# Review of Modern IT Tools Adopted by M.P.K.V Library, Rahuri

#### Syed Fayyaz Mohsin\*, PA Shinde\*\*

## Abstract

The influence of IT tools or ICT in developing countries makes more demand for web based and accurate information. Application of modern IT tools in a academic environment has increased gradually in the recent decade. This IT study scrutinized the availability and utilization of IT in establishment of Digital Library. And for more benefits university library also decided to make almost all services through computer via Internet and LAN. At present e-GRANTH NAIP project is in progress with the financial assistance of ICAR, New Delhi through which AgriCat (National) and WorldCat (International) union catalogue is going to be developed. This paper is aim to take the review of modern IT tools and its utilization in the Mahatma Phule Krishi Vidyapeeth Library, Rahuri.

Keywords: Institutional Repository; Digital Library; Library Consortium; Blog.

#### Introduction

Due to technological revolution, there is vast difference between the traditional library and digital library setup. The emphasis is now on access to information instead of possession of documents in timely manner irrespective of formats such as audio, video, picture etc. The user's demands are increasing day by day which every librarian's need to take care of and that too in cost effective manner. In such scenario there are many IT tools available which are simple to use from users point of view, giving technological edge, which assures satisfaction of users. This review of services has been taken to examine how and what IT applications adopted by this library to keep abreast of latest technologies.

(Received on 30.10.2010, accepted on 16.10.2012)

#### University Library

University library promotes the higher education, supports the teaching and extension programme of the University. The University Library, MPKV, Rahuri started functioning at Central Campus in the year 1971. Since its inception, the library is developing steadily and has been playing a vital role in providing all types of technological information to the students, teachers and scientists from Faculty of Agriculture and Faculty of Agricultural Engineering at Central Campus as well as to the progressive farmers. The students appearing for MPSC and other competitive examinations are greatly benefited by the services of University Library.

Development of Library services after Introduction of IT

Application of IT in Libraries

#### Digitization

Digitization is the process of converting information into a digital format. In this format information is organized into discrete units of data that can be separately addressed.

Digitized data either digitally borned or required Retrospective Conversion

Author's Affilation: \*SRF (Senior Research Fellow), \*\*University Librarian, University Library, Mahatma Phule Krishi Vidyapeeth Rahuri-413722 (MS).

**Reprint's request: Syed Fayyaz Mohsin,** University Library, Mahatma Phule Krishi Vidyapeeth Rahuri-413722(MS) ,Ph.02426-243356, Fax: 02426-243283. E-mail: f.mohsin73@gmail.com.

- i. Digitally Borned
- ii. Retrospective Conversion/ Digitization

For effective digitization there are some steps to follow

Material

72

Scanning

Cleaning of Data

PDF Editor

Storage

OCR Check

Metadata for OPAC

Online ETAD (Electronic Thesis Abstracts Database)

Thesis contains valuable findings. Theses available have been digitized and electronic thesis Abstracts Database (ETAD) has been created by the MPKV library and made available through internet at MPKV's website http://mpkv.mah.nic.in. with user friendly search module, Now one can retrieve abstract of thesis from database from any corner of the globe free of charge.

Full text Database of Doctoral Dissertation on Agricultural and allied Subject submitted to MPKV University is going to made available through internet. This work is in Progress and soon will be available for the users.

#### Barcode / RFID Technology

A barcode is an optical machine-readable representation of data, which shows certain data on certain products. Originally, barcodes represented data in the widths and soakings of parallel lines, and may be referred to as linear or ID barcode or symbologies. They also come in patterns of squares, dots, hexagons and other geometric pattern within images termed 2D systems use symbols other than bars, they are generally referred to as barcodes as well. RFID or Radio Frequency Identification is the Auto-ID technology by which one can identify objects and track information about them wirelessly using radio waves. In the simplest terms an RFID system consists of a TAG (transponder) and a READER (interrogator).The technology of RFID deals with the remote collection of information stored on a tag using radio frequency communications.

As the RFID Technology is so costly MPKV Library adopted Barcode Technology. There are 2 barcode reader and 1 barcode printer available in library.

#### Library Management Software

There are various library management software available in market such as :Slim++, SOUL, Libsys, Librarian, Library Management etc. The MPKV library using Slim ++ library automation software.

#### Slim++

Slim++ is integrated, Multi-user, Multitasking library information software for the windows environment. Slim++ helps to catalogue books, films, sound recording, drawings, clippings, articles, reports, letters, pamphlets, serial publications.. all those things that contain information so vital to your organization. Slim++ cataloguing adhere to popular international standards. This means you can exchange dat with the world. Retrieval of the data is simple, fast and efficient. Even a catchy phrase in the description of the catalogued item can be used for searching.

#### *SLIM++ contains the following modules*

Cataloguing, Circulation, Serial Control, Acquisition, OPAC, Web based OPAC, Bulletin Printing (CAS), Statistical Analysis. MPKV Library uses Slim++ software because

- of their salient feature are as below:
- Slim++ can be configured for specific requirements by choosing one or more of these standard and add-on modules.
- 2) These modules work on the same data from different nodes of a network.

- Slim++ works just as well on a stand-alone machine as it does in a network of computers.
- 4) Library can be browsed through the Internet/ Intranet with SLIM++.

## **Computer based Library Services**

## Intranet Services

## Book Issue

Book issue to strengthen the transaction services and to bring accuracy in issue and return of book at the circulation desk, The library is now in last phase to make the system functional for issue of books through bar code system.

## **OPAC** Searching

Computerized library catalogue were first introduces during the late 1960's. the online catalogue, known as the Online Public Access Catalogue, or OPAC, has gradually become more user friendly with the use of menus and simple commands. MPKV library using the Slim++ as OPAC.

## DVD/CD ROM Data Base

CD-ROM is a digital optical disk. CD-ROM has provide new dimensions for information storage. In MPKV library the thesis are accepted in a Electronic format on DVD and also to download the data from the internet, DVD ROM are used.

In MPKV Library the collection of DVD's are 57 and CD ROM databases are 21 for retrieval of references of interest with abstract from 1972 to 2009 on agriculture and allied subjects.

Addition to this two online virtual data bases are subscribed by the MPKV library for its users. They are 1) Krishi Prabha and 2) Indiastat.com

### Krishi Prabha

## Indian Agricultural Doctoral Dissertations Repository

There are 45 Agricultural Universities/ Deemed Agricultural Universities in India which award Doctoral Degrees in agriculture and allied disciplines. These doctoral dissertations are one of the very important and valuable original sources of Information. It is accessible online to the national and international users. This Project was sanctioned by ICAR under its National Agricultural Innovation Project (NAIP) in 2007. At present there are 7500 theses in the database and can be retrieved from the URL: http://hau.ernet.in

Doctoral dissertations - the end product of doctoral research is a rich source of original information, access to which is severely restricted due to absence of information in digital form. Over 10,000 doctoral dissertations produced in India during 2000-2006 are digitized and made available online and offline.

### Indiastat.com

Indiastat.com has endeavor at Datanet is to collect, collate and compile in ready to use socio-economic information about India and its states and to make it available. Datanet India Pvt. Ltd. was established as an ITenabled company in February 2000. Today, Indiastat.com is a cluster of 51 sites including India-specific, Sector specific and State specific sites rendering its dedicated services to the fraternity research from academic, professional and corporate world with authentic and comprehensive compilation of secondary level socio-economic statistical data about India and its states on more than 35 variables.

MPKV library has the collaboration with the Indaistat.com and provides it user every statistical information about India and its states.

## CAS(Current Awareness Service)

Different types of CAS are involve like title announcement services, announcement of research in progress, notification of forthcoming conferences etc.

MPKV library has started CAS, whatever library receives (journals), the content page is made available at the desktop of the user through Intranet. The library member avail this service through Intranet of the University.

#### Internet Services

Internet is usually referred as "a network of networks". Internet, as a name itself indicates, that it is essentially a worldwide network of the computer networks. In MPKV a 50 computer internet is available for the students.

#### Interlibrary Loan Service

ILL activities can be automated through workstation connected to the OCLC system and utilizing their ILL module or through local or regional networks, which provides online information about resources in other libraries. MPKV library registered for the membership of OCLC for ILL.

#### Accessing the E-journal/E-Books

These days many academic and research journals are made available in the electronic format. These are full text journals accessible via internet. MPKV has the collection of 5 ejournals and 26 e-books. It also has the 58 online Indian and 2 foreign journals like CeRA and J-Gate.



## Digital Library of MPKV

A digital Library is a group as distributed repository in digital form. According to Berkeley of digital library project, University of California, "the digital library will be a collection of distributed information sources. Producers of information will make it available and consumers will find it perhaps through the help of automated agents."

In a broad sense digital library is a computerized system that allows users to obtain coherent means of access to an organized, electronically stored repository of information and data.

The University Library, MPKV, Rahuri is using Slim++ for digitization of documents with OPAC search module. At present MPKV library is in last phase of computerized library management system but moving towards fully digital steadily.

Commercial Digital Library Software has been purchased by the MPKV library and will be functional soon.

A separate digital library infrastructure is also going to be established in library for which 80 computers with latest configuration have been purchased.

### e-Granth Project

ICAR initiated its strengthening of digital library and information management system, for its community of users, with the following objectives:

- 1. Development of a digital library system that networks and integrates twelve of its physical libraries and their collection, accessible by all its user community.
- Creation of an institutional repository for its digitized content ant to promote author archiving of research papers Published agricultural scientist in India.
- Creation of AgriCat, a Union Catalogue of books and other learning resources held by the libraries in Universities and research institutes under its domain.

4. Capacity building.

#### Project Scope

AgriCat project conceived by ICAR as a part of ICT under component I of NAIP. The objective of AgriCat is:

- i) To promote shared access to books and other learning resources currently held by the libraries under ICAR domain.
- ii) To create a common catalogue (Union catalogue) of these learning resources.
- iii) To standardized and modernize cataloguing practices among its libraries.
- iv) To create common infrastructure for cooperative cataloguing for the current and future acquisition of books and learning materials by all the participating libraries.
- v) To join global network of libraries in agricultural education and research, to explore visibility to publications from India in agriculture and related disciplines.

Other IT Tools which are used in the current IT based services in the Libraries

#### E-Books

An electronic book (also e-book, ebook, digital book) is a text- and image-based publication in digital form produced on, published by, and readable on computers or other digital devices. MPKV library has the 26 E-Books in its Collection.

#### E-Journals

Electronic journals, also known as ejournals, e-journals, and electronic serials, are scholarly journals or intellectual magazines that can be accessed via electronic transmission. In practice, this means that they are usually published on the Web. MPKV Library has 5 E-Journals in its collection.

J-gate is one of the online journal which is subscribe by the MPKV library and it has the

more than 4380 online full text journal with their archives are available.

### J-Gate

76

J-Gate is an electronic gateway to global ejournal literature. Launched in 2001 by Informatics India Limited, J-Gate provides seamless access to millions of journal articles available online offered by 7478 Publishers. It presently has a massive database of journal literature, indexed from 23173 e-journals with links to full text at publisher sites. J-Gate also plans to support online subscription to journals, electronic document delivery, archiving and other related services. J-Gate Features and Benefits

- Truly e-journal portal
  J-Gate excludes journals that are not available online.
- Portal with largest number of e-journals As an e-journal portal, J-Gate presently hosts content from 23173 e-journals.
- Access to 1844 e-only-journals
  J-Gate provides access to 1844 online-only journals, which are not available in print.
- 7566 open-access online journals

Captures and indexes articles from more than 7566 open-access e-journals and maintains links to them.



- Links to 3009927 open-access articles Provides links to over 3009927 open-access articles.
- Full-text link to largest number of publisher sites presently links to e-journals from 7478 publishers.
- Union List linkage

This useful feature enables a J-Gate subscriber to check the availability of journals in local libraries.

Customization features

J-Gate Custom Content (JCC) and J-Gate Custom Content for Consortia (JCCC) are Intranet solutions offering customization, making J-Gate a local gateway for subscribed journals.

• Constant updating

The J-Gate site is updated every day, ensuring the freshness and reliability of content.

- Comprehensive journal classification Three level hierarchical classification of journals is available.
- Easy-to-use search functionalities

TOC and Database allow various search options for the user's convenience. The subscriber can choose to search by Title, Author, Authors' Address/Institution, Keywords, etc.

## Archives

An archive is a collection of historical records, as well as the place they are located. Archives contain primary source documents that have accumulated over the course of an individual or organization's lifetime. The library has some archival collection of crop diseases.

## Knowledge Portals

Knowledge portals increase the effectiveness of knowledge workers by

providing easy access to information that is necessary or helpful to them in one or more specific roles. Knowledge portals are not mere intranet portals since the former are supposed to provide extra functionality such as collaboration service, sophisticated information discovery services and a knowledge map.

## Institutional Repository

An Institutional Repository (IR) is a contemporary concept that captures and makes available as much of institutional research output as possible to the users. It is a sort of database of digital information resources accessible through Internet of Intranet. In the first instance this might include electronic versions of documents such as research papers, project reports patents, theses and dissertations.

IR is an online locus for collecting, preserving, and disseminating — in digital form — the intellectual output of an institution, particularly a research institution.

## Blog

A blog is a type of website or part of a website. Blogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. Blog can also be used as a verb, meaning to maintain or add content to a Blog.

The library has its Blog which can be access on http://mpkvlibrarian.wordpress.com

## Social network

Social Networking is a social structure made up of individuals (or organizations) called "nodes," which are tied (connected) by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, or relationships of beliefs, knowledge or prestige.

#### Twitter

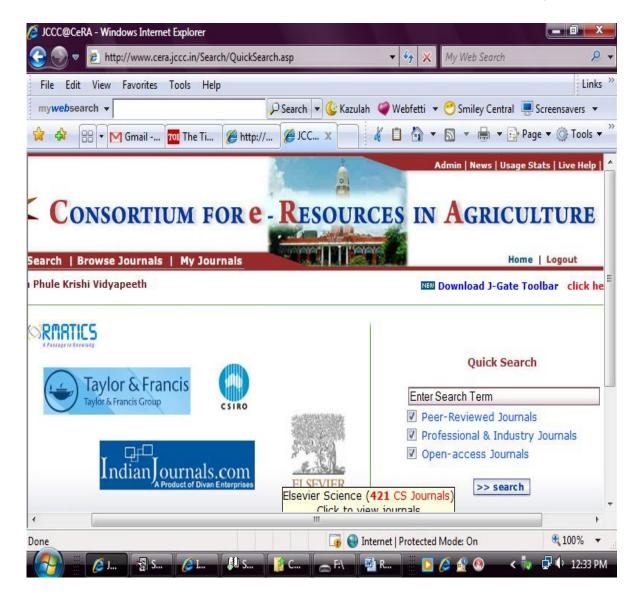
Twitter is a website, owned and operated by Twitter Inc., which offers a social networking and microblogging service, enabling its users to send and read other users' messages called tweets. Tweets are text-based posts of up to 140 characters displayed on the user's profile page. Tweets are publicly visible by default; however senders can restrict message delivery to their friends list. Users may subscribe to other author tweets – this is known as following and subscribers are known as followers. As of late 2009, users can follow lists of authors instead of just following individual authors.

### Orkut

A social networking site sponsored by Google and named after Google developer Orkut Buyukkokten. Launched in early 2004, Orkut was originally an invitation-only site, but was later opened to the general public. Membership exceeded 40 million users within two years.

#### Consortium

A consortium is an association of two or more individuals, companies, organizations or



governments (or any combination of these entities) with the objective of participating in a common activity or pooling their resources for achieving a common goal.

#### Library Consortium

Brings together librarians and libraries for activities and objectives that cannot be as effectively undertaken individually. ICAR launched Project CERA-Consortium of E-Resources in Agriculture with objective of providing shared access by its academic and research community to e-journals etc. Through consortium licensing of e-content and creating a common access platform for all the content subscribed and held by libraries in 120+ institutions. These institutions include Agricultural Universities and ICAR funded research institutes in the country.

The following are type of Library Consortium CeRA

CeRA (Consortium for e-Resources in Agriculture)

Objectives of CeRA

- To upscale the existing R & D information resource base of ICAR Institutions/ Universities comparable to world's leading institution/Organizations.
- To subscribe e-journals and create e-access culture among scientists/teachers in ICAR Institutes/Agricultural Universities.
- To assess the impact of CeRA on the level of research on the level of research publications measured through NAAS ID and Science Citation Index.

## RSS

RSS (most commonly expanded as Really Simple Syndication): is a family of web feed formats used to publish frequently updated works—such as blog entries, news headlines, audio, and video—in a standardized format.

RSS is a content delivery vehicle. It is the format used when you want to syndicate news and other web content. When it distributes the content it is called a feed. You could think of RSS as your own personal wire service.

### Podcast

A Podcast (or non-streamed webcast) is a series of digital media files (either audio or video) that are released episodically and often downloaded through web syndication. The word usurped webcast in common vernacular, due to rising popularity of the iPod and the innovation of web feeds.

### Podcasting

Podcasting describes the process of using audio files to deliver syndicated content to a digital audience. In Podcasting, you create audio files that are available on your website, which people can then download to their iPods or MP3 players and listen to. "Podcast" are delivered through RSS (Rich Site Summary) feeds; users subscribe to various Podcast which are then checked regularly for updates – just like blogs.

## Conclusion

In order to render quality services to the students and readers, it is necessary to every library to keep pace with modern IT tools. Tremendous changes have been taken place with the advent of computer and communication technology. The library and information professional has to work in IT environment. Keeping in mind the University library of MPKV has adopted modern IT tools such as CD-ROM databases, e-books, ejournals, OPAC, Library Portal, Blog, Library Consortium etc which is found to be noteworthy changes. As well as MPKV library has working for the development of Agri-CAT and World-CAT with association of ICAR & NAIP. It shows that university library has committed towards its vision of adopting the IT tools in this IT world.

To make aware of all IT services, the course of Library and Information Services has been

incorporated by the ICAR, New Delhi from last year in curriculum of PG Studies. The library is conducting this course by using modern tools such as power point, Video orientation etc.

The Vision with action is the only way to change the World.

### References

80

- 1. Ezra M, Ravindra D. Institutional Repositories Initiatives in India: A Study. Indian Journal of *Agricultural Library and Information Services* 2008; 24: 108.
- Shinde PA, Ingle RN. Knowledge Portal: An Emerging Tool for Libraries (Practical Approach of MPKV Library, Rahuri). *Indian Journal of Library and Information Science* 2009; 3(2): 76-77.
- 3. Neelam Sharma, Sudhir Gupta. Digital Library: The Need of the Hour. *Indian Journal of Agricultural Library and Information Services* 2009; 25(1): 46.

- 4. Jesudoss Manalan et al. E-Journal Consortia: A Boon to Indian Libraries. *University News* 2007; 45(05): 8-9.
- Muzamil Shafi. Library Consortia: An Overwhelming Technology. *University News* 2008; 46(31): 14-17.
- 6. Vishnukumar H Suthar. RSS: A Superhighway of Information Retrieval in Modern Library Era. *DLIBCOM* 2009; 4(10): 3-4.
- 7. Vaishnav AA. Impact of IT on Library Management. *Modern Trends in Library and Information Science* 160:165.
- 8. Joshi N. Impact of IT on Library Management. Modern Trends in Library and Information Science 168:173.
- 9. http://wikipedia.org/wiki/Barcode. (October 12, 2010).
- 10. http://wikipedia.org/wiki/Twitter. (October 12, 2010).
- 11. http://wikipedia.org/wiki/Orkut. (October 13, 2010).
- 12. http://wikipedia.org/wiki/Social networking. (October 13, 2010).