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INFORMATION ARCHITECTURE: CASE STUDY

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Abstract: This paper main objective is to raise information and knowledge demands in an information technology consulting organization, aiming to prepare an information architecture project, where the information and knowledge management will contribute to the expected improvement. A descriptive research has been prepared, using an interview script that enabled to reach the desired goal. It was concluded that existing investments are isolated, without an effective planning that might allow the company to achieve results that would bring real improvements to it.

Keywords: Information Architecture, Knowledge Management, Information Management,

INTRODUCTION

It's clear in modern organizations the need of investment in information and knowledge management business that enables them to create, if not a differential, a condition to compete with greater force in the market where they operate. To Calof and Smith (2010), organizations must be aware of technological trends and employ efforts to best meet competitive edge.

According to Pessoa and Jamil (2012), organization managers, whether from strategic or information technology (IT) area, feel the importance of having investments in order to seek an improvement in the information and knowledge management. Barbosa and Nassif (2012, pp. 114) highlight the productivity paradox of information technology, since IT investments have not been utilized by organizations especially in the case of "facilitating creativity and exploration of ideas by employees or as a support resource for strategic planning and competitive intelligence activities. "

Davenport (1998) argues that organizations should develop their projects holistically, so that all sectors work in an integrated way in search of the desired differential. The author stresses that organizations should best think about their information and knowledge management

projects before considering investment in technology, what usually occurs in the opposite way.

In this context, the concept of Information Architecture (IA) is of great importance to assure that strategic decisions are taken in a more founded manner. IA facilitates organizations to organize the information in order to make it easily accessible and useful to the users. According to Wurman (1997), IA has emerged to organize data standards creating an information map that turns the complex clear. This gives the organization a competitive advantage, since decisions will become more effective through the use of accurate and easily accessible information.

Imbued with the thought of these authors, this research main objective is to raise the demands of information and knowledge in an IT organization, aiming to elaborate a planning project of information and knowledge management. Interviews were conducted with five professionals of the organization, from different areas, seeking to develop a diagnosis and propose possible solutions to deployment of AI Project, which will bring the benefit of qualifying the decision-making by offering more precise information to organization managers.

THEORETICAL FRAMEWORK

Information and Knowledge Management

Thinking strategically, managing information in organizations has become paramount to compete in a dynamic market like today's. Pereira (2008) draws attention to the expansion of vision, in information science studies. Today they focus more on understanding the personal, social or organizational situation. In the past, the focus was on the information systems. Ferreira (1995) calls this new perspective "perception approach" or "alternative approach". In this context, according to the author, the information will have meaning only when integrated to a context. The individual is seen as a person who has a whole range of previous knowledge (culture, beliefs and values, cognitive, affective and physiological needs) that interfere with the search for information that will lead to decision making (PEREIRA, 2008). The information then is an incomplete data to which individual assigns meaning from the intervention of his former previous "schemes". According to the author, the individual will always use "schemes" to try to solve his/her problems to the extent that permit no longer overcome identified obstacles, making them inoperative. It is clear, at this point, a cognitive

vacuum, where there is a lack of information to solve the problem and where the process of seeking for new information begins. It's up to the individual to identify the nature of this emptiness and define strategies to overcome the problem, what is not always a trivial thing.

Choo (2003, pp. 87) concludes that the search and use of information behavior can be predicted when it's known how this "user perceives his/her cognitive gaps and how he/she desires information to help him/her solve the problem situation." Consequently, Pereira (2008) states that information systems should be designed with flexibility to adapt to the process of seeking information by users.

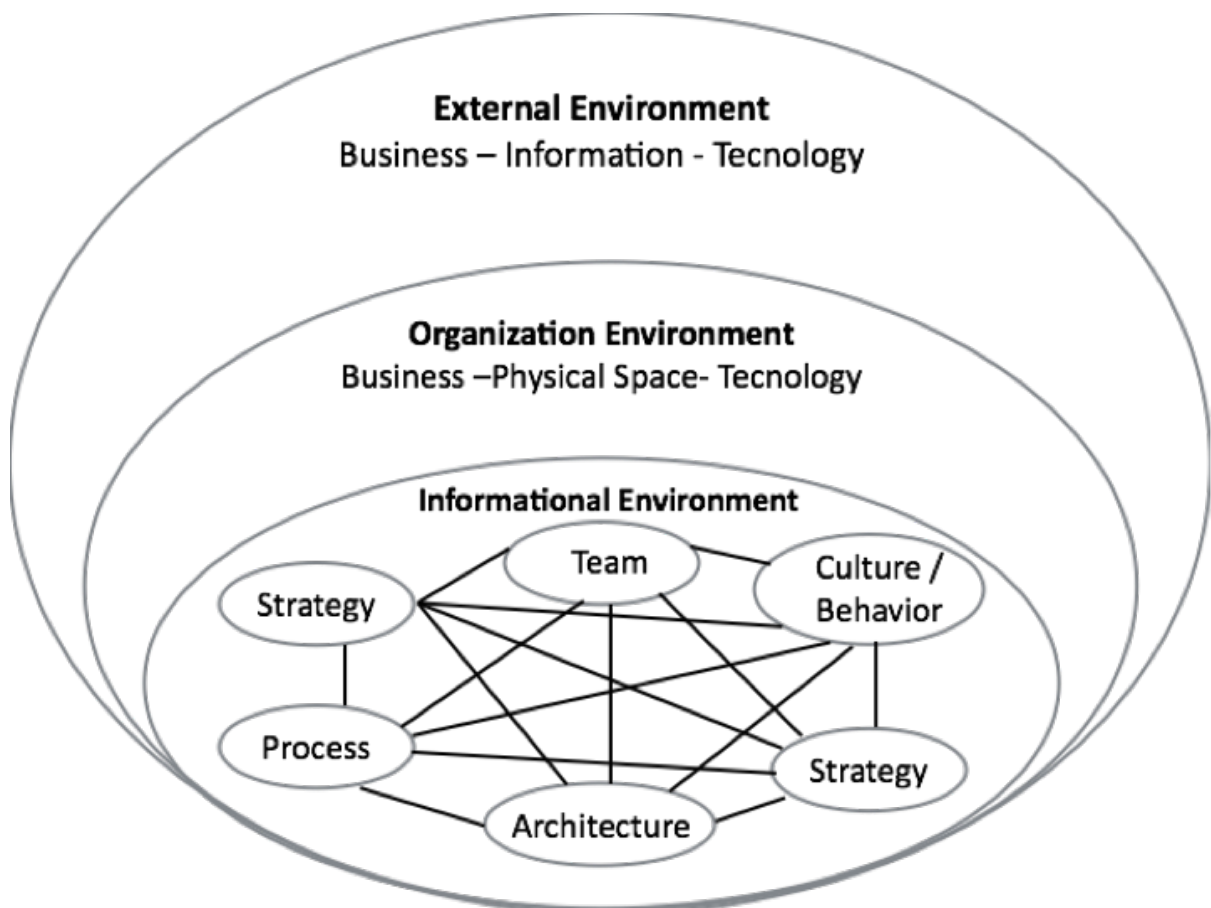
To Choo (2003, pp. 27), if organizations do not have a "clear understanding of the organizational and human processes by which information is transformed into perception, knowledge and action, organizations are not able to realize the importance of their sources and information technologies." The author highlights three areas where "the creation and use of information play a strategic role in the growth and adaptability", as follows:

- Creation of meaning - the creation of meaning seeks to give sense to organization external environment changes. According to the author, organizations live in a dynamic and uncertain world, must know how to identify these changes and react to them. For him if organizations can early realize the influences of the external environment, they will have a competitive advantage.
- Construction of new knowledge - in this context organizations create, organize and process information seeking to generate new knowledge. This will enable organizations to innovate in the creation of new products and services and/or even improve the existing ones. According to Choo (2003) there are two obstacles in the creation of new knowledge: the knowledge and experience are dispersed in the organization, concentrated on individuals or work units; and the great difficulty of "unlearn what they have learned in the past."
- Use of Information: In this third "arena" organizations will seek and evaluate information for decision making. According to the author, theoretically, all decisions should be made rationally, based on complete information and plausible alternatives. However, still according to the author, this does not occur in practice because there are clashes of interests, negotiations between interest groups, lack of information, among others.

Organizations that are able to integrate the processes of creating meaning, knowledge building and decision making can be considered a knowledge organization. According to Nassif, Caixeta and Ribeiro (2008) as well as Choo (2003), what will determine the success of organizations is the ability to develop an understanding of how to create, identify and use information.

To Davenport (1998), information management must occur in an integrated manner, which the author called Information Ecology, proposal that studies how a group from an organization affected by external trends, works with the information and think about it . The author divides organization environment into three distinct parts that must work in an integrated way, as an ecological environment, according to figure 1.

Figure 1: Ecological model for information management



Source: Davenport (1998, pp. 51.)

The informational environment, according to the author is the core of the ecological approach and is divided into six components:

- Information Strategy: Making explicit the "informational intent" makes the difference in a world filled with information. This strategy will revolve around the question "what do we want to do with organization information? And should involve senior management.
- Information Policy: critical component that involves the power given by information and direction responsibility for its management and use.
- Culture and behavior related to information: According to the author it is fundamental to share information and gain long lasting knowledge from it and this can not depend on each one's initiative. So in this component team behavior in relation to information shall be measured, whether it was good or bad.
- Information Team: According to the author team that handles information constitute "the best means to identify, categorize, filter, interpret and integrate information, not IT, but those who provide and interpret information. This team will work with the most valuable forms of information, organizational knowledge and the best working methods.
- Informational management processes – in this process it is seen how the work is done. An organization must have their information processes clear, like all other organization processes.
- Information Architecture: This component is a guide to structure and locate information within an organization.

The organizational environment is described by the author in three categories:

- Business situation: The information professionals should pay attention to strategy and business processes, organization structure and human resources orientation.
- Investment in technology: To the author if an organization focuses too much on technology it will expel information. The technology may limit the creativity of how to assemble and structure the information. Before acquiring technologies organization managers must evaluate which informational initiatives they will facilitate.
- Physical distribution: People's physical proximity facilitates information exchange and thus can positively affect organization's business.

For the author, the external environment is critical because it affects information and there is no effective control of the organization over it. It is divided into three components:

- Business Market: "affects organizations ability to acquire and manage information, as well as to choose the type of information they need."
- Technological Markets: Where organizations research, seek and acquire technologies that affect the informational world. It is important, after studying the organizations needs, to know what is available to solve technology problems efficiently.
- Information Markets: According to the author is where all things "from industrial trends to mailing" are traded. The use of information acquired in this environment becomes a challenge.

The transformation of information into knowledge is treated by many authors as Barreto (2007) who says that information flows move in two levels. On the first level, internal flows move among storage and information retrieval system elements and, finally, guide to their organization and control. On the second level, there are two extreme flows: on one side information enters the system to be treated and assimilated as knowledge by the receiver. At the opposite extreme there is a cognitive process that transforms information into knowledge. The place where information becomes knowledge is on the receiver consciousness, who must be able to receive them, internalize and then finally use them.

Information Architecture

The term Information Architecture (IA), according to some authors as Reis (2007), Lazzarin et al (2012), was created by Wurman in mid-1970 and was motivated by the explosion of information, derived from modern world, which created on users a gap between what should be understood and what should be understood.

According to Lazzarin et al (2012) the transformations derived from "information age" caused studies to be based on architecture traditional concepts "known as the art/technique to design and build environments and organized spaces." Then comes the need to study methods of organization in informational environments. According to the authors IA contemplates the intersection "user-content-context", being the focus to the user "needs, habits and behaviors in the process of information search and retrieval "; to the content "volume, shape, structure and how the information is presented"; and the context linked "to the objective of the website,

internal organization policy, technological constraints and other factors". IA projects shall be aware of the diversity of user profiles aiming to meet their expectations and needs, and the more diverse are these profiles, more complex will be information management.

According to Francke (2009) Information Architecture is a label used for a practice that intends to employ a user perspective. It is usually discussed when it comes to large databases, such as the WEB. According to the author, it involves people in a large number of practices and disciplines such as graphic design, information science, journalism, "usability engineering", marketing, user-computer interaction, among others. The author draws attention that IA in organizations should work as on project management, where involved people should create a friendly information environment that meets the project. Another important point is to work, which in architecture is called "wayfinding", which aims to guide users in unfamiliar environments. In the case of information systems this means organization, indexing, navigation schemes that will make the system more user-friendly. IA focus therefore is to facilitate the use of systems in complex databases.

According to Carvalho and Marar (2009) information architecture is "responsible for allowing user to find what he needs with the lowest number of interactions." To the author, due to lack of organization it is not useful to create large databases without having the possibility to find the information needed at the right time. The author cites Internet as an example, where some scholars claim that only 20% of its content is likely to be accessed. All due to the lack of integration between information retrieval tools and contempt or ignorance of the user who enters the information on the network and digital documents methods of registration that make the network inefficient in this sense.

According to Hinton (2009) IA is a kind of amalgam that will create boundaries and connections between information and a new design for information management environment. It is important to study in the context of IA how the various existing controls shall be, the informational contents and how to make them more friendly and usable.

Studies on IA show that most authors work the theme with studies focused on information management found in web environment. Kalbach (2009), studying uncertainty in information architecture, analyzes whether the general models of information search on the web can be applied in online information. The study shows that this occurs and it is interesting to take the concept of IA also in organizational environments where information can also be stored on a local basis, allowing its use in strategic decision making. For this it is interesting to study the

concepts of information and knowledge management, information representation and information retrieval systems. This whole process will cause IA to become effective within organizations. To Dias and Vidotti (2011), the deliverables of IA "are concrete instruments that allow information architects to formally outsource the results of their work about the construction of an informational environment ... and this environment may not necessarily be the WEB".

Information Representation

It is necessary to stress the importance of the representation of the information when in time to supply the SRI. According to Cesarino (1985), in order to obtain good results with SRIs, "user x machine" interaction is of paramount importance in order to minimize failures at recovery time. For the author, SRI efficiency depends on both the quality of conceptual analysis of documents as much as users questions about the same issues. Most failures happen in the omissions of content interpretation and on people's demand to whom the system is intended. This would lead, according to the author, to classification and indexing errors and therefore on the recovery of this information. For her, there is not a perfect representation language. What exists is one that best fits an SRI with certain characteristics. The greater the difference between users language and controlled language, the greater the chances of error.

According to Alvarenga (2003) represent means the "act of putting something in place of" and this representation is divided into primary, which would be the representation of the author's thought, when languages are used in the context of his/her production and communication of knowledge; and secondary that would be the knowledge records contained in documents that become part of collections, libraries, etc. This second representation, according to the author, seeks inclusion in SRI.

Alvarenga (2003) argues that this process of representation is a cognitive process. According to her "beings exposed to the process of knowledge ... integrate the essence of the field that philosophers call ontology". According to Capurro apud Alvarenga (2003) human beings are connoisseurs and observers of external reality. Thus the process of knowledge consists in assimilating things through representations on being's mind/brain. The perception, classification and knowledge creation is constructed through comparison between what is perceived and what was previously identified and already known, characterizing what the author calls classificatory/cognitive processes. According to Alvarenga (2003), in the process of treatment and processing of knowledge records for storage in SRI, a new stage of

representation is needed, that doesn't start from the ontological being itself, but from the knowledge expressed in documents (secondary representation), what is more linked to epistemology. This demands information professionals a more detailed content analysis of these documents, it is important, according to the author, to deepen their understanding of the relationships between the similarities and differences among all documentation knowledge and objects. Documents cannot be considered "only by Lexical units (words) contained in them."

Meadow (2003) lectures on various forms of knowledge representation showing how complex it can become this representation. In first analysis, he speaks of a binary representation, widely used by computers (0 and 1). However, he points out that this representation could also represent letters which would be the basis of texts or pixels which in this case would be the basis of a figure. In another aspect the author demonstrates the need for representation of meaning and content that would be the basis of what the author called entity. This entity, still according to the author, could be an event described in articles, a scene from a picture, a person who is being seen by a doctor. The complexity of the representation would depend on the context. The author cites as an example the doctor case, whose necessary observation attributes would be: name, date of birth, date of visit, blood type, the reported complaints, diagnosis etc. In the case of pictures these attributes could be very varied, as would depend on the perception of the person who would be analyzing the picture. Also according to Meadow (2003) a method which represents the content and nature of the relationships of attributes is the entity relationship model (Entity-Relationship Model / map). In this model the relationship is done by combining all instances involved.

Meadow (2003) also points out other representation models as:

- Controlled Language, which, he says, is used to facilitate the interpretation of texts by computers. Vocabulary is restricted seeking better understanding.
- Artificial Language: When, according to the author, the information that must be represented is limited in variations, may be represented in an extremely compact form, removing some content and making it very simplified.
- Codes, measures and "descriptors": According to the author, some information such as books, car colors, temperature of a patient, can be represented by symbols or a symbol set (like binary code) that facilitate the representation and help information recovery.

To Alvarenga (2003) the process of production, organization and retrieval of knowledge and information is divided into three stages:

- Prior to the entry of items in the SI. At this stage are included the successive instances of cognition, producers, cited authors, reviewers, editors;
- Stage that corresponds to the inclusion in the system. It is the moment when the document passes through the sieve of the information professional. According to the author, at this time there may be secondary representations as primary;

Stage post-enrollment. It when new cognition stage takes place, when there is user contact with the information, and there is new representation of documents.

The author draws attention to knowledge representation in modern times where technology has evolved greatly causing representation of knowledge to be not only primary document substitution by a cataloging information, as the document to be treated is not physically in another space, but on the proper medium that provides it materiality and still new ways to create indexes and conceptual structures are available. The goals of work in the electronic world are not restricted to create symbolic representations of a collection of documents, but to create new forms of hypertext and metadata writing, many of which will be extracted from the documents themselves and will constitute the access key for users (netizens). According to the author the "virtual" media is limited to secondary representations, also allowing primary representations (images) insertion, as it allows to store not only "codes" that will represent the objects, but allows store the object itself.

For Souza, Tudhope and Almeida (2010) information representation is of paramount importance in the field of information science issue, as it has the task of organizing and facilitating correct recovery of arised information, even in other fields, and this involves the creation of substitute epistemology and ontology. According to the authors many theories, processes and tools of information science are dependent on representations of the products, modeled through successive abstractions on the relevant characteristics of a chosen domain, or information obtained and processed over these and recorded in SI or documents. These representations are known, according to the authors, as KOS (Knowledge Organization Systems). KOS, according to the authors, is not new to librarians or biologists that already use for many centuries catalogs, bibliographic classification systems and taxonomies. But has received special attention in the present days as a result of Semantic Web that requires a more formalized and less ambiguous vocabulary. The KOS, according to the authors, involves all

kinds of methods for organizing information stimulating knowledge management. Includes models of classification and categorization that organizes the content into multiple levels creating index that give more details, controls several versions with key information, thus facilitating access. Includes highly structured vocabularies, such as thesauri, and less traditional models such as semantic networks and ontologies.

The authors present many KOS models created by authors such as Smith, Welty (2001), Lassila, McGuinness (2001), Obrst (2004), Daconta (2005), Guarino (2006), Bergman (2007), among others, that help in designing a system. But note that KOS can be designed for different purposes where the scope and extent of its applications should be different. This flexibility and variation of models has several features that allow the choice of a more appropriate model for the context in which the organization is.

Information Retrieval

There is often talk about in studies of information science relating to information retrieval (IR) and information retrieval systems (IRS). Cesarino (1985, pp. 157) defines SRI as "a set of consecutive operations performed to locate within a totality of information available, the ones that really relevant." To Meadow (2003) RI is to find the desired information in a "warehouse" of information or database. According to the author, a library is the best example of institution devoted to RI. According to Souza apud Barbosa and Bax (2013) an SRI should have a good acceptance rate in relation to the number of relevant documents retrieved and the precision not to recover unwanted documents.

Information retrieval is a much studied subject as it is vital at the time of decision making in organizations. For Maia and Cendon (2005) with migration of information related activities from printed to digital media, it is necessary to develop means that allow to "disseminate information in an easy and portable way, and which exceeds the physical environment." According to the authors the internet has played this role since its creation in the late 60s, early 70s, sharing information and allowing knowledge to be spread to distant parts of the globe.

For Lopes (2002) the access to large information retrieval systems, with the use of databases "a technique or set of rules to make the encounter between the question asked and the information stored in a database as possible."

According to Fidel apud Lopes (2002) a study on expert systems, whose function is to assist users in their database queries, showed that most are based on the text analysis and not on human search models, thus not relating to the search request.

Maia and Cendon (2005), describe the search process in the recovery system as follows:

- The user feels the need for information;
- The users will directed to an information retrieval system with a query based on their need;
- The system will compare the query with the representation of documents in the system;
- The system will return to the user the text, or texts that most satisfies the search need.

According to the authors the system considered efficient by the users is the one that has a high return rate on realized searches, i.e., that successfully solves the majority of searches. However, even if the skills of use of the systems, on the part of users, interfere much in information search, D'Alessandro et al apud Maia and Cendon (2005) add that other barriers, beyond individual skills, may contribute to the failure of the search, being: personal barriers related to personal characteristics, such as "do not like computers", "not interested" etc; access barriers based on the possibility to access computers (cost, physical location); and resources barriers that are related to information source ("not enough information", "information is not reliable" or "it is very difficult to find information.")

According to Cardoso (2004) and Ferneda and Dias (2013), the classical information retrieval systems are:

Boolean Model - In this model documents are represented by a set of indexing terms. The retrieved documents satisfy the logical query expressions, considering conventional Boolean expressions with logical connectives "and," or "and not ". Thus, only documents which index terms satisfy the boolean query are retrieved. In the case of a search "t1 and t2", all documents that were indexed by both terms will be retrieved. When using "t1 or t2", documents containing t1 and documents containing t2 are retrieved. If "not t1" is used, will be retrieved those which are not indexed by t1. According to Ferneda and Dias (2013), these terms can still be combined to obtain a more detailed or restricted search.

Vector Model (vector space) – in this document each element is represented by a vector and each element has a relevance (weight). In the same way a search will also be represented by

vector where each element will have its importance (weight). Thus at the time of recovery the similarity between the search expression and stored documents will be calculated. This similarity result will be responsible for documents that will be "shown" to the user who made the search in the system.

Probabilistic Model: This model, as the name says, deals with the search for information as a probabilistic process. The user, according to Ferneda and Days (2013), at the time of the search, expresses his need through a one or more terms expression. The system then, through probability calculations estimates for each document of the researched database a value that represents the possible result of query object. After this the user will already have in his hands the result of a first query and will be able to tick the chosen ones.

Beyond citing the classic information retrieval models, it is interesting to quote a model that seeks to solve problems related to a binary logic, where there is only an ambiguity of possible answers. According to Ferneda and Dias (2013) Aristotelian logic of thought is strong in western culture. In this way, a particular statement is true or false. According to the authors, in science truth and accuracy are closely linked. But the authors emphasize that this can, sometimes escape reality of a world where "truth and absolute precision exist only in extreme cases." For these cases fuzzy logic is used as method for search tools that can capture and operate with diversity, uncertainty and partial truths. This theory (fuzzy) states that the sets that exist in the real world but don't have precise limits. According to Ferneda and Dias (2013) "A fuzzy set is an undefined group of elements in which transition from non member element to set member element is gradual." This imprecision degree is what will "solve" whether an element is a member of the set or not. The search results will bring a number between zero and one with the percentage of the element belonging to the set.

Yi (2008) cites one of the main problems faced in organizations that seek to manage their information and knowledge, which is unstructured information. According to Laura Ramos, vice president of Forrester Research, unstructured data corresponds to something around 80% in organizations. This data includes emails, voice messages, presentations, videos, printed documents and forms. According to the author, people and organizations create islands of information and subsequently spend many resources to filter and find relevant information. Still according to the author, many researchers seek to improve the search for information

using methods that will improve the way information is stored. With the use of semantic relations, with ontologies that are based in concept it is possible to improve the search results.

It is important to emphasize that the choice of search system to be used will be the result of a prior research in the organization which will seek to understand the needs, culture and build a management model that will "describe" which tool best suits the organization.

METHODOLOGY

To conduct the survey a descriptive case study was taken. According to Yin,

"... The case study is a way to do empirical social research by investigating a current phenomenon within the context of real life, here the boundaries between the phenomenon and the context are not clearly defined and in the situation that multiple sources of evidence are used. " (YIN 2001, p 34-35).

To Schramm (1971) case study aims to clarify a decision or set of decisions, why were taken, how they were implemented and what results were obtained.

For Campomar (1991) a study of a case allows the discovery of what would not otherwise be found, being logical, and compares theories, models and other case studies.

Authors such as Strake (1995, 1998), Yin (2001) and Merriam (1988, 1998) share the point of view that the specificity of the case study is not focused on the types of research employed, but on the type of question that responds, which focus is on the specific. This research aimed to examine the need and use of information from the concepts of IA.

The researched organization operates in the area of telecommunications engineering consulting and services and network security. It has been chosen because works with consulting, what demands a large volume and quality of prior information, to elaborate an ideal solution for their customers.

Visits were made to the organization and followed an interview script with key professionals from varied áreas (Table 1) which are involved, directly or indirectly, with strategic decisions of the organization. The choice for several areas aimed to check varied points of view in respect of the issues researched and detect the real information needs on the part of professionals.

In these interviews we attempted to get to know the level of corporate knowledge in relation to their employees, how information is shared on day to day, existing tools to manage information and how the employees seek information that guides decision making.

TABLE 1: Sample survey

POST	Professional Area
Director	Administrative
Director	Financial
Director	Technical
Manager	Customer Service
Thecnical	Customer Support

After collected the responses, we carried out a qualitative analysis of them, seeking to meet the assumptions of the research, namely:

- a) what are the needs / demands of information identified - those that are common and those that are specific;
- b) what actions are suggested to the organization so that it has minimum contributions for managing information and knowledge?

PRESENTATION AND ANALYSIS OF DATA

From the perspective of IA, it was noticed that there is a major concern of managers in creating tools to organize the information to be worked in the organization's day to day. This reflects on the number of information systems that the organization has installed, each one to attend a specific demand of the organization. However there is no integration among these systems, turning information and knowledge management complex. It was not possible to observe, by users a difficulty in retrieving stored information. However it was noted that not all important information are in the existing systems.

Regarding the demand of information, we could see that, because it is a consulting organization linked to technology area, there is concern in documenting exisiting information on the technical and financial areas. However, these information are stored in an unstructured manner, sometimes in professionals local hardware, and is not done by all professionals in the organization. It was noted in the responses obtained about existing software, that many of them are used only in an attempt to document the necessary information for decision making. However it does not happen effectively for many reasons, such as lack of adequate training.

It is interesting to highlight the existence of a knowledge management project, although still incipient, in the technical area, through the use of a Wiki tool. This project arose from technical professionals demand to share the information about customer service processes.

The tool would have the goal of creating a collective knowledge construction, making future solutions more agile and of better quality. But this system is rarely supplied (even managed), so there isn't on the part of users, a better use of information.

Other systems detected are CRM (Customer Relationship Management) and ERP (Enterprise Resource Management), which curiously was cited only by two of the interviewed. It became clear in the responses collected that the sectors are concerned in solving the problems in an isolated way, not thinking in an integrated solution that would meet the organization in a holistic way.

In the technical area, due to organization's profile, there is a great demand for information and the need for management, because the professionals demand improvement in customer service. This sector is considered critical by all interviewed because organization's business depends on ever more efficient solutions for its customers.

Another sector with a large demand for knowledge is the administrative and financial. In this sector there is a concern with the information being used for organization's strategic decisions. However, they use a third-party organization to store and manage them, what from the perspective of information management and security is in no way advisable. It is advisable, therefore, to audit this outsourced services organization aiming to know how this storage is done and how confidentiality provided by them is maintained.

In the area of customers service, although there is a concern of their professionals regarding the information, systems are misused and a deeper study of the information cycle is necessary to detect the real needs for a possible solution. The existence of a system for this purpose does not guarantee that users feed and consequently effectively use information at the time of the customer service. Although there are fields for notes in the system, area professionals do not fill them properly. There is no information representation model that make data entering in a standardized manner that would facilitate information future recovery.

At commercial sector, it became evident the concern with prospecting, follow-up and management of the negotiations in progress. There is, in the organization, another system with this objective where opportunities register is done. But this system is only used on business meetings (Forecast) days, without effective actions planned in advance. These actions are outlined at the time meetings together with the team, but after commercial meetings they are

not accompanied by managers nor are their evolution registered by the commercial team. This makes the meeting tedious and ineffective.

CONCLUSION

Aiming the implementation of an IA that will bring improvement to organization's information and knowledge management, it is suggested a deeper study of information management cycle, where it would be important to detect each organization professional real need in his/her respective sector. This study would allow the interaction "user-content-context" and better understand users profiles and develop systems with focus on these users expectations and needs (LAZARIN et al,2012). It is important to choose an information system that integrates information that meet the organization's business demand in a holistic way.

Another extreme important factor is the work that must be carried out with professionals in the organization. It was possible to observe their resistance in feeding the existing systems with the performed services information, customer service experiences in the field and strategic information, such as, for example, commercial sector service. It is not effective investment in information systems and IA techniques without organization professionals commitment to use these systems in order to improve the group. In the absence of training, organization knowledge management is impaired, since information becomes unstructured, often stored only in emails, spreadsheets and texts. As quoted in Maia and Cendon (2005), barriers to development can come from professionals involved, being necessary, therefore, training in methods of information representation, tools for information retrieval and even in information storage systems with focus on their security. This means a cultural change, when it shall be shown everyone the importance of documenting the actions of those involved, as well as the use of information, which will assist in decisions.

For future work, it is suggested to apply the interview script on more organizations of the sector, bringing to IKM area a greater knowledge regarding the use of the concepts mentioned in organizations which focus is consulting and demand, in an effective way, the use of information not only for strategic decision making, but also in developing new solutions to their clients.

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