) Results referring to the year 2008:

AUTHOR	TITLE	ORIGIN	APPROACH FOCUS	WG
V. Brusamolin	Narrative of histories in the organizational learning	UNB	Organizational learning	4
E. N. Duarte, A. K. A. da Silva, A. C. Machado, D. H. da S. Moreno, I. G. S. C. de Oliveira	Informational learning through sharing of knowledge between teachers	UFPB	Informational learning. Sharing of knowledge: teachers Competences of the librarian.	4
L. M. Woida, M. L. P. Valentim	Informational culture turned to the process of competitive organizational intelligence in the sector of shoes of São Paulo	UNESP/ Marília	Informational culture. Organizational competitive intelligence. Sector of shoes from São Paulo. Business information. TICs.	4
F. Ziviani, J. L. R. de Oliveira, M. A. T. Ferreira, S. Cristina	Formal and informal strategies of information and knowledge sharing in the production of scientific researches	UFMG	Information and knowledge sharing. Scientific researches.	4
I. M. A. Loureiro, S. Albagli	The role of the informational environment in the generation of knowledge and innovation	INMETRO/ IBICT	Technological information. Technical rules. Informational environment. Innovation environment. Conformity assessment.	5
C. V. da Silva, S. H. de A. Gomes	Process of transference of knowledge in the interaction university-company: the incubation program CDT/UnB	UnB/ UFG	Mechanisms of interaction university-company. Argument triple-propeller. Knowledge transference. Companies incubator – CDT/Unb.	7
L. S. Bufrem, J. S. de P. Pinto	Modeling practices to the socialization of knowledge	UFPR	Database. Information sharing. Information architecture.	2
M. I. Tomaél	Opportunities to the sharing of information in the environment P&D	UEL	Opportunities to share information. Sharing of information. Research and development (P&D)	5
L. R. Issberner	Information and knowledge to the development sustained in small communities: the	IBICT	Information and knowledge development sustainable. Network of territorial	5

	certification of products to alternative market		information. Learning and training.	
C. R. S. Barbalho, H. B. F. Rozados	Competences of the Brazilian librarian professional: the look of the system CFB/CRBs	UFAM/ UFRGS	Professional competence. Librarian. Project census of the librarian. Librarian registration. System CFB/CRBs,	6
TOTAL: 10 (TEM) WORKS SELECTED AND PRESENTED. WG-2: 1 / WG-4: 4 / WG-5: 3 / WG-6: 1 / e WG-7: 1				

Frame 1: Characterization of the Articles about KM Published in 2008.

Source: Annals of ENANCIB - 2008

b) Results referring to the year 2009:

AUTHOR	TITLE	ORIGIN	APPROACH FOCUS	WG
A. V. Oyola, L. Alvarenga	Mapping and representation of knowledge and ontologic modeling: an experience in the area of the sorghum culture	UFMG	Ontology. Ontologies construction. Acquisition of knowledge. Farm sector research.	2
R. A. S. Ramalho	Representation of knowledge and ontologies; interdisciplinary reflections	UFSCAR/ UNESP	Ontologies. Representation of knowledge. Organization of knowledge. Systems of representation. Semantic web.	2
I. Szabó, R. R. G. da Silva	Virtual communities of knowledge: information and collective intelligence in the cyberspace.	UFBA	Virtual communities, virtual communities of knowledge, cyberspace, collective intelligence.	3
V. Brusamolin, J. A. Vieira	Organizational speech: a proposal of process of informational management to speeches	UNB	Critical analysis of the speech. Speech analysis. Information management. Organizational memory. Knowledge management.	4
E. C. Alves, E. N. Duarte, A. K. A. da Silva, A. C. Machado	Knowledge of the teachers from the department of administration compatible to the contents of the management of information units: a mapping to formation of collaborative networks.	UFPB	Knowledge. Competences. Social network of cooperation.	4
H. P. de Moura, D. A. R. Mota, E. B. Pacheco	Process of adoption of a model of knowledge management in a technology company	UFPE/ UFPB	Knowledge management. Model of adoption. Models of deployment.	4
F. J. A. P. Cunha, N. M. Ribeiro, H. B. de B. Pereira	Learning processes and social networks: a study in the network InovarH-ba	UFB/ IFBA/ Univ. Est. Feira de Santana	Learning processes. Networks. InovarH-Ba.	4

S. Albagli, M. L. Maciel	New conditions of circulation and appropriation of information and knowledge: questions in the contemporary debate.	IBICT/ UFRJ	Production and circulation of information. Social appropriation. Intellectual property. Information regime.	5
TOTAL: 08 (OITO) WORKS SELECTED AND PRESENTED. WG-2: 2 / WG-3: 1 / WG-4: 4 / e WG-5: 1				

Frame 2: Characterization of the Articles about KM Published in 2009.

Source: Annals of ENANCIB - 2008

From the data exposed in the Frames 1 and 2, we realized that quantitatively there was a reduction of articles about the thematic from one year to another. However, among the ones which were selected, two of them referring to the year 2008, are specifically of approaches inherent to the knowledge management, such as: organizational learning, competitive intelligence, knowledge, sharing of information and competences. Among the articles from the year 2009, it is included one of them which deals with learning and network. Although these articles do not contain key-words related to the knowledge management they are related to the KM, for this reason they were considered as such.

About the authorship, almost all of them are from several authors and coming from institutions from many regions of the country. There was an incidence of articles about KM in several Works Groups of the ENANCIB, such as: WG-2, WG-3, WG-4, WG-5, WG-6 and WG-7, in a demonstration that the approaches are multiple and integrated to the information, therefore, they are not concentrated in the WG-4: information and knowledge management in the organizations, as shown in the Table 1.

5.2 Quantitative synthesis of the work incidences about KM in the WGs

To greater visualization and comprehension of the results we present a synthesis of the incidences of articles in the ENANCIBS of 2008 and 2009.

Table 1- Distribution of Articles about KM by Work Groups from ENANCIB

Work Groups	KM in the ENANCIB 2008	KM in the ENANCIB 2009	Total	%
WG-1	-	-	-	-
WG-2	1	2	3	16.6
WG-3	-	1	1	5.6
WG-4	4	4	8	44.4
WG-5	3	1	4	22.2
WG-6	1	-	1	5.6
WG-7	1	-	1	5.6
WG-8	-	-	-	-
WG-9	-	-	-	-
Total	10	8	18	100.0

Source: Annals of ENANCIBs – 2008 e 2009.

In an understandable and logical way it was expected that the work about KM would be concentrated in the WG-4. In an amazing way, we found that the members are diluted among the several WGs. In the WG-4, the focus is given to the *'Information and Knowledge Management in the Organizations'*, whose work focused in 44%. In the WG-5 *'Politic and Information Economy'* – a meaningful percentage (22,2%) fit, and 16,6% in the WG-2, corresponding to the *'Organization and Representation of Knowledge'*. In the WGs 3, 6, and 7, they were registered work with the same percentage of 5,6%.

The WG-2 contemplates on its menu the studies related to the processes, products and instruments of knowledge representation. The menu of the WG-5 include processes of generation, diffusion/sharing and use of information and knowledge, as well as intellectual property and access to information and to the knowledge and information, knowledge and innovation. Besides the focuses pointed out, in the menu of the WGs 3, 4, and 7 they are include work which deal with networks with distinct perspectives, what may provoke doubts in the less attentive researcher, in the moment of submission of work. Finally, for these reasons pointed the truth is that the approaches about the knowledge are contemplated in several WGs and they require a more specific analysis to the case.

5.3 About the Insertion of the KM in the WG-4

The formation of work groups in the ANCIB has been changing naturally along the years to follow the changes of the Information Science. The WG-4, before named “Management of Information Units” (OLIVEIRA, 2009), in the year 2008 was named “Information and Knowledge Management in the Organizations’. This change happened due to the evolution of studies about IM and KM in the organizations.

Considering this change, we decided to listen to the researchers about the acceptance of the insertion of the KM in the WG-4. Their answers, whose authorship originality we preserve in the listed, reason for which we required such written authorization, are presented in a faithful and complete way in the Frame 3.

Authors and their Respective Views about the Insertion of the KM in the WG-4
“I see in a very competent way, for the quality and exhibition of the work. In the first moment the work are directed to aspects of the Information Science theory and in the second moment they are presented work directed to the business scenery and in the third moment to the academic scope” (J. Echeveria Barrancos, 2009)
“Totally related and of great value to the researchers interested in this thematic” (S. A. Amaral, 2009)
“I think it is extremely positive to define the differences and interferences and relations between the IM and the KM” (M. R. Delaia, 2009)
“The insertion of the knowledge management is essential to the WG-4 due to the following aspects: a) In t he organizational environment, the knowledge is not always registered, what means, it exists in the organization, knowledge which was not converted into information and; b) To the organizational environment, the oral information is more important than the written or registered” (V. Brusamolin, 2009)
“ The insertion of the knowledge management in the scientific production of the WG-4 brought higher production and strengthened and spread the group” (W. S. Lemos, 2009)
“I believe that the Information Science should evaluate in a critical way this insertion, which brings concrete problems which are being dealt with in the new inadequate” (C. R. Montenegro, 2009)
“It has been growing along the latest work” (F. C. M. Pereira, 2009)
“Certainly it is important, but as I am from the WG-2 and I am here only to present a co-authoring work, I do not feel myself informed about the evolution historic of the WG-4 inside the ENANCIBs mentioned” (M. P. Manini, 2009)
“I believe that the theme is gradually being contemplated in the work of the WG. I say gradually for understanding that this is happening in a very timid way mainly due to the lack of definition of what KM is” (R. Garcia, 2009)

Frame 3 – Answers of the Researchers about the Insertion of KM in the WG-4.

Source – ENANCIBs – 2008 e 2009.

Among the 14 researchers/presenters of work in the WG-4 during the X ENANCIB, nine answered to the question, and the others justified the ignorance due to the lack of following of the WG-4.

When analyzing the answers contained in the Frame 3, we identified the acceptance of the KM in the WG-4 as construct of the Information Science theory. Its context presents marked relevance to the business and academic scenery as collaborator when it comes to the enlightenment of the approaches related to the IM and to the KM. In the organizational scope it is realized that it is given more emphasis to the oral information than to the registered one, even that it exists the knowledge which was not still converted into information (BRUSAMOLIN, 2009). This is a factor that should be assimilated by the managers as a warning and indication to its performance.

Among the several perceptions of the KM insertion, it is pointed out the one of Delaia (2009), when the author states that this contribution is a definer of differences, interferences and relations about the IM and KM. Face to conceptual conflicts about the IM and the KM, the WG-4 has contributed with the insertion of the KM, enabling discussions, clarifications, debates and concepts from the two kinds of management, contributing then to the growing of the Information Science in the perspective of the management. It is exactly what Lemos (2009) states, saying that this insertion comes to corroborate stating that this section came to strength and spread the group in a growing way, the one which is composed by scholars of the Information Science and other interdisciplinary sciences.

The understanding of Garcia (2009) points to the in definition by part of the WG to concept what is KM, what makes it impossible the contribution of other work which deals with the theme specifically in the WG-4.

The X ENANCIB favored the “Ba”, what means, the adequate environment to the reunion of people who share distinct thoughts, putting in practice the Knowledge Management along with the members of the academy. This way, we can experiment a healthy time to the Knowledge Management and the Information Science, supplanted by the theoretical contributions presented by the participants of the X ENANCIB, in the sense to realize the impacts of the KM insertion in the WG-4.

About the matter of lack of definition of the KM, the literature of the area registers this limitation and attributes the divergences of understanding of the expression Knowledge Management, considering its multiple facets and multidisciplinary views.

Nothing healthier to the Knowledge Management and to the Information Science, surrounding the ANCIB, than these theoretical contributions presented by the participants of the ENANCIB in the sense of facilitating the perception of the impacts of the KM insertion in the WG-4.

5.4 About the KM Evolution in the WGs

Authors and their Respective Views about the Evolution of the KM in the WG-4
"I notice that they are reducing quantitatively the work/research of this thematic. I also notice that the thematic is being inserted in other groups of work" (S. A. do Amaral, 2009)
"The evolution of the KM in the scientific production has shown itself present and constant through the diversity of work, directed to small, medium and big companies" (W. S. Lemos, 2009)
"The evolution is partial in my understanding, it should advance of the KM initiatives (as to do in the practice), and more articles about organizational intranets" (F. C. M. Pereira, 2009)
"The practical problems remain, but the concepts of this "Knowledge Management" do not answer [...] in a satisfactory way and then they appear as something repetitive" (C. R. M. de Lima, 2009)

Frame 3 – Answers of the Researchers about the Evolution of the KM in the WG-4.

Source – ENANCIBs – 2008 e 2009.

Among the 14 researchers/presenters of work in the WG-4 during the X ENANCIB, four answered the question and the others left it blank.

In the answers obtained, the researchers divided themselves between the approaches referring to incidence of work about KM and about the questions of practical order. It was realized that the work are been diluted among the WGs (AMARAL, 2009), that the approaches are directed to small, medium and big companies (LEMOS, 2009) and Pereira (2009) suggests that the approaches of the inter-organizational network be intensified. Among the observations of practical order, the KM should advance the initiatives of "how to do", because it was pointed out the permanence of problems on this order (LIMA, 2009).

These observations are considered contributions to the consolidation of the KM in the sense to intensify the applications in the environment of several kinds and organizational natures and to search to concentrate the researches which deal with KM in the WG-4 of the ENANCIB for that the discussions due to the event may be more productive and enriching.

5.5 Role of People in the KM

The authors who were contacted during the presentations of the work in the WG-4, to found the approach of the people's role in the KM, referred to the individuals as creators of demands in the organizations and to communication, as a way of sharing of information and knowledge (MANINI, 2009). In relation specifically to people, they manifested the belief that they are the responsible for the production of the live knowledge (LIMA, 2009) and are seen as authors (GARCIA, 2009), as sources of information and knowledge (DELAIA, 2009; BRUSAMOLIN, 2009; DUARTE, 2009) according to the literal information as follow:

"I understand the knowledge management in a metaphorical way, actually the people have the role to contribute to the establishment of an environment adequate to the creation and sharing of knowledge" (A. J. F. P. Sousa, 2009)
People:"are the main actors of this process, although the theme still lacks more concrete definition, it only makes sense if coupled to the action of the individual and in the achievement of his objectives" (R. Garcia, 2009)
"The practices of knowledge management in the organizations are still in the tacit level and therefore are totally "penalized". This means that the focus in the people is essential to understand them (M. das G. de P. Tavares, 2009)
"The people are the Center of all practice of the KM, because it is them who will share (or not) their knowledge, running [...] the KM processes" (D. A. R. Mota, 2009)
"I believe that the individuals are the main creators of demands relative to the problems and needs in the organizations. And are also developers of diagnosis" (M. P. Manini, 2009)
"The live knowledge in the organizations is being produced all the time. The communication between the people seems to be the biggest way to share and produce improvement and innovation" (C. R. M. de Lima, 2009)
"I believe that the people are the main source of information to the KM, therefore it should be stimulated the sharing of information in the organizational environments" (M. R. Delaia, 2009)
People: "Source of Knowledge" (V. Brusamolin, 2009)
"The people are the main actors of the KM because they are the responsible by the socialization of knowledge" (W. S. Lemos, 2009)

People: "Very important, once that they are the intrinsic elements from the studies of this thematic (S. A. do Amaral, 2009)

"The people have essential role in the KM, because they are them the main responsible for the contribution to the dissemination and sharing of information and knowledge between all the areas of an organization" (L. O. B. Duarte, 2009)

"I believe that the role of people is to generate wealth, making use of the intellectual capital and providing all the moment a productive chain of knowledge (constant learning)" (J. Echeverria Barrancos, 2009)

Frame 4: Answers of the Researchers about the Role of People in the KM

Source: ENANCIBs – 2008 e 2009.

The people were seen as the responsible for the creation, dissemination, socialization and sharing of knowledge (SOUSA, 2009) and as the center as all the practice of KM, because they are considered the main source of information to the KM (DELAIA, 2009), as intrinsic elements to the studies of this thematic. Therefore they have an essential role in the KM as generators of wealth (ECHEVERRIA BARRANCOS, 2009) and they make part of the intellectual capital in the organizations, confirming with what Probst et al. (2001, p.24) state about the knowledge – that it "is based in data and information, but, different from these ones, is always connected to people".

Sveiby (2001) proclaims that the knowledge has been interpreted both as an object and as a process. However, when interpreted as a process, it is being admitted that it resides in the people, in the ones who the investment should be done.

5.6 Role of the IT tools in the KM

About the use of tools of information technology in the Knowledge management, 100% of researchers (Frame 5) announced ratifying the relevance of its adoption but as support to the processes, in the sense to support and facilitate the capture, the obtaining, the collection, the treatment, the dissemination, the storing and the use of information (DUARTE, 2009), accelerating the circulation of information in the organizations and promoting the approach between the holders of knowledge and the ones who need knowledge.

<p>"They are support tools, once that nothing is made without the use of technology, mainly when we work with quantitative data" (S. A. do Amaral, 2009).</p>
<p>"They are important and essential." (A. J. F. P. Sousa, 2009)</p>
<p>"Challenging and totally interesting, seen that these tools will have to be interactive and of easy use aimed to stimulate the register of knowledge for people feel motivated to sharing" (C. R. Delaia, 2009)</p>
<p>"IT passes through the understanding of people, how they meet each other, make relationship, form sense with what is around them. Tools are only tools and to their functioning they need to have roots in the contexts and abilities of people" (M. das G. de P. Tavares, 2009)</p>
<p>"Interconnecting the holders of knowledge and people who need knowledge" (V. Brusamolin, 2009)</p>
<p>"It is about a very important support but it should not be expected that the technology accomplishes itself to the KM, something that in my opinion is the individual's task in the context of life and work" (R. Garcia, 2009)</p>
<p>"Supporting and evaluating in the decisions taking developing programs of management to increase the level of wealth in an organization" (J. Echeverria Barrancos, 2009)</p>
<p>"Facilitating the capture, obtaining, collection, treatment, dissemination, storing and use of information, the ones which are base and the means through what the knowledge management happens" (L. O. B. Duarte, 2009)</p>
<p>"The tools of IT exercise their role of support and assistance to the knowledge management" (W. S. Lemos, 2009)</p>
<p>"The tools of IT are interesting for making it possible distributed teams collaborating among themselves .However they are not exclusive in this pact: a picture or small course (lectures are as(or more) efficient as in certain aspects)" (D. A. R. Mota, 2009)</p>
<p>"Currently the role is essential as the existence/presence of the "new" informational and technological drawing is not only in the organizations but also in the common life" (M. P. Manini, 2009)</p>
<p>"Essential to the deployment of the KM initiatives, but it cannot be the center of the process, the IT is support!" (F. C. M. Manini, 2009)</p>
<p>"A normative approach of the organizational knowledge, which considers the knowledge only as an extern object to the individual I..I stored, manipulated and transferred through the TICs, it is not enough to create it and use it in the organizations. The TICs present limitations in the systematization of the tacit knowledge and they may also facilitate or inhibit the organizational learning. It is incorrect an interpretative approach of knowledge, that contextualize it rooted in the organizational practices providing the organizational change" (F. J. A. P. Cunha, 2009)</p>
<p>"The tools of IT accelerate the circulation of information in the organizations, facilitating also the communication between people" (C. R. M. de Lima, 2009)</p>

Frame 5: Answers of Researchers about the Role of Technology Tools in the KM.

Source: ENANCIBs – 2008 e 2009.

In the Frame 5, it was pointed out by Cunha, Ribeiro e Pereira (2009) informers of this work, that the TICs present limitations in the systematization of the tacit knowledge and also, they may facilitate or inhibit the organizational learning.

The IT was seen by Manini (2009) also as an apparatus of the presence of the “new” informational and technological drawing not only in the organizations but also in the common life. Probably, for this reason, it was pointed out that nothing is made without the use of the technology. The tools of the IT exercise the role of support and assistance to the Knowledge Management (LEMOS, 2009). They are important and essential in the sense to promote the development of programs of management, to increase the level of wealth in an organization (ECHEVERRIA BARRANCOS, 2009). This wealth is centered in the human capital and it is able to move and remove the tools of information technology.

Cunha, Ribeiro e Pereira (2009) pointed out that the TICs present limitations in the systematization of the tacit knowledge and also, they may facilitate or inhibit the organizational learning. However, in order for the information technologies to be adopted efficiently, they will have to be interactive and of easy use (DELAIA, 2009), they need to have roots in the contexts and in the abilities of people, but they cannot be the center of the process (MANINI, 2009). Besides this, it cannot be expected that the technology make the KM happens (GARCIA, 2009).

About the use of the IT in the organizations Silva and Gomes (2008) propose the development of the information system, intranet and the development of a database to facilitate the transfer of knowledge. Amaral (2009) asserts that nothing is done without the use of technology, mainly, when the work is about quantitative data.

About the use of the IT to the knowledge management, Sveiby (2001) warns to the organizations to search the correct conceptualization and application, avoiding this way, the investment to be done in a wrong way.

6 FINAL CONSIDERATIONS

The goal of this article was to find similar characteristics in the ways the organizations have worked the Knowledge management, in conformity with the reports of researches conveyed in the annals of the ENANCIB, falling in two possibilities of management – people and technology. For its attainment were raise data to the characterization of the articles published in the ENANCIB in the period of

2008/09, about the insertion of the KM in the WG-4, about the evolution of the KM in the WGs, the role of the people in the KM and the role of the tools of the IT in the KM.

The data revealed that there is an incidence of articles about the theme in several thematic groups of the ENANCIB, in a demonstration that the approaches of the KM are multiple and integrated to the information, once that the event deals with Information Science.

In the moment to realize the impacts of the insertion of the KM in the WG-4, the researchers presented meaningful contributions to the Knowledge management and to the Information Science, surrounding ENANCIB. The theoretical contributions presented by the participants are considered essential to the consolidation of the KM, in the sense to intensify the applications in the environments of several kinds and organizational natures, and to concentrate the researches which approach the KM in the WG-4 of the ENANCIB, so that the discussions due to the event are more centralized, productive and enriching.

In the perception of the researchers/authors or paper presenters, here considered investigated, the people have essential role in the KM as wealth creators, while they are part of the intellectual capital of the organizations. The tools of IT exercise the role of support and assistance to the Knowledge Management and are important and essential, in the sense to promote the development of programs of management to increase the level of wealth in an organization.

Concluding the report of the research, according to the goal declared, it is inferred that the Knowledge Management has been spreading in a testimonial way, not only on the corridors of the organization but also in the “enabling context” promoted by the managers and researchers who produce the ENANCIB, adopting as central and defining characteristic the human capital and his interfaces with the IT and the Information Science.

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