

Full Length Research Paper

Content analysis of university library portal: A detail study of Jayakar Library Portal, Savitribai Phule University of Pune

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The revolutionary change which took place in Information and Communication Technologies (ICTs) has dramatic effects on modern education system and the way universities carry out their functions of teaching, learning and research, particularly on the creation, storage and dissemination of knowledge. During the last one decade the library system and knowledge market has undergone a rapid change due to development of digital revolution. Portal technology is a recent innovation which plays an important role in knowledge management in the libraries. The purpose of this research paper is to introduce the Library Portal concept, its application and various e-resources and services of Library Portal. Similarly the idea is to make the readers familiar with Jayakar library portal, University of Pune. The main aim of this paper is to study the contents of Jayakar Library portal and to find out the strength and weakness of the portal.

Key words: Library portal, Jayakar library portal, academic portal.

INTRODUCTION

WWW has changed the mode of information dissemination in libraries. In the age of information technology, learners, that is, information seekers do not wish to spend most of their time in getting formal education through educational institutes. However most of the youths prefer e-learning. Web portal is one approach to organize information resources and services in a way that supports the students' needs. However, students as well as teachers and parents should be aware about portal technology, its applications in academics and usability of the portal which is based on effective content management. University Library portal is key to knowledge; it is a tool for Web-enabled information

Services. Effective library portal is nothing but proper contents, user-friendly design, simple structure and availability of relevant resources on it. Function of Library portal is like a water or electricity that flows in a network or a grip, which we tap into when we want. It acts as an Opening Doors to Education Worldwide

Objectives of the research paper

The present study deals with the Savitribai Phule Pune University Library portal, its features and underlying technologies in order to identify its strength and

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weakness. The objective of the present study is to study in detail Jayakar Library portal, its design and content on web. The main aim of this research paper is to explain what Library portal is and its usefulness to the students and to know the resources and services of Jayakar Library portal.

RESEARCH METHODOLOGY

The researcher has used descriptive method of research in which detailed study of Jayakar library portal was carried out. Researcher tried to find out availability of e-resources and their subject-wise contribution at Jayakar Portal. All primary data were collected by using observation technique.

Scope

The scope of the study is limited to the study of Savitribai Phule Pune University, "Jayakar Library Portal". The study deals with Jayakar Library portal, content available on web during May 2013 to August 2014.

LITERATURE REVIEW

Lakos (2004) has highlighted the importance of library portal when discussing the power of portals at college and university level. Olsen (2002) and Augustine and Greene (2002) studied the way users searched information discovering how students search library portal. Letha (2006) highlighted the role of a library portal for various user services. Murray (2002) discussed the benefits of a library portal to an institution. Cox (2003) listed the portal benefits and considered related issues. He thoughtfully suggested the main criteria for choosing a library portal system. Brown (2000) conducted a research and explained the need of university portal. Madison and Maureen (2005) explained various issues in planning for portal implementation and whether the perfection of portal is required for successful implementation of portal and related studies. Shemberg (2000) found that it is often difficult to locate the library portal from the university name. It is essential to study the university library portal, its structure and design along with its contents.

What is a portal?

The word "portal" is derived from the Latin word "porta", which translates to "gate". In the strictest sense of the word, anything that acts as a gateway to anything else is a portal. The "portal" is an entry point to a world of resources, designed to save the user time, to unite him or

her with relevant resources, and to encourage maximum use of acquired resources.

Definition

'Portal' has been defined in several ways. According to Looney and Lyman (2000) "A variety of useful information into a single, 'one-stop' web-page, helping the user to avoid being overwhelmed by 'Infoglut' or feeling lost on the web"

According to Heflin (2003), "A Portal is a website that collects information for a group of users that have common interest." A Library portal became a digital platform to access e-resources at one single place. It plays an effective role in education system in modern era.

What is a library portal?

A library portal is the site where the electronic information and services available to the members of library, academicians, researchers and any other member at one stop. It is an accessible, secure personalized, customizable and integrated form of library services. Commonly referred to as simply a portal, it is a website that offers access to a broad array of resources and services of libraries such as e-journals, online databases, Web OPAC, new additions and any other static information about library services.

Overview of Jayakar Library

Jayakar library is a library of Savitribai Phule Pune University, which was established in the year January 1950, named in honor of the first Vice- chancellor Dr. M. R. Jayakar. It has the holding of more than 4, 78,774 books and subscribes to journals on varied subjects. The Jayakar library has preserved a wealth of ancient Indian texts in the form of manuscripts and books. Jayakar library has created its portal with aims to provide one window access to library resources as well as free resources to all in-house and outside users of Savitribai Phule Pune University.

Jayakar library portal

The library portal is accessible through web address <http://lib.unipue.ac.in/portal/portal.html>. To achieve its objective, library has developed E-resources portal that contains information regarding online union catalogues of books, theses and serial publication. Web-links are provided to various National Libraries, open access resources of variety of subjects and databases. The said 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.

Structure and design of portal

In order to fulfill the individual users' needs, Jayakar Library portal is designed with simple structure. Relevancy of portal is maintained with the categorization of e-resources into three parts; that is free resources, library subscribed databases and subject wise e-resources. It helps users to find out desired information at one place. The portal electronic resources are widely accessible to the Jayakar library community from any computer on campus that connects to the internet. The portal is also accessible to anyone in the world with an internet-enabled computer. Only library subscribed databases provided access to authorized Jayakar Library users via the proxy server. With respect to system visibility, Jayakar library portal is highly visible on the internet to their user. The links to library portal are.

- i) Savitribai Phule Pune University website homepage
- ii) Jayakar library homepage and
- iii) Search engine by searching with URL address.

Terminology

Terminology refers to the words, sentences and abbreviations used for a portal system. With respect to terminology, the Jayakar library portal has made some positive steps towards limiting its reliance on library jargon. Layman terms are used to reduce the gap between user's needs and portals e-resources. E-resources on Jayakar library portal with their abbreviated form are provided with their short description about their content or subject coverage.

Screen design

Screen design refers to the way information is presented on the system interface. The screen design of a Jayakar library portal is very user-friendly and easy to read. The Jayakar library portal is divided into three sections. That is upper, middle and lower. The upper part shows the first heading section followed by the Google customs search option and rules for assessing online journals and databases. The middle part is divided into 3 sections. These are free resources, library subscribed databases and subject wise e-resources. Under these sections relevant journals and databases links have been provided. The lower part of portal page shows note section, contact details of librarian, last updated date number of hits and date of inception of the portal. Thus, the screen design of the portal is very easy to understand and even the layman can use and access information easily.

Navigation

Navigation refers to the easy way with which the users' can move around the digital library. Navigation feature of a Jayakar library portal evaluated in three different ways. These are,

1. Hyper linking of e-resources,
2. Google custom search and
3. Site map.

In the context of hyper linking of e-resources, Jayakar library portal provides links to e-resources which are easy to navigate under the headings of free-resources. Google custom search is a search engine which also provides direct access to the listed resources on Jayakar library portal. Due to direct accessibility to resources on Jayakar library portal, site map is not provided on portal page. Therefore, greater navigation clarity of Jayakar library portal affects perceived base of use.

Support personalization

Personalization refers to the extent to which a library portal meets the individual needs of users. Personalization feature of a portal provided in two ways. These are as follows.

Personalization through portal itself

In terms of personalization through portal, Jayakar library portal provides resources to students, faculty and outside community members by considering their information needs. As per individual's subject interest personalization facility is provided to record the desired resources. Subject gateways are provided to facilitate the user as pertains to their information needs.

Personalization through user themselves

There are two ways of portal personalization. One is to sign on with a username and password on entry to the portal in order for the system to access personal profile information and tailor the site's design. Another way is to give users the ability to create their own personalized library page by selecting what they want to see when they access the library websites. But, till today Jayakar library portal does not support personalization to a large extent and does not support users to create their own personal views on the portal.

E-resources on portal

Jayakar library provides access to e-resources through

Table 1. Total number of sub-links.

Sr. No.	Main links /headings	No. of sub-links	(%)
01	Free-resources	17	20.73 %
02	Library subscribed databases	43	53.66 %
03	Subject wise resources	21	25.61 %
	Total	82	100.00 %

its own online library portal. E-resources on the portal are divided into three parts. There are three main headings provided on the portal under which sub-links are provided to access e-resources. They are as follows,

1. Library Subscribed Databases.
2. Free Resources.
3. Subject wise resources.

Library subscribed databases

Jayakar library portal provides access to subscribed databases which are only accessible with the help of User-ID and password of their library members. The links which are provided in subscribed databases are as follows: J-Gate, List of Subscribed Journals, EBSCO, Manupatra, Lexis-Nexis, Sage Publication, PsycArticle, Nature, IEEE, LISA, Online Individual Journal Titles subscribed by Jayakar library, American Society of Civil Engineer, American Society of Mechanical Engineers, CLA Online, Online Encyclopedia of Library, Indian Journals.com, ProQuest, GeoScience World, JCCC @ UGC-INFONET, Science Direct, Math Sci Net, ISID, Web of Science, Scifinder Scholar, Royal Society of Chemistry, American Chemical Society, American Institute of Physics, American Physical Society, Institute of Physics, Annual Reviews, Wiley-Backwell Publishing, Cambridge University Press, Emerald, J-STOR, Nature, Oxford University Press, Portland Press, Project Euclid, Project Muse, Society for Industrial and Applied Mathematics, Springer Link, Economic and Political Weekly, UGC INFONET

Free resources

Resources which are freely available on Jayakar library portal under the headings of free resources are as follows: Open J-gate, Free Journals, Directory of Open Access Journals, Open Archives (India), Journal of Ayurveda and Integrative Medicine, Public Library of Science, TOC (Table of Contents), Catalogues of, Books, Serials, Theses etc.

Subject-wise E-resources

Subject-wise e-resources provide direct link to various

types of resources on a specific subject. Subject wise categorizations of E-resources are divided into 21 subjects. The subject wise resource link helps users to retrieve a specific subject which gives access to free as well as subscribed resources.

Analysis of total number of sub-links

Sub-links which are provided under main headings are given as follows:

Table 1 highlights the sub-links provided under the three headings. It shows that total 44 (53.66%) links are subscription of various databases by Jayakar library (Figure 1). Total links 21 (25.61%) are covered in subject wise resources and 17 (20.73%) links represents free-resources available at Jayakar library portal. The above chart represents that subscription-based links are more as compared to free resources availability through Jayakar portal.

Analysis of databases as per general databases and subject databases

Databases have two types General databases and Subject databases. The analysis in Table 2 shows the total number of databases in which general databases and subject databases are provided with their separate links on library portal.

Table 2 and Figure 2 show that among 43 databases, total 18 (41.86%) databases are general databases which cover multiple subjects and 25 (58.14%) databases are subject databases which cover only one specific subject.

Subject distribution of free-Journals

Subject wise analysis of journals shows the distribution of journals varied subject to subject. It is uneven distribution of free journals availability on Jayakar Portal.

Table 3 and Figure 3 show that 76 (11.62 %) journals are available on Earth Science followed by 70 (10.70 %) journals on Information Technology, 66 (10.09%) journals on Library Science, 64 (9.78%) journals on Chemistry, 64

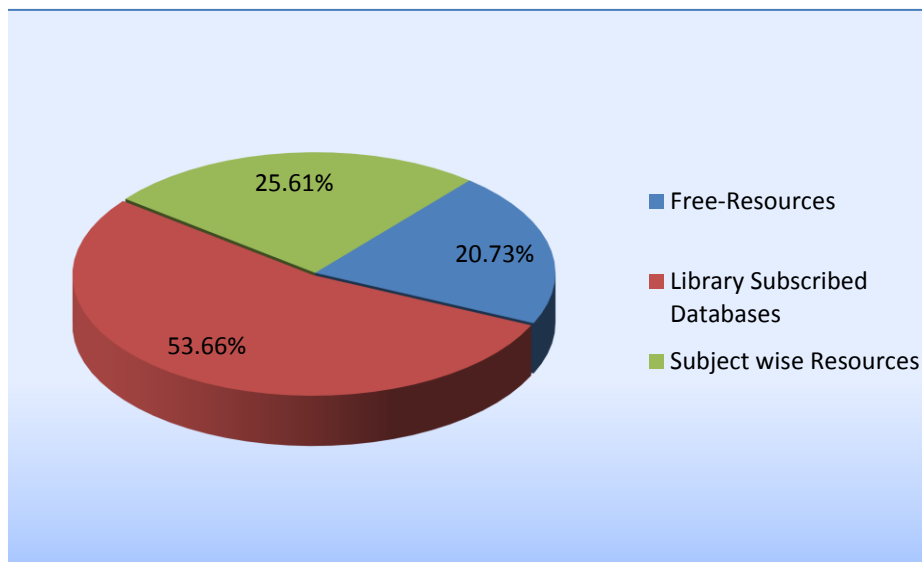


Figure 1. Total number of sub-links.

Table 2. Analysis of databases as per general databases and subject databases.

Sr. No.	Databases	No. of Databases	Percentage (%)
01	General Databases	18	41.86%
02	Subject Databases	25	58.14%
	Total	43	100%

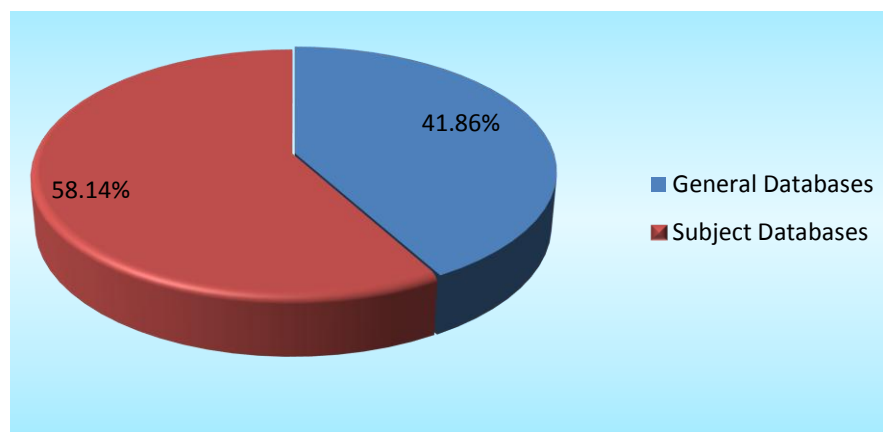


Figure 2. Analysis of databases as per general databases and subject databases.

(9.78%) journals on Engineering, 62 (9.48%) journals on Business Management, 59 (9.02%) journals on Mathematics, 44 (6.72%) journals on Physics, 32 (4.90%) journals on Environmental Science, 26 (3.97%) journals on Health Sciences, 26 (3.97%) journals on Life Sciences, 24 (3.70%) journals on Material Science, 23 (3.52%) journals on Social Sciences, 12 (1.83%) journals

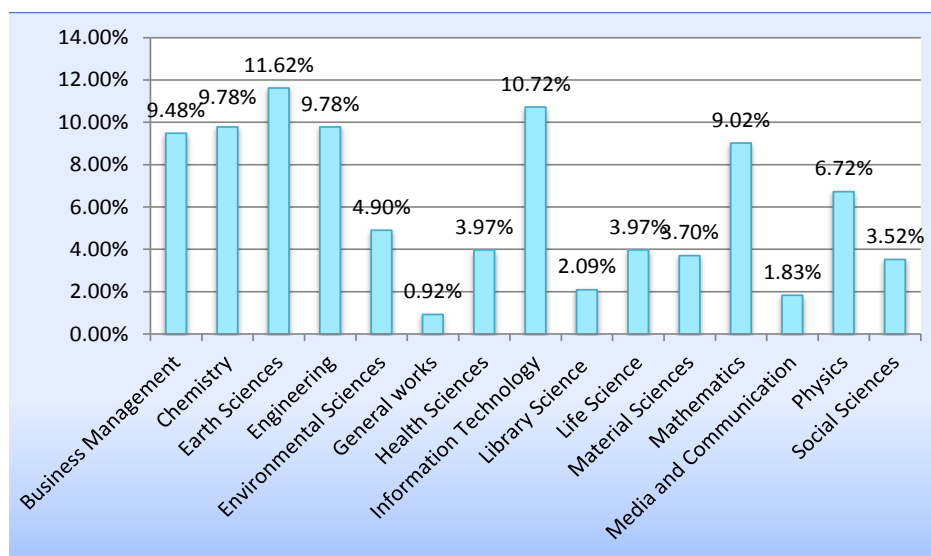
on Media and Communication and 06 (0.92%) journals on General Works.

Union catalogue of theses

Union catalogue of theses provides 14 catalogues which

Table 3. Subject wise distribution of free journals.

Sr. No.	Subject	Number of journals	Percentage (%)
01	Business Management	62	9.48 %
02	Chemistry	64	9.78 %
03	Earth Sciences	76	11.62 %
04	Engineering	64	9.78 %
05	Environmental Sciences	32	4.90 %
06	General works	06	0.92 %
07	Health Sciences	26	3.97 %
08	Information Technology	70	10.72 %
09	Library Science	66	2.09 %
10	Life Science	26	3.97 %
11	Material Sciences	24	3.70 %
12	Mathematics	59	9.02 %
13	Media and Communication	12	1.83 %
14	Physics	44	6.72 %
15	Social Sciences	23	3.52 %
	Total	654	100.00 %

**Figure 3.** Subject wise distribution of free journals.

include some national and International catalogues. Table 4 shows the number of national and international catalogues available on the portal. Table 4 and Figure 4 show that among total union catalogue of these there are 03 (24.42%) National union catalogues and 11 (78.58%) International Union Catalogues on Jayakar Library portal. It seems Jayakar Library portal covers huge number of International union catalogues.

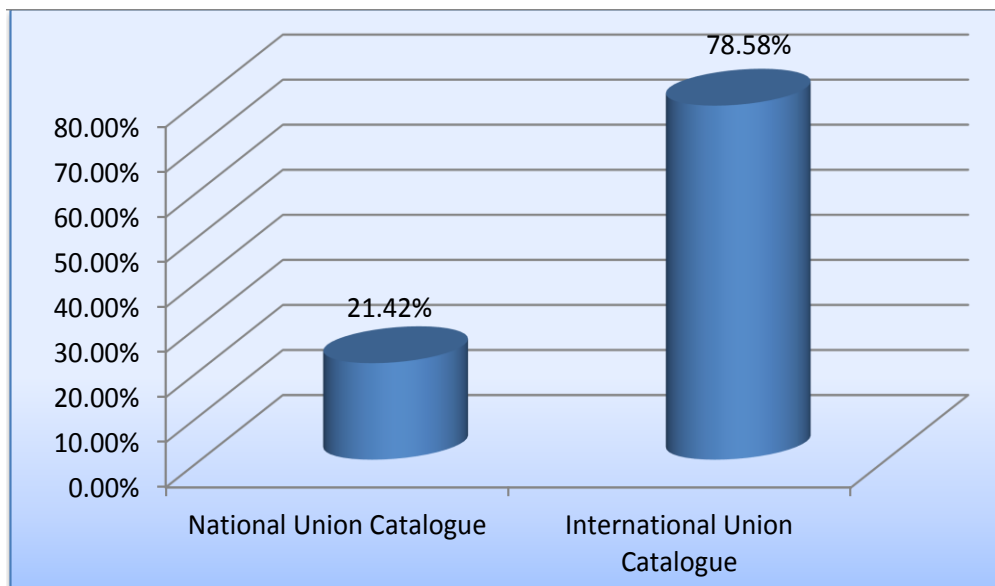
Online catalogue of some major libraries

Some major libraries online catalogues are provided

through library portal. It contains twenty-five libraries from various universities, institutions and national libraries with their online catalogue. Geographical distribution shows the number of libraries as per university, Government, institution and national level. Table 5 and Figure 5 highlight that the library portal provides 15 (60.00%) national library online catalogue from all the parts of world and 08 (32.00%) institutions library catalogue, 01 (4%) university of Poona library catalogue and 01 (4%) parliament library (India) catalogue provided on portal. It seems that Jayakar library portal contains maximum contribution from National libraries, whereas government and university libraries catalogue contribution is very less.

Table 4. National and International union catalogue of theses.

Sr. No.	Catalogue of theses	No. of catalogue	Percentage (%)
1	National Union Catalogue	03	21.42%
2	International Union Catalogue	14	78.58%
	Total	14	100%

**Figure 4.** National and international union catalogue of theses.**Table 5.** Geographical distributions of major online catalogues all over the world.

Sr. No.	Major online catalogues	No. of catalogues	Percentage (%)
1	University library	01	4.00%
2	Government library	01	4.00%
3	Institutions library	08	32.00%
4	National library	15	60.00%
	Total	25	100%

FINDINGS AND SUGGESTIONS

Jayakar library simple structure helps users to browse various e-resources on portal. To encourage more visits to the portal, more links of interests need to be created and highlighted on the university website and on Jayakar library homepage. Jayakar library portal should include more number of free e-resources, e-journals, e-class notes, Educational videos which will be beneficial to engage more number of user on library Portal.

Jayakar library portal needs to increase the number of links of national union catalogues and theses. Jayakar library portal does not support personalization to a large extent and does not support users to create their own

personal view on portal. Jayakar Library portal can enhance services through adding collaborative tools like chat rooms, RSS, ask a librarian, research assistance etc.

Conclusion

In the modern era, libraries should adopt new techniques to attract greater number of users. Library portal is an effective tool which helps them to learn new things easily and get the desired information at their fingertips for 24/7. Due to advancement of ICT and Internet and existence of various search engines users have stopped turning to

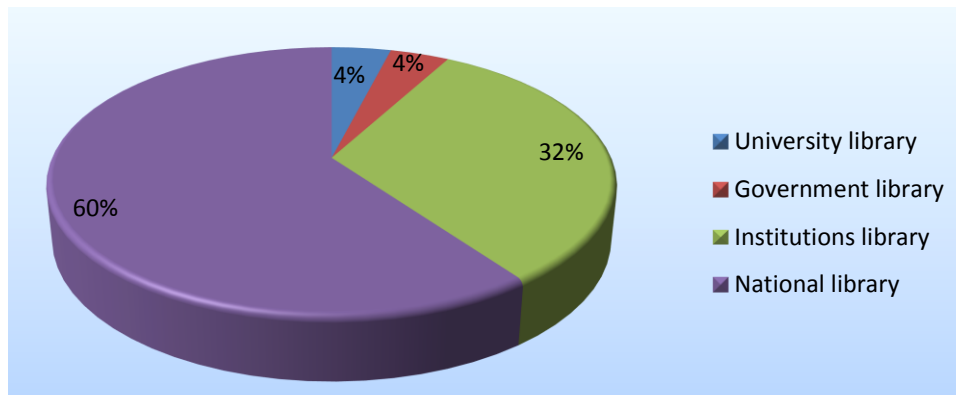


Figure 5. Geographical distribution of major online catalogues all over the world.

libraries. Library portal can be a thread which can tie knowledge (libraries) and its users for ages together by providing timely, accurate information to its users.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

Augustine S, Greene C (2002). Discovering how students search a library portal: A usability case study. *College Res. Libr.* 63(4):354-65.
 Brown S (2000). *Reinventing the University. "The changing face of Learning Technology"*. University of Wales Press. <http://lib.unipune.ernet.in/Portal/portal.html>

Cox A (2003). Choosing a library portal system. *Vine*, 33(1):37-41.
 Heflin J (2003). *Web Ontology Language (OWL) Use Cases and Requirements*. W3C Working Draft, 31 March 2003
 Lakos AA (2004). 'Portals in Libraries', *Bulletin of the American Society for Informat. Sci. Technol.* 31 (1)
 Letha MM (2006). Library portal: A tool for web enabled information services. *DESIDOC J. Library Inform. Technol.* 26(5).
 Looney M, Lyman P (2000). "Portals in Higher Education." *EDUCAUSE Review* 35(4):28-37
 Murray R (2002). Putting Portals into Practice: *Library and Information Update* 1(8):42-43.
 Olsen F (2002). The power of portals. *Chronicle of Higher Education*, 48(48).
 Shemberg M (2000). Through the web: Door to academic libraries. *Ref. Serv. Rev.* 28(2):178-87.