Knowledge Management in Academic Institution through Knowledge Portal

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Abstract: *Knowledge is non-uniform in nature. Everyone has different notion of a particular knowledge. And here we are trying to capture this multidimensional knowledge, which is vast in terms of size, continuum and dynamic in nature and has diverse sources. Knowledge has become the precious asset to every academic institution and in the contemporary generation has realized its consequences. In this modern knowledge environment well equipped techniques and management is required to organize, store and access; information and knowledge. Knowledge Portals are the tools for executing knowledge management procedures. It is a piece of software that helps to convert explicit knowledge to implicit knowledge and share among the patrons.*

Keywords: Knowledge Management; Knowledge Portal: Library Websites; Knowledge Architecture

1. Introduction

Knowledge has become the key driving force in the present day. Today, every organization has understood the importance of knowledge. Knowledge is derived from information but it is richer and more meaningful than information. It includes awareness, familiarity and understanding through gained experiences or study. Each and every academic institute is a great stack holder of that kind of knowledge. Generally two type of knowledge are available in any academic institution, these are explicit knowledge and tacit knowledge. The academic institutions are easily capture the explicit knowledge because it has been recorded in any book, software etc but what about the tacit knowledge that any academic institution are generates every day? We can also capture that tacit knowledge, in a mechanized way and serve to the user for better understanding, through knowledge portal.

The concept of knowledge management arises as a technique to develop institutional knowledge and capacity to derive relevant knowledge from information. Knowledge portals are the best knowledge management tool to serve this type of solution. Knowledge portal is a gateway to databases, institutional repository, internal web resources and outside web resources. A user from remote area can access the same knowledge portal and capacity to create, store and share his/her knowledge without any border. The main feature of any knowledge portal is; it can able to capture the explicit knowledge as well as the tacit knowledge very efficiently and share that knowledge among users. We understand any topic efficiently with the help of discussion rather than reading any book. Knowledge portal offers that opportunity to its user through community forum and blog. With the help of knowledge portal user can easily gate a solution from domain expert and this process speed up their learning.

2. Importance of Knowledge Porta

We know that library is the heart of any academic institution, so that the library website should be the mirror of library collection. But in good old days, even now also, library websites are not able to cater that necessity. Even in Indian scenario most of the libraries does not have a proper website, those are more specifically only a webpage along with main institution or organization. Generally in this kind of webpage they provide the general information such as opening/closing time of library, about their staff, general policy of the library and collection of books, journals and so on.

If we realized that library website should be the mirror of the library collection, then it has also some responsibility to give more and more information and provide some pathway to its user to share their knowledge through the website. For overcome the problem the concept knowledge portal has came into picture. So that in an academic environment library website can able to cater the knowledge needs of its user, in spite of explicit or implicit. So, we propose knowledge portal to explicitly manage and disseminate of any kind of knowledge that any academic institute has.

Knowledge portal is the best knowledge management tool to manage any organizational knowledge. So we have built an imaginary knowledge portal of an academic institute and we named it as "Institute for Advanced Engineering Studies". Through our work we have tried to prove that by using a knowledge portal it is easy to manage and disseminate tacit and explicit knowledge of any academic institution.

3. Knowledge Portal Architecture of an Academic Institution

Knowledge is continuously being created in every academic institute. The technique of capturing and managing new knowledge is the most difficult part. If we want to solve that problem through building a knowledge portal for an academic institution then the diagram in Fig-1 will guide us, as a basic blueprint.

3.1 Knowledge sources

In any institution knowledge can be captured in various ways. First we have to identify the sources of explicit and implicit knowledge.

3.1.1 Explicit knowledge sources: Knowledge from the explicit sources can be easily captured and stored. Explicit sources are readily available format books, reports, journals etc.

3.1.2 Implicit knowledge sources: Implicit knowledge can be extracted from various sources by using different technologies. The available implicit sources of academic institution are faculties e-mail, personal blog, conferences and student's feedback, blog.
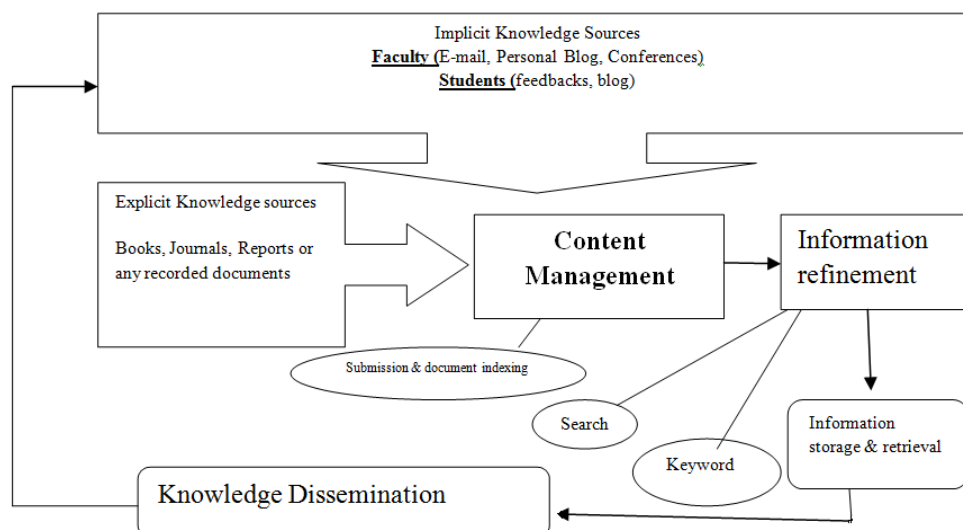

Fig.-1 Blueprint of knowledge Portal

3.2 *Content management:* Content management is very important step in building a knowledge portal which stores the knowledge. After identified the implicit knowledge and readily available explicit knowledge, it will be stored via content management.

3.3 *Information Refinement:* After gathering and storing the knowledge in the content management, the knowledge should be refinement by the domain experts. They check which knowledge is to be stored and which are not. After selection they assign the keyword for better searching.

3.4 *Information Storage and Retrieval:* In order to retrieve the knowledge, it should be stored in a standard and useful way and indexed properly.

3.5 *Knowledge Dissemination***:** Once the knowledge stored in the repositories is retrieved by the user. For that the stored knowledge now disseminate to the academic user for better understanding.

4 Knowledge portal as the tool to manage and disseminate knowledge:

In our study we try to solve the problem of knowledge management and dissemination by the Knowledge Portal. We have developed a knowledge portal and try to show how knowledge portal serves well than a normal webpage. Our knowledge portal is mainly divided into 6 parts. Those are Header, First/Right Sidebar and Second/Left Sidebar, Main content body, Footer, Chat and search box.

4.1 Header section

In this section, like all website, it has main menu and its sub-menu for navigation. With help of this section, we have tried to give information about the library like;

About us- This menu has its sub-menu; with this we have provided basic information about the library e.g. library hours, library collection, information about their team and organization.

IAES- it provides the general information about institution.
Services- The library will provide which kind services that information will be provided by the services menu and its sub-menu.

IR@Dspace- it provides link to the contact of the digital library.

Web OPAC koha- it provides the link to connect the web cataloguing databases.

Journal List- What are the journals are subscribed by library, the user can know from this list.

IAES mail- Nowadays many organization has its own mail server, this part provides that facility.

Upcoming events- The upcoming events of the organized or institute will be announce by this section.

FAQ and Contact us- This is for the user if they have any query and question for their requirement.
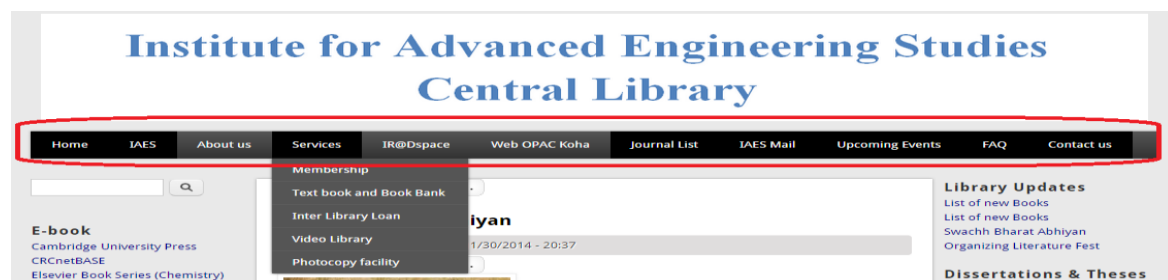

Fig 2- Header Section

4.2 First/Left Sidebar and Second/Right Sidebar:

This First/Left Sidebar and Second/Right Sidebar are all about external/related links. These sections are organized by blocks. The blocks are-

E-book and Bibliographic databases- All e-books/ Bibliographic databases links are group together in this block. The user can easily find the useful books and journals that are grouped in one place.

e-pg pathshala- It is a project of UGC and INFLIBNET. It provides the PG level course materials.

Dissertations & Theses- The user can access the Dissertations & Theses uploaded in different databases through this section.

Online Dictionary- From this part of the portal users can easily access online free dictionaries.

Blog- It is one of the main features of knowledge portal. Blog is generally for giving personal opinion. With the help of blog user can understand many thing easily and they also can give their view on this topic. By this process tacit knowledge can frequently and easily transform into explicit knowledge.

Forum- Forum is mainly for general discussion. The user can discuss any topic with the experts and other users. It is also a main component of knowledge portal to transforming tacit knowledge to explicit knowledge.

Fig 3- First/Left and Second/Right sidebar

Faculty Databases- This block is organized by departments. In each and every departments are connected to its faculties. With this, user/students can easily connected to the faculties online and ask queries.

4.3 Main content body

In this main content body, it displays the portal contents. The library can add any important news related to library and institution. Whatever contents library uploads in its portal, they can also share the information with the help of social media and can get comment on this.

Fig 4 - Main content body

4.4 Footer

Nowadays, all the institutions and their library are connected to social media. In footer part we can give the social media link to connect with the user.
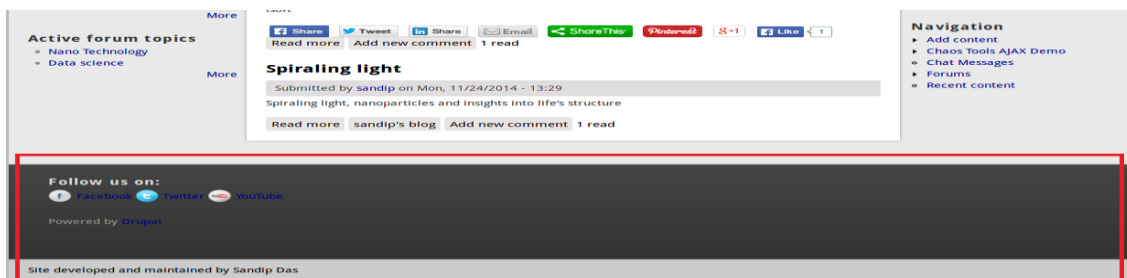

Fig 5 - Footer

4.5 Chat

Digital libraries generally offer "Ask a librarian" service but it is more time consuming process. Here, with the help of real time chat option the user can easily connect with the librarian. This chat option not only helps to connect with the librarian but also it helps to connect with the other experts and other library users.

Fig 6 – Chat

4.6   Search Box

Search box provided the key word based search facility and also the advance search option.
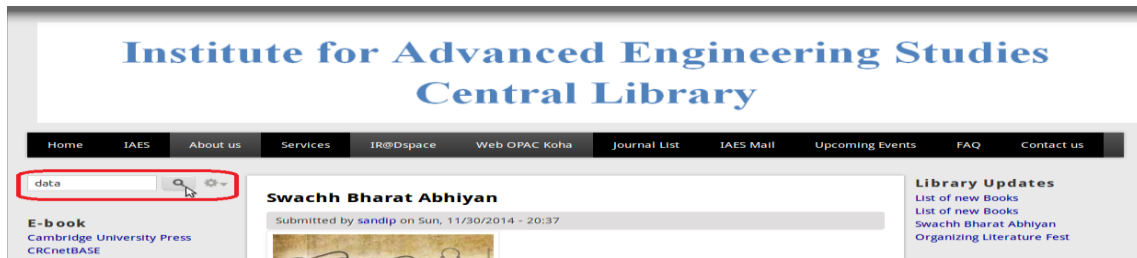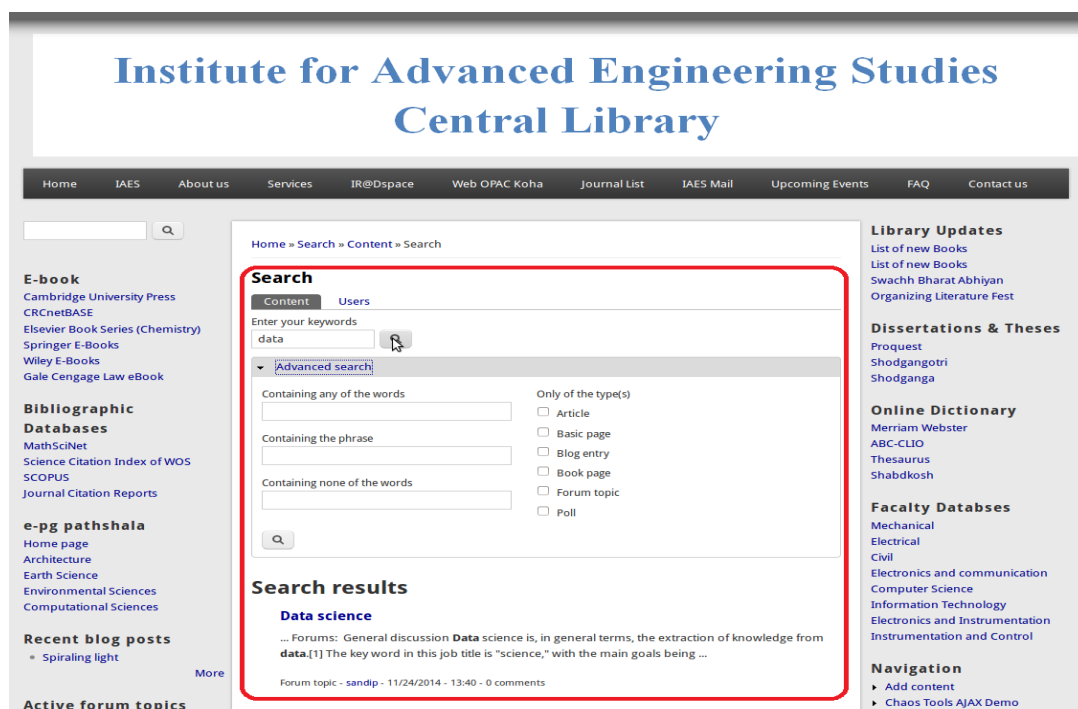

Fig 7- Search box

Fig 8- Advance search option

5   Conclusion

A knowledge portal speeds up the process of learning and facilitates more effective transfer between tacit and explicit knowledge form, as well as containing structured information, contains knowledge network and communities, discussion forum and collaborative workspaces, to better encourage, surface and transfer a more spontaneous exchange of tacit knowledge. A knowledge portal also normally contains an 'expert locator' –a sort of 'Who's Who' directory to help people find and connect with experts. A good knowledge portal is 'knowledge asset centric'. That is to say, it is designed for knowledge workers to easily locate and work on the key knowledge assets within the key knowledge areas of the organization,

which is the best way to manage and disseminate knowledge in an academic environment.

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