Design and Implement a sharing LAN library using Network-Attached Storage (NAS): a model for knowledge sharing in a special library

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Abstract

**Purpose**—This paper describes the Design and Implement a sharing LAN library using Network-Attached storage (NAS) as a tool for knowledge sharing in learning organization special libraries which may create new types of knowledge sharing environments. It is a model for Iranian Special Libraries to manage explicit knowledge in what is increasingly a digital age.

**Design/methodology/approach**—A single case study based at organization of educational research and programing special library in the Iran is explored to demonstrate how implement a sharing LAN library. It’s chosen for the empirical aspect of the study as there are no case studies available in the literature that illustrates this library. The Delphi technique was used to gather data from 8 participants.

**Findings**—special library has an important role in knowledge management, despite the increase in digital information provision. This paper report on sharing LAN library project, which run from May 2011 to October 2014. In particular it will consider the design and implementation process and how these elements have created a platform for managing the amount of information created explicit knowledge. The experience of the OERP special have developed in managing shared knowledge can be transferred to learning organizations elsewhere.

**Research limitations/implications** - The validation of the suggested method is based on a single case study. For future research, we suggest the implementation of the approach in different organizations.

**Practical implications**—NAS is shared storage on a network infrastructure Using this model in the absence of financial resource is a good choice For OERP. **Originality/value**—This LAN network structure stimulates the sharing knowledge in a learning organization and facilitates the flow of knowledge and the creative process. This paper’s originality is in constructing a conceptual framework or model for knowledge sharing within the architectural organization. This paper is valuable to any architectural practice that aims to protect its reputation, improve its performance and increase its innovative knowledge base.

Keywords: Knowledge Management, Learning organizations, Knowledge Sharing, Social Constructivism, Organization For Educational RESEARCH And Planning (OERP), Network-Attached storage (NAS), special library, explicit knowledge.
INTRODUCTION

One of the 21st century organizations are learning organizations. Suveatwatanakul stated learning organizations has a capability to learn so as to create a sustainable competitive advantage. This capability is seemingly developed through the three stages of knowledge acquisition, knowledge sharing and knowledge utilization (Dibella, Nevis, & Gould, 1996). In fact after individual members learn and acquire new knowledge, the whole organization can only benefit if the knowledge is transferred to, or shared with other members within or between employees. Kim (2007) declared that Knowledge is a critical organizational resource that provides a sustainable competitive advantage in a competitive and dynamic economy (Davenport & Prusak, 1998; Foss & Pedersen, 2002; Grant, 1996; Spender & Grant, 1996). Organizations are striving to capitalize on their knowledge assets through effective knowledge management strategies and practices. Making knowledge available to the right people at the right time is crucial for building and sustaining an organization’s competencies (Alazmi & Zairi, 2003). Therefore knowledge management efforts overlap with organizational learning and may be distinguished from that by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the sharing of knowledge (Maier, 2007). As such Wang & Noe (2010) stated knowledge sharing is the fundamental means through which employees can contribute to Knowledge application, innovation, and ultimately the competitive advantage of the organization (Jackson, Chuang, Harden, Jiang, & Joseph, 2006). According to Rahab & Wahyuni (2013) Knowledge sharing is strongly associated with knowledge management, and Knowledge sharing has been recognized as a positive force for the survival of an organization. Knowledge sharing is the distribution of knowledge or what has been learned and it is this concept which is at the heart of the learning organization. Knowledge sharing has been identified by many as a key focal area of knowledge management (Davenport & Prusak, 1998; Dixon, 2000; Fullan, 2002). Thus, it becomes an important area of study for organizations. While the knowledge management literature has tended to focus on two dominant approaches of either technology centered or people-centered (Ardichvili, 2002; Gourlay, 2001), the conceptual as well as empirical Knowledge sharing is the process by which individuals make their knowledge available to others. Given the importance of knowledge sharing, this paper attempts to explore the design and implementation of a sharing LAN library in OERP special Library as a system which allows Participants in the organization to input explicit Knowledge into a local sharing library and makes it available to others and special library manage this system. This ability to enter many different types of data (text, sound, graphics, etc.) is viewed by the entire organization as knowledge sharing activity in learning organization and facilitate by NAS library to manage knowledge.

Problem Statement
Organizations live in an overflow of information, both internally and externally produced. Ability to maintain an organizational memory through which to share knowledge and facilitate organizational learning is a core capability for any organization (Widén-Wulff & Suomi, 2003). Especially important this is however for organization, such as OERP where Individuals in organizations have created and shared knowledge and therefore knowledge sharing was...
considered to be a natural function of workplaces, this activity took place automatically, so organization must facilitate this activity and manage it. In fact along with the global economic and information age urges, libraries to adopt knowledge sharing in order to enhance knowledge creation. Library as a knowledge management place in organization the same as other organizations, through knowledge sharing, can accelerate the process of knowledge creation and reuse of knowledge.

OERP organization in the context of k-12 education, is considered as knowledge based organization due to the role as a learning organization and of knowledge development and management. The OERP special library is supporting educational knowledge acquisition and dissemination in the organization. It did so in a way that emphasized safety, innovation, low cost, speed, and quality which suited to multilateral user’s needs is a sources of knowledge for the educational research and compile school textbook, educational media specials and publications in educational field. The parent organization have 5 faraway buildings. The personnel are generally stationed in main building and faraway building are located in a district. The special library located in main building. The library along with delivering information services to researchers, and library patrons, try in updating and delivering digital services, too so it needs a network for expert to share their explicit knowledge among educational experts, which would enhance the capability and quality of research and compile school textbook undertaken by the OERP. Carmen et al. (2011) stated that employees need to feel, identified with, and involved in the particular social organization for them to share their knowledge. Therefore, some department conduct formal knowledge sharing, which means that the activity has become a part of the library management policies? Zack (1999) states To remain competitive it is necessary for organizations to efficiently and effectively create, locate, capture and share their organization’s knowledge and expertise whilst he argues necessitates to make explicit and store for distribution and reuse. As a Special Library being the nucleus of its organization has advantages to provide access to information, to affect the existing knowledge of members. There is valuable content that employees or members provide. Thus, organizations must promote knowledge sharing in order to enhance the knowledge base and to gain competitive advantages and knowledge sharing has been an increasingly important research topic in information systems. This paper aims to design and implement a network local sharing library for knowledge sharing in OERP organization. The LAN network enables knowledge exchange. And individuals are able to to acquire knowledge for resolving problems at work.

**Methods of the Study**
As the study aimed to explore ‘how’ the organization uniquely developed a local sharing library, and the researcher did not always have control over events, the case study approach was particularly appropriate. Thus the method for this research was case study. In 2008 The Delphi technique was used to gather data from 8 participants (3 technical and 2 librarian and 3 managers) to find best solution and, make rules and regulation and policy development also according to Campbell (2004) the best learning occurs in the middle of social interaction. The adoption of a constructivist approach in a technology-rich environment, promotes the full potential of technologies in producing and disseminating resources. Though budgets are limited and existence of several buildings in OERP which are far from the main organization building,
availability resources, storage and backup needs are vital aim of library also to store ever-increasing amounts of critical data and protect that information against loss. So the library try to make knowledge in a way to be available.

According to Delphi technique, the LAN solution is chosen as a service in organization to easy speed, cost and the amount of data in educational resources in any format such as pdf, word, power point presentation and mp3 to share in a local library. Network attached storage (NAS) products can help organization centralize and back up all their files to one location, so that they have the freedom to access those files from anywhere, anytime. (Imbert, 2011). thus, there is knowledge sharing activity between OERP community of practice already initiated under NAS was founded in 2011 and is supported by the integrated system in ICT department as a place where all OERP community can share and develop their knowledge. a Seagate BlackArmor NAS 440 10TB-12TB storage server were designed in local IP address. Hardware-based encryption keeps files secure, and the NAS device enables library to access and manage files over the Intranet. And library rules designed by library committee.

- create a storage strategy with certain goals
- Organization have developed a network strategy on network than those that have invested in developing a long-term plan
- creating a long-term storage refresh strategy
- increase efficiency and save time and money
- IT and library department assess the current situation (access rates, OERP’s policy, data protection need),
- Provide a roadmap to guide investments in infrastructure, operations and people.

The first objective of this paper is to implement a local LAN library as a model for Iranian special library

The second is how to manage explicit knowledge in that LAN library

The questions focused on specific elements of the case.
(1) What is the suitable LAN solution for OERP?
(2) What is the policy for sharing knowledge?
(3) How Experts could share their knowledge?
(4) What is the special library role to manage and organize the shared knowledge?

Theoretical Framework

Knowledge, knowledge management in organization

Knowledge is the intellectual capital of the organization which affects its advancement. Semertzaki (2012) notes “knowledge is like light: weightless and intangible, it can easily travel the world, enlightening the lives of people everywhere” (World Bank, 1998-1999). Knowledge is a familiarity, awareness or understanding of someone or something,
such as facts, information, descriptions, or skills, which is acquired through experience or
education by perceiving, discovering, or learning. Knowledge can be implicit (as with
practical skill or expertise) or explicit (as with the theoretical understanding of a subject.
(Oxford, 2014). Chindgren (2008) declared the concept of knowledge has been explored and
defined by a number of researchers, Nonaka (1994) defines knowledge as “justified true
belief” or according to Nonaka and Takeuchi (1995), knowledge is “a dynamic human
process of justifying personal belief toward the truth” Davenport and Prusak (1998)
conferred knowledge a working definition: “a fluid mix of framed experiences, values,
contextual information, and expert insight that provides a framework for evaluating and
incorporating new experiences and information” The most popular division is putting
knowledge into two categories, namely, explicit and tacit knowledge (Nonaka & Takeuchi,
acquired and retained through study and experience”. Paul & Wang (2007) declared there are
much taxonomy that specify various kinds of knowledge. The most fundamental distinction
is between “tacit” and “explicit” knowledge. Tacit knowledge inhabits the minds of people
and is (depending on one’s interpretation either impossible, or difficult, to articulate. Most
knowledge is initially tacit in nature; it is laboriously developed over a long period of time
through trial and error, and it is underutilized because “the organization does not know what
it knows”. Also Karl Mannheim’s perspective take from the traditional, cognitive view of
knowledge as a thing, to the collective performativity view of knowledge as socially
constructed (Heaton, Bergeron, Bertrand-Gastaldy, & Mercier, 2005) and continuously re-
produced and negotiated in interaction among members of a knowledge community. (Augier,
Shariq, & Vendelo, 2001). Knowledge must manage to be useful. The focus of Knowledge
management is Organizational Knowledge and treated as a valuable asset. It is regarded as
creating value from knowledge, information and people. Knowledge management In
business dictionary defined as Strategies and processes designed to identify, capture,
structure, value, leverage, and share an organization’s intellectual to enhance its
performance and competitiveness. It is based on two critical activities: (1) capture and
documentation of individual explicit and tacit knowledge, and (2) its dissemination within the organization. (Business dictionary, 2014). Semertzaki (2012) stated Knowledge management refers to the
procedures of creating, sharing, codifying, distributing, and learning, retrieving, using and
reusing knowledge to create new knowledge in a continuous circle. (St Clair, 2001). Knowledge
management is about using the brain power of an organization in a systematic
and organized manner in Order to achieve efficiencies, ensure competitive Advantage, and
management is not a new idea though it has become only recently widespread, it is
considered a central and a main process in organizations. There are contributions on creating
knowledge, Resources and Capabilities, Communication and Sharing Knowledge,
Knowledge Innovation and Human Resources. It is implied that ultimately organizations are
there to facilitate the acquisition, creation, transfer to exploit knowledge. That is as Wang &
Noe (2010) note organizations need to emphasize and more effectively exploit knowledge-
based resources that already exist within the organization (Damodaran & Olphert, 2000;
Davenport & Prusak, 1998; Spender & Grant, 1996).
Knowledge sharing and learning organization

As organizations move towards being learning organization. Knowledge and knowledge creation increasingly considered as the main elements for organization. Learning Organization that acquires knowledge and innovates fast enough to survive and thrive in a rapidly changing environment. business dictionary defined Learning organizations: (1) create a culture that encourages and supports continuous employee learning, critical thinking, and risk taking with new ideas, (2) allow mistakes, and value employee contributions, (3) learn from experience and experiment, and (4) disseminate the new knowledge throughout the organization for incorporation into day-to-day activities.(business dictionary, 2014). According to Garvin (1993) “A learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.” Another well-known definition, provided by David Skyrme has developed the following definition: “Learning organizations are those that have in place systems, mechanisms and processes, that are used to continually enhance their capabilities and those who work with it or for it, to achieve sustainable objectives - for themselves and the communities in which they participate.” They draw out the following important points to note about learning organizations: they are adaptive to their external environment, continually enhance their capability to change and adapt, develop collective as well as individual learning and use the results of learning to achieve better results. (David Skyrme Associates, 2003). Many scholars have attempted to explain the necessity of sharing knowledge in an organization. Hong and Kuo (1999) suggested that learning through sharing becomes the operational core of knowledge management. Thus, an organization may develop important characteristics of a learning organization if it has placed great emphasis on learning through sharing. learning from the experiences of others is one way of developing learning organizations. Through this process, human knowledge, which is more implicit becomes more explicit and shared and, through this sharing its power to add value to the organization grows exponentially. So organizational learning is one of the important ways in which the organization can sustainably improve its utilization of knowledge. Kharabsheh (2007) proposes that there is a positive relation between learning orientation, market orientation, absorptive capacity and knowledge sharing an organization that makes it competitive. Serban (2002) stated that the process of knowledge management is knowledge sharing. Knowledge Sharing is an activity through which knowledge (i.e., information, skills, or expertise) is exchanged among people, friends, families, communities, or organizations (Bukowitz, 1999). In fact as organizations grow in size, geographical scope, and complexity, knowledge sharing is crucial because it helps organizations promote best practices and reduce redundant learning cycles (Hanse, 2002; McDermott & O’Dell, 2001). Also, there is growing realization that knowledge sharing is critical to knowledge creation, organizational learning, and performance achievement (Bartol & Srivastava, 2002 cited in kim, 2007). The purpose of knowledge sharing is knowledge generation that helps sustain organizations in a competitive learning organization. Knowledge sharing is the process where individuals mutually exchange their (implicit and explicit) knowledge and jointly create new knowledge. Ardichvili and his colleagues (2003) note that knowledge sharing consists of both the supply of new knowledge and the demand for new knowledge. In general, several definitions of knowledge sharing are provided by different resources. For example, Bartol and Srivastava (2002) define knowledge sharing as a process during which the employees defuse their knowledge and information across their organization in
a way through which people exchange their knowledge (implicit and explicit) jointly and create new common knowledge. According to Wahlroos (2010), knowledge sharing encompasses two processes: knowledge donating and collecting knowledge. Knowledge donating is the communication with others in the field of intellectual capital, while the emphasis of knowledge collecting is on cooperation and partnership with others in order to share the collective intellectual capital. Thus, when employees share their knowledge with others, it is the process of knowledge donating and when they discover the experiences of others, knowledge collecting process takes place. (Wahlroos, 2010) Note that Knowledge sharing is the process by which individuals make their knowledge available to others. Knowledge sharing is an important mechanism that will turn individual knowledge into group organizational knowledge. Three aspects of knowledge sharing can be distinguished. Firstly, knowledge sharing is a process, and therefore involves a sequence of events, actions and activities, that evolve in time. Secondly, knowledge sharing asks for at least two parties or roles, played by individuals or groups: the role of bringing (offering, showing, teaching etc.) and the role of getting (acquiring, learning, etc.) knowledge. Thirdly, knowledge sharing is typified by the characteristics of knowledge that is shared. A closer interpretation of the third aspect of knowledge sharing, the fact that it concerns sharing knowledge, calls for an exploration of the terms knowledge and organizational knowledge.

Network technology infrastructure and knowledge sharing

One aspect of the sharing process is codification and sharing of information and knowledge using information technology. Knowledge sharing is conducted via some channels that act as connections between the partners of sharing and facilitate the transfer of knowledge from source to target. Therefore, the availability and of such channels may impact the success of knowledge sharing to some extent. Holtham and Courtney (1998) summarized four kinds of transmission channels which are informal or formal, personal or impersonal. Impersonal channels, are more effective for sharing knowledge that can be readily generalized to other contexts. Moreover, it enables people to conduct knowledge sharing conveniently and flexibly in terms of time and place. Knowledge Sharing and in the last few years, there has been a turn toward investigating knowledge sharing in network technology. A LAN community is defined as a group of individuals who communicate and build social relationships with each other via network-based technology (Rheingold, 1993). Hendriks (1999) defined Knowledge sharing has been identified as a phase in the process of knowledge management. At the same time that knowledge sharing is recognize as an important pillar in knowledge management. In particular, when information systems such as intranets, document management systems or groupware applications are introduced to support knowledge sharing, reports show that often the introduction of these systems does not result in significant improvements in knowledge sharing Hendriks concludes that ICT is an important instrument to share knowledge, but not the only or most prominent one (Hendriks, 1999)
Social constructivism and knowledge sharing

Social constructivism served as a framework for developing the Professionals. Chindgren (2008) stated Constructivism is the perspective that learning is a process of constructing meaning and building knowledge; it is how people make sense of their experience (Matthews 2002; Merriam & Caffarella, 1999). A social constructivist perspective recognizes that human beings require the assistance from others to learn. Candy (1991) adds that, “Becoming knowledgeable involves acquiring the symbolic meaning structures appropriate to one’s society, and, since knowledge is socially constructed, individual members of society may be able to add to or change the general pool of knowledge. Therefore, learning is seen as a process of actively constructing knowledge by integrating experiences together with the learners’ prior knowledge; the learner plays an active role in building his/her knowledge. Vygotsky (1978), the founder of social constructivism, emphasizes the importance of interaction with others such as peers, teachers, and parents in order to build knowledge. He also emphasizes the need for tools such as language and computers to mediate knowledge construction. Campbell (2004) argues that the best learning occurs in the middle of social interaction. The adoption of a constructivist approach in a technology-rich environment, promotes the full potential of technologies in producing and disseminating resources. Social constructivism, strongly influenced by Vygotsky's (1978) work, suggests that knowledge is first constructed in a social context and is then taken up by individuals. According to social constructivists, the process of sharing each person's point of view called collaborative elaboration (Meter & Stevens, 2000). Other constructivist scholars agree with this and hold that we make meanings through acting with each other and the environment. Knowledge is thus a product of humans and is a product of our social nature. Organizations are constructing their knowledge. Once a structure is in place it will take a major push from somewhere to change it. This underpins Fiol & Lyles (1985) contention that structure determines organizational learning and not vice versa and is seen to be integral to the challenging nature of a learning organization.

The approach to knowledge sharing explored in this paper will reflect an understanding that knowledge is embedded in and constructed from relationships and through sharing knowledge. With this framework, knowledge is recreated and reconstituted through dynamic, interactive, official activities. Weick (1995) emphasized that knowledge creation and, consequently, sharing is grounded in human agency, and that it emerges in a reflexive monitoring of the stream of experience. As such, it is an unfinished construction that must continually be sustained in the ongoing flow of human work and interaction.

Thus, Weick and Szulanski propose that knowledge sharing is a social, communicative, and decision-based process, and in order to understand the processes, all relevant social, cognitive, and communicative factors should be investigated. Knowledge is divided into two main types: tacit, explicit (Polanyi, 1966). Tacit knowledge is the most controversial type of knowledge since it is not easily visible and expressible, and, thus, it is hard to articulate with formal language. Explicit knowledge, on the other hand, is expressed in words and numbers, and is easily communicated and shared in the forms of hard data, scientific formulas, and codified procedures (Chindgren, 2008).
Background and Significance

In Online Dictionary for Library and Information Science special library defined a library established and funded by a commercial firm, private association, government agency, nonprofit organization, or special interest group to meet the information needs of its employees, members, or staff in accordance with the organization's mission and goals. The scope of the collection is usually limited to the interests of the host organization (Reitz, 2013). Semertzaki (2012) stated Characteristics of Special libraries are: adhere to the mission and goals of the parent organization. They are subject-oriented, they cover from one to a few related topics. They provide specialized and tailor-made services to fulfill the needs of the institution’s personnel. They provide the right information to the right people at the right time when there is a demand for specialized information. They apply the “just-for-you” model instead of the “one-fits-all” model other types of libraries do. They act as mediators and bridges which connect people together and people with information and knowledge. Mostly, they have to be aware of the tasks and activities of their organization. Special libraries have to reconsider their roles and services, to adapt to and adopt new and emerging technologies. They should experiment with innovative ideas to provide services that empower patrons. So it is library evident that there is a shift from information services to building the knowledge culture of the organization.

Organization for Educational Research and Planning or OERP, was founded in, 1979 and is a government affiliated, scientific, learning organization. It has qualitative and knowledge-based curricula consistent with the scientific and research findings, technological, national identity, Islamic and cultural values.

OERPs Responsibilities:
1. To research on the content of the education,
2. To study and develop simple methods for examinations and educational assessments,
3. To compile, edit and print textbooks,
4. To identify and provide educational tools and the list of standards for educational tools and equipment,
5. To run pure research on improving the quality and quantity of education,
6. To perform other responsibilities issued by the OERP Council (oerp, 2013)

Oerp special library was founded in 1978 and developed to support the mission and goals of OERP organization. It is education subject oriented and its collections and services are more targeted and specific to the needs of the clientele for supporting educational knowledge acquisition and dissemination in the OERP organization. It did so in a way that emphasized safety, innovation, low cost, speed, and quality which suited to multilateral user’s needs is a sources of knowledge for the educational research and compile school textbook, educational media and publications in educational field. The parent organization have 5 faraway building and the personnel are generally stationed in main building. Faraway building called oerp department are located in one district. The special library located in main building. The library along with delivering information services to researchers, and library patrons, try in updating and
delivering digital services, too. so it needs a network for expert to share knowledge and facilitate sharing knowledge.

THE TECHNOLOGY
The technology being used in this model is network-attached storage (NAS). Technopedia (2011) define Network attached storage (NAS) as a dedicated server, referred to as an appliance, used for file storage and sharing. NAS is a hard drive attached to a network, used for storage and accessed through an assigned network address. It acts as a server for file sharing but does not allow other services (like emails or authentication). It allows the addition of more storage space to available networks even when the system is shutdown during maintenance. NAS is a complete system designed for heavy network systems, which may be processing millions of transactions per minute. NAS provides a widely supported storage system for any organization requiring a reliable network system. Organizations looking for the best, reliable data storage methods, which can be managed and controlled with their established network systems, often choose network attached storage. NAS allows organizations and home computer networks to store and retrieve data in bulk amounts for an affordable price. (Janssen, 2011).

Network-attached storage is accessible directly on the local area network (LAN) through LAN protocols such as TCP/IP. (Fujitsu Siemens, 2009). A local area network (LAN) is a computer network that interconnects computers in a limited area such as a home, school, computer laboratory, or office building using network media (Donahue, 2007). According to Wang (2013) NAS is file-level computer data storage connected to a computer network providing data access to a heterogeneous group of clients. As of 2010 NAS devices are gaining popularity, as a convenient method of sharing files among multiple computers. Potential benefits of network-attached storage, compared to file servers, include faster data access, easier administration, and simple configuration. Network-attached storage removes the responsibility of file serving from other servers on the network. They typically provide access to files using network file sharing protocols. So a NAS the focus is placed on the network functions and many users consider it a lower-cost alternative. The wide proliferation of NAS, IP storage technology for accessing storage systems, offers enterprises of all sizes the option of economically setting up and operating efficient and reliable storage networks. Enterprises can now use their existing IP technologies and IP-trained personnel to provide and operate their storage networks. IP-based storage technology make it significantly simpler and more cost-effective to achieve the desired storage consolidation results. (Fujitsu Siemens, 2009)

The model
The model used in this sharing LAN library use network-attached storage (NAS) device as shown in figure 1.
Environment

**Figure 1. Sharing LAN library**

This sharing LAN library stand on four pillars: user, policy, content and service which are foundation of this kind of sharing library. Users defined as all the person work in organization and can use the LAN intranet by accessing the local IP address. The OERP special library develop a policy for sharing and access to shared knowledge. The content and resources are those which share by user and some services such as SDI and alert system used to inform the user about new sources and shared knowledge.

<table>
<thead>
<tr>
<th>User</th>
<th>All the employees and manager counsellor in OERP organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Free Access to LAN and share their file but couldn’t delete anything</td>
</tr>
<tr>
<td>Content</td>
<td>All the file shared</td>
</tr>
<tr>
<td>Services</td>
<td>A small digital library-SDI</td>
</tr>
</tbody>
</table>
System architecture

System architecture is based on NAS typology and IP-based storage technology. It center define IP address and make a repository by the name “digital library” and some repository for oerp department the name of department such as” tve” and other department and a public “ folder “. ever one in organization enter by IP address and share the file there . Shared file could be copy but could not delete or change name for security and accessibility to others.

The OERP special library has the responsibility to manage this called LAN sharing library . and develop a policy to make all shared knowledge available to others and in this library all the society shared their explicit knowledge most of them are resources and some other individual experienced document and organization document and etc. is put in this location by LAN IP in a digital folder.

![System architecture Diagram](image)

Figure 2. System architecture

Procedure

After the organization settled NAS, oerp special library arrange folders . sharing LAN library plan to organize the shared material and manage the organization knowledge. which Stored in a file system, this file has been located in a collection of files (a directory), called “public” for example

1. The storage device divided in main folders
2. The main folders have its folder name with a special location for oerp department same as the oerp department like “tve ”file as a local name and a “public” file.

3. In public file all the employee have their own file and every department put their file in that file location by using as an example a single user file containing a presentation slide image or a user’s document preserved between editing sessions in a file. Uniquely naming the user’s file requires listing its name and its ancestor directories’ names, “/eini/research file” in the example. As a side effect of its creation, “eini file” is labeled with such attributes as the date of its creation and the amount of storage used by its contents.

4. Make a “DIGITAL LIBRARY” folder. Digital library category was a file to organize shared knowledge. Among all shared knowledge there was resources such as books, articles and other resources which were shared by some of the employee in order to be used by others. because the number of resources were grow every day the resources must organize in a way that easily retrieve on time so the librarian make 10 file category based in Dewey classification in digital library folder in order to find the resource easily and organize it by society information needs and put the shared material in this 10 files. Whenever a new shared item add to folder, the librarian make it available to society and inform the society by mail or official automation system Current Awareness Service [CAS] and Selective Dissemination of Information [SDI]. another classification is based on the subject and the format of shared item such as educational slide for compiler and educational film and some official document has a file name in the library. no one could delete the digital library file only librarian could change and manage this location.
Figure 3. digital folders- sharing LAN libraryNAS storage

Conclusion

Knowledge Management is considered a dynamic function in organizational development and. Since the 1990s when the term was introduced, knowledge management is expanded in organizations. And Special Libraries Of organizations are in a strategic position to be key in this
field. the use of IT, as a tool for supporting knowledge management process knowledge sharing is recognize as an important pillar in knowledge management. NAS is shared storage on a network infrastructure Using this model in the absence of financial resource is a good choice for OERP. This LAN network structure stimulates the sharing knowledge in a learning organization and facilitates the flow of knowledge and the creative process. Therefore, it can be concluded that the availability of technological tools to support knowledge management is linked with technological development of the sector. In other to answer the questions the library design and implement a sharing LAN library.

The suitable LAN solution for OERP
Technology has revolutionized the way we work and the way information is created and distributed has transformed. With the exponential growth in the amount of information created by the digital age, storing, classifying, accessing, and sharing efficiently this information has increasingly become a challenge. NAS helps solve the problem of multiple different copies and versions of the same file and data residing in different local file systems. (Noronha, 2008) Though budgets limitation, and existence of several buildings in OERP which are far from the main organization building, making information needs of the society are vital. So the library try to make knowledge available after so many session a suitable LAN solution for cost effective and ready access for Far building decided to use NAS storage for local situation and sharing knowledge. This ability to enter many different types of data (text, functions, graphics) so that to be viewed by the entire organization is knowledge sharing activity in learning organization and facilitate by NAS library to manage knowledge.

The policy for sharing knowledge
The library committee has many sessions and set rules for sharing knowledge in the organization through NAS device. There is a policy for sharing knowledge. This policy assigned and manifest in Delphi sessions.

- Everyone can share and see the other resources.
- Library is responsible to inform the society for new events.
- Library organized the resources in a LAN place folder name digital library by Dewey classification and inform society by call or automation messaging
- No one could delete the file and the library manage this library.

How Experts could share their knowledge
The IP Based location in LAN is the place expert could share their knowledge without limitation. Library inform the society about this capability and design a 2 hour workshop for every OERP department experts aim of training the way they could share their experiment and make explicit knowledge, file sharing, using the NAS environment, inform about rules and regulation. Library inform Them who can share whatever explicit knowledge and resources but there is a rule that cannot delete or change the folder. this rule is informed to them as soon as they join in this setting.
Special library role to manage and organize the shared knowledge

- Provide NAS storage device
- Instruct and Inform the society about the sharing knowledge
- Managing the knowledge and facilitate to share
- manage the file
- Support comprehensive access to information,
- Centralizes storage in digital sharing library
- Simplifies management, Scalability, High availability. Provides security integration to environment (user authentication and authorization)
- Design elements of sharing LAN library and how these elements have created a platform for managing explicit knowledge.
- Enforce a new type of organization culture.
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