# University Library Portal as an Effective Knowledge Management Tool: A Case Study

Manisha B. Mane and B. M. Pange\*

Librarian, Shri Chhatrapati Shivaji College of Engineering \*Librarian & Head, Department of Library & Information Science, Jayakar Library Savitribai Phule University of Pune

#### **ABSTRACT**

This paper aims to investigate students' perceptions of using University Library portal as a knowledge management tool. A self administered questionnaire was distributed among randomly selected 100 students of Savitribai Phule Pune University, Pune. Moreover, a scheduled interview was conducted with the research scholars of various departments. This paper introduces the relationships between University Library portal and knowledge management practices. The study reveals that all the respondents are very much interested to use university library portal and quite good number of respondents are regular users. Library professionals working in university libraries should create awareness about the potential of the university library portal and its use among the users by conducting orientation programmes, demonstrations, workshops, seminars and through pamphlets. Respondents indicated that they need personalization in the currently available portal to convert it into knowledge management tool. Majority of the respondents are eager to create, share, store and utilize knowledge on the university library portal.

**Keywords**: Knowledge Management Portal, University Library Portals; Savithribai Phule Pune University

#### 1. INTRODUCTION

Internet offers a host of ideas, a broad array of information and interactive opportunities to educators and students. The web has made a huge amount of information electronically available. Portals present information from diverse sources in a unified way. Portal technology provides a central online tool to access and exchange internal information, vendors and resources according to needs, mission and priorities of the library. It is also called as a knowledge management tool. Knowledge management is the most powerful means for development of any organization. Besides business organizations, academic Universities are also trying to adopt these techniques to cope up with the modern society and to cater the ever changing needs of the modern users in the .com era.

Library portals have played a vital role in the advancement of the present education system. The principal benefit of the library portal is to supplement the formal education system by making knowledge available to all users. It has become increasingly important to understand the need of knowledge management techniques in university library portal. While evaluating the needs of the use of library portal it was found that majority students are eager to use it. In the age of social networking modern users not only want e-access to the libraries but also need to create their own content, share it with the same interest groups and exchange their knowledge with other interested groups. In order to understand the quest of modern users, a survey was conducted in the campus of Savithribai Phule Pune University (SPPU). This study was done to determine the usage of the library portal by the students as well as to improve the contents, knowledge management tools in the portal. The introduction of the

portal concept in the university libraries has opened new possibilities to address some of the issues concerning the management of academic information and knowledge.

#### 1.1 Academic Portals

An academic library portal provides essay access to from anywhere using internet, quick and easy availability of information; improvise the communication system between knowledge creators and knowledge users. According to (Pienaar, 2003), to support academics' personal knowledge management in an integrated way, the academic portal must have the following characteristics:

- The university library portal must be a combination of a vertical portal and a corporate or enterprise information portal
- It must include advance personalization and customization qualities
- The portal must support both the role of teaching and research role of academics
- The portal should give access to the following information sources: e-journals, e-articles, e-reserves, e-archives, databases, e-books e-dissertations, library catalogues and the university's research database. Personal information sources should also be available for example experts and information specialists etc.
- The portal should provide web search engines; global search function lists, server's chat room, email adding of Urls, and interface with document delivery and inter library loan system.
- Academics should be able to evaluate and add information sources to the portal

It is a most popular form of knowledge management which provides a secure personal space to its users to access, create and guide others through sharing the knowledge with each others. It provides easy to use discovery and management tool to academicians, research scholars, and other users.

## 1.2 Need of Knowledge Management Tools

University libraries act as good platforms which makes academicians best knowledge creators. University library portal personalization tools help users to create their own content, save the available content to their personal space. Portal also helps them to share their views with the similar interest communities by using various knowledge sharing tools. University library portal storage facility can be called as asset management as it stores the valuable content at one place. Knowledge is worthless until and unless it is utilized. The introduction of the portal concept in the academic universities opened new possibilities for knowledge management. It can also provide a number of e-learning tools, course contents, a course calendars', an online discussion boards, announcements, reviews, auto marked quizzes, navigation tools, online assignments, email, chat room etc. Such a platform which provides facility of creation, storage and share knowledge will enhance the research productivity among university students.

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Knowledge	<b>University Library Portals</b>				
Management	, ,				
Creation of knowledge	Discussion forum				
	Idea generation				
	Share views				
	Add knowledge, ideas				
	Brain storming sessions				
	Workplace for research				
	Student account				
Sharing of knowledge	Chat rooms				
	Email				
	Online help				
	Bulletin boards				
	• RSS				
	Video conferencing				
	Virtual class rooms				
	Video lectures and tutorials				
	Research communities,				
	groups				
Storage of knowledge	Institutional repositories				
	Digital libraries				
	Databases				
	• Thesis and dissertations'				
	• E-books, e-journals				
	• Wikis				
	• Blogs				
Utilization of knowledge	Sophisticated web search				
	engines				
	Link to subject experts				
	Link to reverence librarian				

## 2. SAVITRIBAI PHULE PUNE UNIVERSITY

Savithribai Phule Pune University is one of the most popular educational centers in India. It is a premier university positioned in the North-western part of Pune city. It occupies an area of about 411 acres. It was established on 10th February, 1949 under the Poona University Act. The university houses 46 academic departments. It is popularly known as the 'Oxford of the East'. It has about 307 recognized research institutes and 612 affiliated colleges offering graduate and under-graduate courses. There is a well-stocked library containing plenty of books regarding various subjects.

#### 2.1 Jayakar Library

Jayakar Libray is a library of SPPU, which was established in January 1950, named in honor of the first Vice-chancellor Dr. M. R. Jayakar. The Jayakar Library was established to serve students, researchers, staff etc. by providing services and to fulfill the requirements of the users as well as the organization. The library has good collection of books, periodicals and other resources. The library subscribes to Indian and foreign research journals and also receives periodicals on gratis and exchange basis. It has holdings of more than 4, 78,770 books and subscribes to journals on varied subjects. Since last eight

years Jayakar Library is now developing its own digital library of rare material, library has a variety of collection of rare documents in the for a of books, manuscripts, maps, photographs, letters of eminent persons, etc.

This study was motivated with questions related to the Jayakar Library portal including Are the students aware about Jayakar Library portal? What are the features of Jayakar Library portal? To what extent they use it? Do the students find portal content useful to their academic purposes? Is the portal user-friendly? Are the students self efficient to use the portal? Do the students need special training to use the portal? Does the portal support knowledge management processes? It is essential to understand the user's views and opinions about the efficiency and effectiveness of university portal.

## 2.2 Objectives of the Study

The main aim of the present study is to investigate the student's perceptions of using university library portal as a knowledge management tools at SPPU.

- To find the awareness of Jayakar Library portal
- To know the features of the university library portal
- To investigate the use of portal
- To know the purpose and frequency of use of Jayakar Library portal
- To understand the needs of modern users of Jayakar Library portal as knowledge management tool

## 2.3 Scope and Methodology

The study is restricted geographically to SPPU campus and the respondents to the students who are pursuing Masters degree, M. Phil and Ph.D. from the University in the academic year 2014-2015. For the survey a self administered questionnaire was distributed among the randomly selected 100 students staying in university campus. Moreover, a scheduled interview was conducted with the Ph.D. research students of the University.

#### 3. LITERATURE REVIEW

Many investigations have been carried out on library portals and their implementation and use. Lakos(2001) highlighted the importance of library portal and also discussed how the portals are useful at college and university level. Bhatnagar (2005) explored various web-based services, and pointed out its necessity along with the advantages and disadvantages of web-based resources. Augustine & Greene(2002) studied the way users searched information and the way students search library portal. Letha (2006) explained the role of a library portal for various user web-based services. Large, Beheshti & Rahman (2002) related the role of campus portal of the University of Madras in enhancing quality of research; (Jange et al. (2006) analyzed the library web portals of academic institutions in Karnataka in order to enhance the effective use of library websites by providing more user-friendly information access to their users. Kanamadi & Kumbar (2006) discussed the library portals and the web-based library services expected at management institutes in Mumbai and provided suggestions for creation of effective and informative library portal. McGillis & Toms (2001) assessed usability of the academic library portal and found that library websites failed to take into account how people approach the information problem. Authors also presented few recommendations to increase the portal usability by overcoming the lacunas in design and development of library portal. Das & Jeevan (2006) in their study evaluated e-portals providing access to e-resources such as Elsevier Science Direct, Project Gutenberg, Digital Library of India, University of Virginia Library (E-Text century), and Batlleby.com, using twenty selected parameters; Fatima, Ahmad, & Ahmad, (2011) found that majority of the respondents gave average value to their library portal provision of course material and useful links; and that they needed instructions and help for the effective utilization of resources on the library portal. Pearson,

Green and Pearson (2007) investigated the relative importance of five key criteria for assessing web usability and found that, as expected, ease of use was the criteria that the respondents considered most important in assessing web usability. The results also indicated that less effort/resources should be devoted to personalization and customization, and more in making sure that websites are easy. Geetha (2013) discussed the use of library portal by research scholars and faculty members of Kuvempu University and found that research is the major reason for use the library portal.

## 4. JAYAKAR LIBRARY PORTAL

The Jayakar Library portal is a gateway to e-electronic resources; it is a one-stop shop to for all information needs of the students of SPPU. The main objective behind the development of library portal was to provide one window access to library resources as well as free resources to all in-house and outside users. To achieve this objective, library has developed e-resources portal that contains information regarding online union catalogue of books, theses and serial publications. Web links are provided to various national libraries, open access resources of variety of subjects and databases. The portal is accessible through Internet and it is very useful to students, staff, researchers and general public and libraries of the affiliated colleges of the university. The library portal is accessible through web address <a href="http://lib.unipue.ac.in/portal/portal.html">http://lib.unipue.ac.in/portal/portal.html</a>.

The e-resources on the portal are divided into three parts viz. Library Subscribed Databases, Free Resources, and Subject wise resources, providing three main headings with sub-links for accessing them. Jayakar library portal provides 44 access points (links) to subscribed databases which are only accessible with the help of User-ID and Password to their library members.

Further, the portal divided into two parts: Open access E-resources and Subjec-twise E-resources. The first part Open access Resources contains 17 links/access points to free resources. In the second section, subject-wise e-resourcesdivided into 21 subjects, provide direct link to various kinds of resources on a specific subject. Students can get access to the resources by clicking on desired subject; it saves time of user and provides quick access to the users.

#### 5. DATA ANALYSIS

The primary data collected from the randomly selected 100 students of SPPU were tabulated for analysis in accordance with the objective of the study. Some respondents furnished valuable comments in the space provided for future requirements from Jayakar Library portal; those comments were incorporated at the appropriate places.

#### **5.1 Basic Information of the Respondents**

Out of 100 respondents, 21 are male and 79 are femaleof whom, 82 come in the 20-25 age group, 17 in the 26-30 age group and one respondent is above 30 years. All the respondents are having email account.

#### 5.1.1 General Understanding and Usage of Portal

A descriptive statistical analysis is given to provide students' general understanding and usage of Jayakar portal. From Table 1 it is can be seen that all the respondents use computers.

Table 1: General understanding and usage of academic library portal

Parameter	Yes	No	No response
Do you usually use any computer applications for your study?	100%	0%	0%
Do you use web in your academic activities?	80%	2%	18%
Are you aware about university library portal?	91%	1%	8%
Have you ever received training on the use of library portal?	0%	93%	7%
Does portal support teaching and learning?	73%	22%	5%
Does the portal enable access all the collection at one place?	91%	6%	3%
Can you add information to the portal?	0%	92%	8%
Are the members informed through their mobile phones or email regarding the current news in their areas of the interest?	0%	94%	6%
Does the portal connect people with common interest who work in different departments?	0%	96%	4%

A majority of the respondents claimed to be familiar with Jayakar Library portal. Moreover, many respondents are aware about the academic portals of their institutes. No respondent has received training on the use of the portal. But majority of the respondents replied that the portal supports both the teaching, learning, enables users to access all the collection from one place and to search across. Moreover, all the respondents admitted that the portal supports electronic scholarly communication.

## **5.2 Students Perception in using University Library Portal:**

## 5.2.1Performance Expectationy

Users' perception regarding the performance is analyzed in Table 2. To understand the value of the content available on portal questions regarding the usefulnesswere asked.

Table 2: Jayakar Library portal: Performance expectation

Performance expectation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The university portal is useful in my studies	3%	2%	1%	31%	63%
Using university portal enables accomplishing tasks more quickly	0%	0%	8%	21%	71%
Using university library portal increases knowledge in other fields	2%	2%	5%	41%	50%
Using university library portal enables getting a better grade.	0%	0%	72%	18%	10%

Majority of the respondents strongly agreed about usefulness of library portal in their studies, enabled them in accomplishing tasks more quickly, and helped in increasing their knowledge too. Majority of the respondents tend to be it more neutral in terms of their perception regarding getting a better grade by using the portal.

# 5.2.2 Efficiency Expectation

Table 3 provides a descriptive analysis of the students' perceptions regarding efficiency of Jayakar library portal. It appears that a majority of the students find the portal's structure is understandable and easy to use. Most of them agreed that the resources available on the portal are useful and relevant to their expected needs.

Efficiency expectation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Portal understandable	0%	2%	7%	13%	78%
Get relevant resources on portal	4%	6%	3%	67%	20%
Satisfied with the layout and design	0%	5%	2%	18%	75%
Portal is totally user-friendly	2%	3%	5%	23%	67%

Table 3: Jayakar Library portal: Efficiency expectation

A few students responded that they are not satisfied with the layout and design of the portal. After the analyzing data in Table 3 it can reveal that overall majority of the users are happy with the portal content and feels satisfied about Jayakar Library portal.

#### **5.2.3** *Training Needs*

University students were asked whether they need training and guidance for browsing of library portal or they have necessary knowledge to use the Jayakar library portal. It is discernible from Table 4 that majority students strongly agreed with the opinion that the training and guidance can improve the efficiency of use of library portal.

Need of training	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Have necessary knowledge to use library portal	10%	6%	76%	4%	4%
Need training and guidance for using of library portal	0%	0%	2%	6%	92%

Table 4: Jayakar Library portal: Need of training

Training workshops and orientation programmes can be organized frequently by university library to promote use of Jayakar Library portal.

#### 5.2.4 Portal Advancement or Future Portal Expectations

In order to identify the weakness of Jayakar Library portal the researcher tried to know the students' perceptions regarding future portal expectations. Majority of the respondent responded that they need

personalization feature in present portal. They are not only interested in accessing e-resources at single stop but also eager to create their personal contents.

Table 5: Jayakar Library portal: Advancement and future portal expectation

Portal advancement/ future portal expectation	Strongly disagree	Disagree	Neutra l	Agree	Strongly agree
Recommend personalization feature to it	2%	3%	5%	15%	75%
Need to create my content and share it with others using portal features.	1%	4%	2%	25%	68%
Suggest web 2.0 tools to incorporate in it.	0%	2%	1%	19%	78%

Table 5 reveals that majority of the respondents strongly agree for web 2.0 tools to be incorporated in university library portal. During informal interviews many of them suggested the need to add some more features to the present university library portal like personalization, RSS feeds, meta-searching tools, browsable interface, and online reference help to strengthen the present university library portal. Some of the respondents recommended that along with the user personalization university library portal should also contain user engagement tools for content creation and exchange. It can also add online communities for connecting individuals for online publishing and sharing tools such as blogs, wikis, podcasting, and tagging.

## 6. FINDINGS OF THE STUDY

The following are the major findings:

- All the respondents use computers as well as web technology for their study.
- Majority the respondents are aware about Jayakar Library Portal
- Majority of the respondents have not received training on the use of the Jayakar Library Portal.
- Majority of the respondents have mentioned that they cannot add information to the student portal and are eager to add content by recommending portal personalization feature.
- Majority of the respondents tend to agree that the library portal is understandable, easy to use and
  easy to access, but becomes easier if students can get online help by someone whenever they get
  stuck.
- Majority of the respondents have asked to organize special training on the use of the academic portal.
- Many of the respondents have suggested adding new features like personalization, RSS feeds, metasearching tools, sharing with online communities etc.

#### 7. CONCLUSION

University library portal has become one of the most commonly used web discovery tools for effective and efficient delivery of information. It not only conveniently delivers electronic resources directly to the users on their computer screens but also provides a web environment which: enriches learning and research activities by providing timely, convenient access to relevant and appropriate resources. It

enables users and the library to focus on fruitful use of collections available on portal. In this paper, researcher studied the use of Jayakar Library portal. The researcher collected views and opinions from the users. The study found that majority of the students show interest in knowledge creation and sharing of content with similar interest groups. They need to get advance features like personalization, web 2.0 tools etc to the present portal. Majority of the students want training to search the resources of the portal. Therefore, it is the need of hour that more and more information literacy programmes should be conducted by university libraries to enable the effective use of library portals. Majority of the students demand educational resources based on curricula along with the video lectures on portal. University libraries need to create and upload relevant e-contents as per their need with simple structure and user-friendly design of the portal.

#### REFERENCES

- 1. Augustine, S., & Greene, C. (2002). Discovering How Students Search a Library Web Site: A Usability Case Study. *College & Research Libraries*, 63(4), 354–365. http://doi.org/10.5860/crl.63.4.354
- 2. Bhatnagar, A. (2005). Web-based library services. Retrieved from http://ir.inflibnet.ac.in/handle/1944/1418
- 3. Das, K., & Jeevan, V. (2006). Evaluation Of Few Web-Based E-Book Portals. Retrieved from http://ir.inflibnet.ac.in:8080/dxml/handle/1944/1209
- 4. Fatima, N., Ahmad, N., & Ahmad, S. (2011). Use of Library Portal by Engineering and Technology Students at Aligarh Muslim University: A Survey. ... *Journal of Library* & .... Retrieved from http://www.publications.drdo.gov.in/ojs/index.php/djlit/article/view/985
- 5. Geetha, M. (2013). Use of Library Portal by Research Scholars and Faculty Members at Kuvempu University: A Survey. ... *Journal of Library & ...*. Retrieved from http://www.publications.drdo.gov.in/ojs/index.php/djlit/article/view/5483
- 6. Jange, S., Sami, L., Angdi, M., & Subramaniam, S. (2006). Web content of Library Portals in Karnataka: Role of Librarians in The Internet World. In *Paper presented at fourth International Convention CALIBER* (pp. 676–682). Retrieved from http://ir.inflibnet.ac.in/handle/1944/1162
- 7. Kanamadi, S., & Kumbar, B. (2006). Web-based services expected from libraries: A case study of management institutes in Mumbai city. *Webology*. Retrieved from http://www.webology.org/2006/v3n2/a26.html
- 8. Lakos, A. (2001). Personalised Library Portals and Organisational Change, 207(207), 8–9.
- 9. Large, A., Beheshti, J., & Rahman, T. (2002). Design criteria for children's Web portals: The users speak out. *Journal of the American Society for Information Science and Technology*. http://doi.org/10.1002/asi.10012
- 10. Letha, M. M. (2006). Library Portal: A Tool for Webenabled Information Services. *DESIDOC BuNetin of Information Technology*, 26(5), 11–16.
- 11. McGillis, L., & Toms, E. (2001). Usability of the academic library web site: implications for design. *College & Research Libraries*, 62(4), 355–367. Retrieved from http://crl.acrl.org/content/62/4/355.short
- 12. Pienaar, H. (2003). Design and development of an academic portal. *Libri*. Retrieved from http://www.degruyter.com/view/j/libr.2003.53.issue-2/libr.2003.118/libr.2003.118.xml