# Journal of Chemical and Pharmaceutical sciences Study on use of E-Books Software in Public Library in West Bengal

Abdul Musref Khan\*, S. Chandrappa

Dept. of. Library & Information Science, CMJ University, Shillong, Meghalaya, India \*Corresponding author: E-Mail: abdullib003@gmail.com
ABSTRACT

Public Libraries were established for collecting books of different categories, different time, authors, religion, community, history, and different subjects at one place with purpose of caring them and make them accessible to the public who is seeking information on a topic. Collecting and accessing of every type of informatics data at the same time is very strenuous for a person in perspective of an organization or financial statement. It is also not possible that a single library can provide all type of information and fulfill the demand of every type of user. So idea of digitization of libraries becomes helpful for handling this situation.

With the digitization of public libraries it becomes easy for everyone to access any library from remote area and get the relevant information. For digitization, printed books needs to be converted to the electronic format by scanning them or making softcopy version for them. To maintain these e-books and provide digital service to the users of the library different e-book and library management software developed. These software has the ability to store e-books over internet in their database, maintain the collection categorically, indexing them, keep record of the user activities, provide search by author, type, community, publication, publishing year, alphabetically, name and other methods. KOHA, Dspace and Libsys are three of many available e-book reading or library management software. This study focuses on the use of different e-book library software in public libraries of West Bengal. West Bengal has its name in the era of library growth and development in India. Also the first fully digital public national library of India is also located in West Bengal. So this paper will provide details of the use of software in public libraries in West Bengal.

**KEY WORDS:** Digital Library, Public Library, E-Book Software, Library Software, Library Digitization.

#### 1. INTRODUCTION

A Public Library is the finished result of man's battle against syndication and centralization of human information in the hands of few. The idea of democratization of learning came in the Nineteenth Century England as a result of long renaissance movement. From antiquated mud tablet storage facility to the new age digital library this change was not straightforward and simple and took around 2500 years to cover the way. Library is one of only a handful couple of most established foundations that still survive. Amid days of yore libraries went about as support of human progress.

Digitization of library and data administrations includes non-numeric information preparing, content recovery, and control of series of characters. Data can be utilized for these reasons and for particular needs, unique reason software are likewise accessible in the market. The different classes of such software and their highlights are: Basic software for information section, approval, arranging, converging of documents, and altering of information. Word handling software to control content stockpiling, review, utilize and alter; arrangement of edges, expansion and cancellation of series of characters, control passages and so on.

Software can likewise be related with seeking on the web recovery framework and CD-ROM databases. Major online frameworks have their own particular software generally written in order dialect, which give access to outer databases. They likewise give private or individual document office and allow altering of pursuit records on micros.

West Bengal Public Library Network starts its balance by giving library office at the entryway advance of the clients, who needs different sorts of data. Any client can approach the system whenever with the assistance of a PC terminal. The State Central Library of West Bengal which is handled by the Directorate of Library Services, Department of Mass Education Extension and Library Services is the zenith Library in the system. The District Libraries are likewise part of this electronic system.

Some of the important public libraries of Bengal are - State Central Library (Kolkata, Established in 1956), Kolkata Metropolitan Library (Kolkata, Established in 1980), Uttarpara Joykrishna Public Library (Hooghly, Established in 1859), North Bengal State Library (Coochbehar, Established in 1870), Govt. Central Library (Darjeeling, Established in 1961), District Library, Uttar Dinajpur (Uttar Dinajpur, Established in 2004) and others. The study has been undertaken by studying the different websites of online public libraries of West Bengal which use one or the other e-books software. Some of these e-books software are: Alice for Windows, Virtua, Techlib Plus, Libsys, Granthalay, Maitreyi, Sanjay, DELMS, Librarian, WYLYSYS, DELDOS, TLMS, Libsuite, DSpace, Greenstone, NewGenLib, EPrints, Atriuum, Insignia Library System, Density Library Manager, Koha and many more. New data made accessible through library locales utilizing e-books software include: Pictures, Theses, Research Papers, Book Chapters, Patents, Annual Reports, Videos/Audios, PPTs, Rare books, Institutional

### Journal of Chemical and Pharmaceutical sciences

productions, Book Cart office, and so on. E-books Software have additionally influenced libraries to encounter all the more intriguing by encouraging self-transferring/downloading of reports and client communication on the web. E-books Software have additionally been instrumental in advancing asset sharing other than filling in as an apparatus to librarians to build up their IT abilities.

**Identify, Research and Collect Idea:** West Bengal has a strong network of Public Library System comprising of total 2480 public libraries out of which 13 are Government Public Libraries, 2460 Govt. Sponsored Public Libraries and 7 Govt. Aided Public Libraries run by voluntary organizations. Out of total Govt. Libraries, State Central Library is at the apex of the Public Library System in the State. Besides, there are 7 District Libraries, 4 Town / Sub-divisional libraries and one library of special status namely Uttarpara Joykrishna Public Library. In addition, there are 2460 Govt. Sponsored public libraries which include 19 District Libraries, 232 Town / Sub-divisional Libraries, 2209 Primary Unit / Rural / Area Libraries.

Amongst these 2480 Government, Govt. Sponsored and Govt. Aided Public Libraries, 344 libraries were established before independence, 418 libraries were established after independence up to implementation of West Bengal Public Libraries Act, 1979, and 1711 libraries were established after independence up to till date. Some libraries are age-old and bear their important role till date.

**Table.1. Government Libraries in West Bengal** 

S. No.	Name of the Library	District	Year of Establishment
1	State Central Library	Kolkata	1956
2	Kolkata Metropolitan Library	Kolkata	1980
3	Uttarpara Joykrishna Public Library	Hooghly	1859
4	North Bengal State Library	Coochbehar	1870
5	Taki Govt. District Library	North 24-Parganas	1860
6	Deshbandhu Govt. District Library	Darjeeling	1955
7	District Library, Uttar Dinajpur	Uttar Dinajpur	2004
8	North 24-Parganas Govt. District Library	North 24-Parganas	1955
9	Govt. Central Library	Darjeeling	1961
10	Central Library	North 24-Parganas	1953
11	Sidhu-KanhuBirsa Govt. Town Library	Purulia	1989
12	Digha Govt. Town Library	Purba Medinipur	1966

There are some other important libraries in West Bengal. These libraries are old and have some historical and important books in their collection. There are 21 libraries which are important because of their collection of books, journals, history notes etc. There are 79 oldest libraries in West Bengal which have rare books, manuscripts, old journals, oldest newspapers and maharaja's collection in their library.

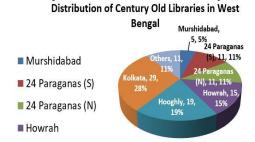


Figure.1. Distribution of Century Old Libraries in West Bengal

There are 7 such libraries, most of which are run by Non-Government Organizations. These libraries are assisted with government grants at par with Sub-divisional/ Town Libraries. Managing Committees of such libraries consists at least one Government officer as government nominee.

Of the three tier library system, namely, i) District, ii) Sub-divisional and iii) Primary Unit/ Rural/ Area Library – services mentioned in item numbers 1, 5 and 7 are generally rendered by the Rural/ Primary/ Area Libraries. Selected Rural/ Primary Unit/ Area Libraries render services under item number 2, 4, and 8. Services mentioned in item number 1 to 8, 10 and 11 are rendered by the District Libraries. The State Central library covers all the services of item numbers 1 to 13.

# Journal of Chemical and Pharmaceutical sciences

**Table.2. Government Aided Libraries in West Bengal** 

Library Name	District	Year of Establishment
RamkrishnaSarada Mission Ashram Library	Kolkata	1957
Ramkrishna Mission Library	24Parganas (S)	1960
Ramkrishna Mission Janashiksha Library, Belur Math	Howrah	1954
Ramkrishna Mission Student Home Library, Belghoria	Kolkata	1963
Krittibas Memorial Community Hall-cum-M use urn Library	Nadia	1960
Rammohan Library and Free Reading Room	Kolkata	1904
Bangiya Sahitya Parishad Library	Kolkata	1893

The present study includes only those public libraries of West Bengal which are digital and have their collection available in e-book format for finding out the use of e-book software in these public libraries. This study tries to unfold the current state of use of existing E-book Software in West Bengal public libraries which have already been digitized and using any type of available e-book software for accessing the e-book collection of their books.

E-book softwares that are used in the West Bengal library are DSPACE, KOHA and LIBSYS. We consider Central Library - The University of Burdwan, The Asiatic Society Library, the Indian Association for Cultivation of Science Library, Indian Statistical Institute Library and Saha Institute of Nuclear Physics Library for the research work on use of e-books software in public library in West Bengal.

Koha is a full included open source Integrated Library System (ILS) for computerizing Library exchanges, grew at first in New Zealand by Katipo Communications Ltd. furthermore, first conveyed in January of 2000 for Horowhenua Library Trust, it is at present kept up by a group of software suppliers and library technology staff from around the world. (www.koha.org) Koha is an open-source Integrated Library System (ILS). It bolsters worldwide measures including MARC bibliographic organization and Z39.50 Server. Web driven design (no extra software/utility is required at the customer side, access through the program Mozilla Firefox as it were). It gives huge flexibility to customization.

Dspace is a notable digital institutional repository that kept, stores, records, protects, and redistributes the scholarly yield of a college's exploration workforce in digital configurations. It oversees and conveys digital things, made up of digital documents and takes into consideration the creation, ordering, what's more, seeking of related metadata to find and recover the things. DSpace plan and created by Massachusetts Institute of Technology (MIT) Libraries and Hewlett-Packard (HP). DSpace was outlined as an open source application that foundations and associations could keep running with generally couple of resources.

It is to help the long haul safeguarding of the digital material put away in the archive. It is moreover intended to make accommodation simple. DSpace bolsters accommodation, management, and access of digital content.

LibSys is incorporated library digitization software created for dealing with substantial gathering in the scholarly libraries. It is most extensive and completely incorporated, multi-client framework intended to keep running on super/Mini/Microcomputers including PCs under UNIX, XENIX, and VMS condition. It is outlined and created by LibSys Enterprise, New Delhi. It bolster for establishment of software and its smooth tasks at a site. It bolsters the whole library related exercises. It has seven essential modules like securing, cataloging, course and serial control, OPAC, Web OPAC, Article Indexing.

Most of the public libraries has already been connected with West Bengal Public Library Network and has been digitized or digitizing their contents. We have selected West Bengal Public Library Network for fetching the public library which is using any e-book library software from the selected softwares for this research.

The University of Burdwan has number of books in the library till now is 253986 (acquired - 191799 nos., DSA/DRS venture - 20389 nos., Gift - 31415 nos., Raj Collection - 10383) out of which 159300 books (remarkable title - 91984) as of now entered in the KOHA database. Barcoding of books is finished. Computerized issue and return and Web OPAC, MOPAC of library database (books and diaries) will be begun instantly utilizing Koha Open Source Library Management Software.

The Asiatic Society has 1, 30, 786 books, 1, 09, 438 Journals and 48, 455 Microfiche in their collection. This collection has wide range of subjects like Anthropology, Archeology, Archeology, Archeology, Archeology and many more. The library has already make digital copy of 5500 books and 3, 12, 000 pages from their collection.

The Indian Association for the Cultivation of Science (IACS) has a large collection of very old scientific journals of immense historical and archival values. The library has more than 81000 bound periodicals and books.

The Library of Indian Statistical Institute (ISI) is one of the library which comes under the category of largest libraries in West Bengal The collection of this library has crossed the number 2,00,000. This large collection has books, diaries, numerous official reports, maps, microfilms, reprints and microfiches. Every year

### Journal of Chemical and Pharmaceutical sciences

cycle sums up approx 1000 special report dearies in this collection. The Library is already digitizing its content by scanning books and storing them on CD-ROM and their databases.

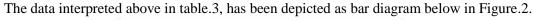
In 1995, Saha, and other professionals and teachers collected their special edition of books at one place for public access and that place was named Saha Institute of Nuclear Physics Library, the cost of expenses was few thousands rupees at that time. After that period the library is advancing itself in area, staff and collection of books. It has covered 12970 Sq.ft. area and its financial position is now 5 crores which was just Rs 50,000 in 1960.

**Studies and Findings:** Calculation of collected data and its analysis is developed on the basis of the answers and responses received from the librarians of these public libraries. Some of the data collection is also done from library websites and West Bengal Public Library Network for a comparative statement generation. The questionnaire (given in appendix) was conveyed to the librarians and professionals of the selected public libraries for gathering of necessary data with explanation of every research point.

**Total Resource Collection of Selected Libraries:** 32 responses with explanation of the asked question were collected from 50 professionals and librarians, which was given the questionnaire for this research work. The first research point was to gather the information of the complete collection of public library.

	Table.5. Library Collection Details of Selected Libraries														
Library	Resourc	Resources													
	Books	Journals	Other Mate	rials (like	Digital Content										
			CD/DVD-ROM/	Micro-fiche)	(E-books or E-journals)										
CLUB	252285	29200	1187		159300	441972	38%								
ASL	130786	109438	48455		5500	294179	26%								
IACSL	20000	51305	1000		6000	78305	7%								
ISIL	136000	82300	800		20,000	239,100	21%								
SINPL	39100	51974	1217		4301	96592	8%								
Total	578171	324217	52659		195,101	1,150,148	100%								
Percent	50%	28%	5%	_	17%	100%									

Table.3. Library Collection Details of Selected Libraries



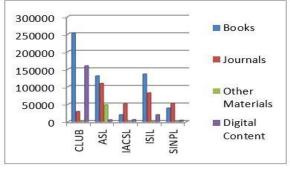


Figure.2. Library Resources

The table and bar chart shows that most of the libraries have printed books materials in large quantity (50%) whereas journals are fewer (28%), Other Materials (like CD/DVD-ROM/Micro-fiche) is 5% and Digital Content (E-books or E-journals) is 17%. The table also shows the quantity of resources present in different libraries. CLUB has 38% of total resources, ASL has 26%, IACSL has 7%, ISIL has 21% and SINPL 8% of total resources. Resources contain volume of books, journals, CDs/DVDs, ROM, Microfiche, E-books and E-journals.

**Services chosen by Users of library:** The table.4, shows the user choice for different services of the selected library softwares. These services includes Web-OPAC, circulation, reservation, full test accessing and others.

S. No.	Library		Total	Percent			
		Web-OPAC	Circulation	Reservation	Full Text Access		
1	CLUB	8	3	5	4	20	43%
2	ASL	4	1	2	3	10	21%
3	IACSL	1	0	0	3	4	9%
4	ISIL	3	2	2	1	8	17%
5	SINPL	2	0	1	2	5	11%
	Total	18	6	10	13	47	100%
	Percent	38%	13%	21%	28%	100%	

The data interpreted above in table.4, has been depicted as bar diagram below in Figure.3.

## Journal of Chemical and Pharmaceutical sciences

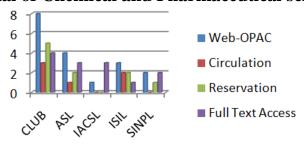


Figure.3. Library Services

Observation of the table.4 and figure.3, shows that 38% responding users chose Web-OPAC, 21% responding users chose reservation facility, 13% library professional chose Circulation and 28% librarians wants full text features service of the software used in public library.

**Use of Software in Public Library:** The response of questionnaire for use of software is given in below table.5. Table.5. Use of Software

S. No. Library **Chose Services** Total Percent KOHA | DSpace Libsys **CLUB** 8 9 6 23 34% 7 2 4 13 **ASL** 19%

2 3 **IACSL** 2 8 3 13 19% 4 4 1 **ISIL** 6 11 16% 5 **SINPL** 2 5 1 8 12% 20 33 100% Total 15 68 49% 29% 22% 100% Percent

10 8 6 ■ KOHA 4 ■ Dspace ■ Libsysy AST ACT IST GIRP

Figure.4. Use of Software

Above results from table.5, we can see that most of the persons wants to use DSpace digital repository (49%) in public libraries and 29% percent shows interest in KOHA. As both KOHA and DSpace are open source software most of the people wants to use them and Libsys is commercial/proprietary software so only 22% respondents shows interest in it.

Views on Different Modules of Software: Next questionnaire is about what modules are most useful. Below table.6, shows the responses regarding this.

**Chose Services** Percent S. No. Library Total **ACO** CAT/W-OPAC CIR | SC ΑI Other 7 1 **CLUB** 11 46 35% 8 7 4 5 2 **ASL** 3 8 6 3 3 25 19% 2 3 3 2 4 3 **IACSL** 6 20 15% 3 4 7 1 8 1 25 **ISIL** 5 19% 5 3 2 1 **SINPL** 1 4 1 14 11% Total 18 34 22 17 28 12 130 100% Percent 14% 26% 17% 13% 22% 9% 100%

Table.6. Useful Modules of Software

The data interpreted above in table.6 has been depicted as bar diagram below in Figure.5.

# Journal of Chemical and Pharmaceutical sciences

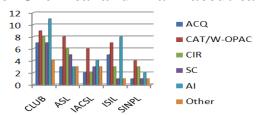


Figure.5. Useful Modules of Software

The respondents of five selected libraries answered the questionnaires for useful module of software that they want to use modules such as Acquisition, Cataloguing /OPAC, Circulation, Serial Control, Article Indexing and as in other option full text. 14% wants to use acquisition module, 26% wants to use cataloging / Web-OPAC module, 17% want to use circulation, 13% needs serial control, 22% wants article indexing and other (full text) want to use only 9%.

**Difficulties Faced in use of Software:** The questionnaire response about difficulties of using software is given in below table.7 and chart is also prepared for the same.

Table./. Difficulties in use of Software													
S. No.	Library	Chose Services	Total	Percent									
		No Technical Person	No Vendor	No admin Support									
1	CLUB	4	9	5	18	31%							
2	ASL	2	6	3	11	19%							
3	IACSL	3	4	3	10	17%							
4	ISIL	4	4	5	13	22%							
5	SINPL	2	4	1	7	12%							
	Total	15	27	17	59	100%							
	Percent	25%	46%	29%	100%	•							

Table.7. Difficulties in use of Software

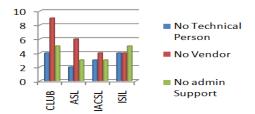


Figure.6. Difficulties in use of Software

The above table shows that library respondents are facing with the problems in using software. 46% tells that no vendor is available for good support of the software. 25% are facing problem due to no technical person and 29% are at lack of no admin support.

#### 2. CONCLUSION

It has been determined from this study that e-book softwares are being used by most of the public libraries of West Bengal. Commonly used e-book and library software in public library of West Bengal are: KOHA; DSpace; Libsys.

Public library aims to freely provide any type of knowledge and information to the user in the possible easy manner. These software are comes in category of open-source and proprietary, which makes these software more reliable to be used in any public library.

**KOHA in West Bengal Public Library:** More than 10 public libraries in West Bengal are using KOHA. Many training programs and workshops are already running in these libraries for increasing awareness of KOHA and promote it to use by user. Also to motivate users and library staff to use e-books more frequently to replace print media.

Libraries Using KOHA are as follows:

- Bose Institute Library,
- S.N. Bose Library National Center For Basic Science Library,
- Bengal Library Association,
- British Council Libraries,
- The Belur Public Library
- Kuchiakol Basanta Library

# Journal of Chemical and Pharmaceutical sciences

- Vivekananda Granthagar And R R Town Hall
- The Dhakuria Public Library
- State Council of Education Research & Training
- Srerampore College, Theology Dept.

**DSpaceIn West Bengal Public Library:** DSpace is a digital repository for libraries. DSpace is providing facilities to public libraries in West Bengal are as follows:

- West Bengal Public Library Network
- Indian Association for the Cultivation of Sciences
- Indian Statistical Institute Kolkata
- National Library

**Libsys in West Bengal Public Libraries:** Following list shows the use of Libsys in public libraries in West Bengal.

- The Asiatic Society
- Saha Institute of Nuclear Physics Library (SINPL)

The E-book software's has acquired the upset the every one of the fields of person and furthermore in the field of libraries/data focuses. E-book software's given the path for the free stream of data to the end clients. KOHA is one such software accessible for nothing; certainly it satisfies the prerequisite of any kind library house-keeping activities.

E-book software are ending up to an ever increasing extent easy to use through consolidating different highlights like simple and coordinated get to interface, looking and self-administration offices.

APPENDIX

#### **Ouestionnaires:**

Dear Librarians/Library Experts,

I am pleased to mention that I am writing my research paper on "Study on Use of E-Books Software in Public Library in West Bengal" for the partial fulfillment of my AIS Course Master Degree. The main objectives of this research are:

- a) To identify and use of different E-book software for Library management
- b) To identify the features and capabilities of different e-book software for Library Automation and why e-book software is existing opportunity for libraries?
- I shall be grateful to you for your valuable information, views, and ideas on selected questionnaires including recommendation of e-book software for library automation.

Name of Researcher

Student

College name, Kolkata, West Bengal.

# A. Personal Data

(a)	Your Name (Opt.):	Qualification:	
(b)	Designation:	Sex (M/F):	
(c)	Address:		
B. Ins	titutional Information		
(a)	Name:		
(b)	Type of Library: Academic/Public/National/	Private:	
(c)	Year of Establishment:		
(d)	Library Budget (2016/2017 in Rs.):		
C. Lib	orary Resources:		
Catego	oriac No of Itams	Categories	No. of Itams

Categories	No of Items	Categories	No. of Items
Books		Journals	
Dissertation		Thesis/ Report	
CD-ROMs		E-Journals	
E-books		Manuscripts	
Micro-fiche		Other Digital Content	

- a) What type of services users needs from the digital public library?
- i) Web-OPAC
- ii) Fast circulation
- iii) Book reservation
- iv) Remotely full text access

# **Journal of Chemical and Pharmaceutical sciences**

## **D. Details of Library Automation Software:**

- a) Which is the software you are using for library management and e-book handling?
- i) KOHA
- ii) DSpace
- iii) Libsys
- **b)** According to your views which of the module are good for public library?
- i) Acquisition
- ii) Cataloguing /Web-OPAC
- iii) Circulation
- iv) Serial Control
- v) Article Indexing
- vi) Other

#### E. Use of E-book

- a) Do Librarian use eBooks alongside, or as a replacement for, print books?
- i) Both
- ii) Replacement

#### F. Evaluation

- a) What kind of problems do you face with the library software?
- i) Lack of vendors readability
- ii) Non availability of technical exports/software specialists?
- iii) Difficult to use
- iv) Lack of administrative support

S0	. If	are	for	r lik	ora	ry a	uto	m	atio	n,	ple	easc	e n	ıen	tic	n	br	ief	ly.				•					eco	mn	ner	ıdat	ion	of	e-bo	ook
• • •		• • • •	• • • •	• • • •	• • • •	• • • •	• • • •	• • • •		• • • •	• • • •		• • • •		• • •	• • •	• • •			• • • •	• • • •	 	• • • •	• • • •	• • • •	• • • •	•								
• • •															• • •							 					•								

#### REFERENCES

Ali Ayub, ICT in Rural libraries of West Bengal, A case study of Jalpaiguri District India, Research Journal of Library Sciences, 3 (6), 2015, 13-19.

Anup Kumar Das, Legacy of the Bengal Renaissance in public library development in India, International Federation of Library Associations and Institutions, 41 (4), 2015, 370–380.

Barati Bhattacharya & Subarna K, Das R, Study of the development of collection and utilization of public library services in Barrackpore sub- division, West Bengal, In 60th ILA International Conference, Delhi: Indian Library Association, 2015, 184-191.

Dawa Doma Sherpa, Librarian, Dinhata College, Dinhata, Coochbehar, West Bengal, Changing Role Of Librarians In The Digital Library Environment, Skills, Current Trends And Challenges, 2017.

Hirak Roychaudhuri, 21<sup>st</sup>Century Public Library, A Venture To Get At Elite To Tom, Dick And Harry Of India, IMPACT, International Journal of Research in Humanities, Arts and Literaturem, 5 (6), 2017, 151-162.

Navin Prasad, Public Library System and Services in India, International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS) A Peer-Reviewed Monthly Research Journal, 2 (4), 2016, 70-77.

ParamitaSen, Collection Development And Services Of Government District Library, Barasat, West Bengal, A Survey, 2017.

Sharmila Bose, Apurba Jyoti Majumder, Evaluation Of University Library Websites Of West Bengal, A Study From Librarians, Perspective, in book, Collect development & ICT Applications in Libraries, Publisher: Raj Publishing House, Jaipur, 2015, 221-232.

Sultana Ruksana, Rural Library Services: Lessons from Five Rural Public Libraries in West Bengal, International Journal of Humanities and Social Science Invention, 3 (10), 2014, 27-30.

Syed Shaz Hussain, Sneha Tripathi, Aditya Tripathi, Library Branding, Extending The Outreach Of, Public Libraries, 2017.