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A STUDY ON DIGITAL LITERACY COMPETENCY AND LIBRARY SERVICES OF VISVA -BHARATI AND CENTRAL UNIVERSITY OF SOUTH BIHAR

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ABSTRACT

In this changing world, information is crucial for expansion of person existence as better in the subject area and overall growth. The new tools and technologies play an active role in growth and development of ones thought process, surviving in digital environment and how to take part world widely. This paper attempts to probe about the definite facet of digital literacy, various competency, library collections, digital information services, automation status of libraries, databases and software's used, e-services during COVID-19, technologies used in providing services to library users, digital literacy instruction, application of web 2.0 tools for library services, application of web3.0 tools for library services of visva -bharati university and central university of south bihar. To gather data related to library and its services, structured questionnaire was framed for librarian and was distributed in both online and offline mode where it was observed that various library services such as CAS, SDI, Inter Library loan, circulation service, digital library services, OPAC, referral services were provided by both libraries easily. It was also seen that CLVB was fully automated and CLSB was partially automated. Library software used by CLVB was LYBSYS and KOHA was used by CLSB. Databases provided to library users by both libraries are JSTOR and PROQUEST. It was also noted that some web 2.0 tools and web 3.0 technologies were adopted in both libraries. To conclude with the libraries are trying to learn and implement trending tools and devices for better performance and output, where VBCU future plan is to introduce RFID and CUSB is planning to have online library.

Keywords: Digital literacy, Digital literacy instruction, library services, e-library, web 2.0, web 3.0 technologies, emerging technologies.

1. INTRODUCTION

The digital world has totally changed various concepts and its utilization. Digital literacy, skills and competency is multiplex expression which is proving it as nucleus concept and inspiration in different sectors such as education, learning, teaching, research, marketing and so on. It provides path in lifelong learning and various new research zone. The literacy of various digital tools and techniques is called as digital literacy and to recognize the composite relationships among society, sole, firm, ICTetc.is called as digital competency. The competence of digital tools

enables one with amplified learning world, content rich sources and prospects for finer learning and understanding, permitting one to enlarge skills required for personal and professional lift that led to handle issues and problems with comfort and confidence. Competence in digital world helps one to be critical thinker, innovative, cooperative, collaborative, problem solver and so on. (Buckingham,2016).

In higher education there has been extensive transformation in e-learning, hybrid learning etc. as COVID-19 arrives. The pandemic came in front with opportunities and challenges as well.

In one side people were adopting online tools and techniques and, on another side, libraries were trying to provide users with all services in online mode as well and those with less online presence were trying to deal in online environment. The offline mode totally transformed to online mode and many new technologies were introduced among many libraries, hospitals, IT firms etc. There were various programs initiated by libraries to professionals and users for better delivery and access of information to users. The academic librarians engaged in various training and orientation programs, skill development and delivery of contents programs. The goal was to introduce access and connectivity to library digital materials, resources, creation of online learning tools, education tools, facilities and encouraging in enhancement of digital literacy and competency among students. The COVID-19 boundations has opened the path to various challenges in teaching and education, which is in ongoing mode where in libraries the utilization of web 2.0 tools and 3.0 tools are in rapid stride and will continue as there is new innovation in technology on daily basis. The web tools like robotics, remote, artificial intelligence allows the accessibility to all by connecting in electronic world and enable library and users to perform better and learn new techniques to execute in digital world. The digital competency and literacy cater the need and allows to access information smoothly in this rapid developing sphere. The academic libraries are becoming much progressive by adopting digital technologies and having a mission to enable users in learning online tools and becoming both information rich and electronically competent and affluent. The web technologies cope with the challenges being faced by the libraries and users in providing and accessing information services and are trying to provide various opportunities and enabling users to move ahead to achieve vision and mission by linking with various resources with an ease. (Martzoukou,2020).

1.1. DIGITAL TECHNOLOGIES AND LIBRARIES

Information is the core part for this society in

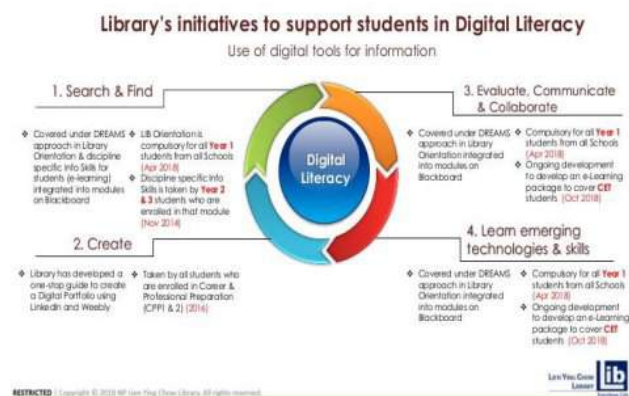
various forms, where library is called as information canter which solely is responsible for enhancement of the community and aid to benefit mankind. For fast processing of library, there is need to adopt new trending technologies which allows in fast delivery of content and also let to deal smartly in various other services provided by libraries such as acquisition, collection, cataloguing, cooperation, serial control, web OPAC, storage, retrieval and many more.

The literacy and competency of trending technologies makes one to be called as digital literate and competent, where digital literacy is the need of hour which helps one to fit in any place or any environment by having various web skills, computer skills, media skills and many more. (Ranjan & patel, 2021). Nowadays, technology manifest boon to libraries and many other sectors by saving time and providing better services by satisfying users need with no time. Some of the activities done in libraries in digital space permits to compete with others with much more confidence and soothe. (Vijayakumar & Vijayan, 2011). The application of web 2.0 technologies is done by libraries for collaboration, content delivery, online service, online cataloguing and many more purposes by allowing them in experiencing different functionalities of databases access, e-delivery, communication, virtual operations and information availability, its use at an ease. (Ranjan & Bhatt, 2021).

Table 1: Library activities by using digital tools

Library activities	Use of digital tools and technologies
Generate	Word processing, character and voice recognition, editing text
Store	ROM, e-publishing, magnetic storage cloud storage, video text
Process	Electronic data processing, expert system, artificial intelligence
Retrieval	Information retrieval, database management system (DBMS)
Communication/ dissemination	Electronic mail, e-document delivery, writing, editing, publishing, conferencing

Figure 1: Library's initiatives to support students in digital literacy



Source: https://cdn.slidesharecdn.com/ss_thumbnails/digitalliteracylibrary181018014347-thumbnail-4.jpg?cb=1539827054

2.OBJECTIVES

The following objectives were placed for the present study.

1. To know digital literacy competency among library personnel.
2. To find out application web 2.0, web 3.0 technologies in libraries.
3. To know about databases and software's used in libraries
4. To know various services provided by libraries.

3. SCOPE

The present study pivot on digital literacy competency, services provided, digital tools adoption, library databases and software's used and utilization of trending tools and technologies among libraries for better services. The data is collected from VISVA -BHARATI AND CENTRAL UNIVERSITY OF SOUTH BIHAR.

4. METHODOLOGY

The method adopted for collecting data from libraries was using questionnaire as a main research tool. The librarian of visva -bharati and central university of south bihar were asked to fill the systematically framed questionnaire. The data collected was further represented with the help of table and compared for further result.

5.DATA ANALYSIS

Table 2: - Library Profile

Name of Library	Year of establishment	Total number of library personnel
Central Library, Visva-Bharati	1921	40
Central Library, CUSB	2012	5 officers, 9 staffs

CLVB*- Central Library, Visva-Bharati, **CUSB***-Central university of south bihar

Table 2 shows year of establishment, and total number of library personnel where Central Library, Visva-Bharati was established in 1921 and Central Library, CUSB was established in 2012. In CLVB total number of library personnel were 40 and in CUSB total were 14.

Table 3: Library collection and services

	Central Library, Visva-Bharati	Central Library, CUSB
Document category	No. of documents	No. of documents
Books	4.5 lakh	42769
E-Books	8000	5737
Magazines/ Newspapers	250	Magazine-19, Newspaper-14
Microfilms	NA	NA
Thesis/ Dissertations/ Project reports	3000	Thesis-23, Dissertations-477
CD/Floppies	1000	NA
Manuscript/ Rare Books	50000	NA
Maps	NA	09(census)
Journals subscribed-	Indian 150 Foreign 100 E-journals only - from ess	Indian 14101 Foreign 1490 E-journals only 146949
Database subscribed	03	04

Table 3 shows Library collection and services where in CLVB total 4.5 lakh books were in collection which is more as compared to CUSB which was 42769.e-books present in CLVB was

8000 which is more as compared to CUSB which has 5737 e-books. There was no CD/Floppies in CUSB and in CLVB it was numbered as 1000. Database subscribed in CLVB was 3 and in CUSB it was 4 which is more as compared to CLVB. There were no microfilms in both libraries available.

Table 4: Digital information services

Digital information services	Central Library, Visva-Bharati	Central Library, CUSB
Information (CAS, SDI, updates)	Yes	Yes
Communication (notice, alert)	Yes	Yes
Promotion (conference, events)	Yes	Yes
Advisory service	NA	Yes
Reference service	Yes	Yes
Searching services (OPAC/Web OPAC)	Yes	Yes
Circulation service	Yes	Yes
Inter Library loan	Yes	Yes (DELNET)
Newspaper clippings	Yes	No
Promote library holdings	Yes	Yes
Bibliographic service	Yes	No
Digital library service	Yes	Yes
Indexing and abstracting	NA	Yes
Referral service	Yes	Yes
Remote access to information	Yes	Yes

Table 4 shows digital information services provided by libraries where Information (CAS, SDI, updates), communication (notice, alert), promotion (conference, events), reference service, digital library service, referral service, remote access to information, Inter Library loan, promote library holdings, searching services (OPAC/Web OPAC) etc. were provided by both of the libraries. Bibliographic service and newspaper clippings were not provided by CUSB and Indexing, abstracting and advisory services were not provided by CLVB.

Table 5: Automation status of Library

Automation status	Central Library, Visva-Bharati	Central Library, CUSB
Library automated	Yes	Yes
Status of automation	Fully automated	Partially automated
Areas of automation		
Acquisition	Fully automated	Partially automated
Circulation	Fully automated	Fully automated
Cataloguing	Fully automated	Partially automated
Serial control	Partially automated	Partially automated
OPAC	Fully automated	Fully automated

Table 5 shows automation status of Library where CLVB was fully automated in several areas such as acquisition, circulation, cataloguing and OPAC and partially automated in serial control. On the other side CUSB library was partially automated in acquisition, cataloguing and serial control and fully automated in circulation and OPAC.

Table 6: Database and software used

Database and software used		
	Central Library, Visva-Bharati	Central Library, CUSB
Frequency of use of digital technologies for proper functioning of library	Daily	Daily
Library software used	LYBSYS	KOHA
Member to any library network/ consortia	J-GATE, CSIR	INFLIBNET
Databases provided	JSTOR PROQUEST	JSTOR, ISID, Manu Patra, SccOnline, Hein Online
Library a member to any library network/ consortia?	Yes (J-GATE, CSIR)	NA
Competency extent to use advanced skills for information retrieval	Highly Competent	Competent

Table 6 shows database and software used by libraries where in LYBSYS software is used by CLVB and KOHA is used by CUSB. CLVB use JSTOR, PROQUEST databases whereas JSTOR, ISID, manu Patra, SccOnline, hein online databases is subscribed by CUSB.

Table 7: e-services during COVID-19

e-services during COVID-19	Central Library, Visva-Bharati	Central Library, CUSB
Direct link of library on home page	Yes	Yes
Remote access	Yes	Yes
Expanded trial access	Yes	Yes
Link of open access resources	Yes	Yes
COVID-19 scholarly resources	No	Yes
Online research support tools	Yes	Yes
Link of special services during COVID-19	Yes	Yes
Organisation of virtual events	Yes	Yes
Research assistance/ literature search/ plagiarism check	Yes	Yes
Share of information of WHO/Government of India	Yes	Yes

Table 7 shows e-services during COVID-19 where both the libraries provided various services such as direct link of library on home page, remote

access, share of information of WHO/Government of India, research assistance/ literature search/ plagiarism check, organisation of virtual events, online research support tools, link of special services during COVID-19, link of open access resources, expanded trial access etc.

Table 8: Technologies used in providing services to library users

Technology adoption in providing services	Central Library, Visva-Bharati	Central Library, CUSB
Literacy software	No	No
Virtual reference technologies	No	No
Integrated library system	Yes	Yes
Automated patron messaging programs	Yes	Yes
Scheduling and event management software	Yes	No
E-book mobile application	Yes	Yes (MYLOFT)
Circulation management system	Yes	Yes

Table 8 shows technologies used in providing services to library users where Integrated library system, circulation management system, automated patron messaging programs, e-book mobile application were provided by both the libraries. It was observed that scheduling and event management software, virtual reference technologies, literacy software was not provided by CUSB as compared to CLVB.

Table 9: Digital Literacy Instruction

	Central Library, Visva-Bharati	Central Library, CUSB
Have library website	Yes (http://visva-bharati-library.in/)	Yes(www.cusb.ac.in)
Provide digital literacy instruction to the users	Yes	Yes
Library home page contain links to any digital literacy tutorial/program	Yes	Yes
Organized digital literacy programmes for library professionals and users	Yes (every year library orientation, research management tolls utilisation)	Yes (Library orientation programme every academic session)
Content of instruction provided in digital literacy program	1. Web OPAC/OPAC 2. Instruction regarding ethical use of digital information 3. Guidance to structure research paper	1. Web OPAC/OPAC 2. Internet searching for information 3. Instruction regarding ethical use of digital information 4. Guidance to structure research paper

Methods followed to provide digital literacy programmes	1. Online tutorial 2. Seminars/workshops 3. Lectures 4. Library tour and orientation	1. Online tutorials, 2. Seminars/workshops 3. Library tour and orientation
Future plans for promotion digital literacy instruction	To introduce RFID and fully security system management and biometric circulation management system.	Online e-Library

Table 9 shows digital Literacy Instruction where it was observed that both libraries provide digital literacy instruction to the users. The content of instruction provided in digital literacy program by both libraries were Web OPAC/OPAC, instruction regarding ethical use of digital information, guidance to structure research paper etc. The methods followed to provide digital literacy programmes by both the libraries were online tutorials, seminars/workshop, library tour and orientations also provide lecture method for digital literacy programmes.

Future plans for promotion digital literacy instruction by CLVB was noticed to introduce RFID and fully security system management and biometric circulation management system and CLSB to have online e-Library.

Table 10: Application of web 2.0 tools for library services

Web 2.0 tools	Central Library, Visva-Bharati	Central Library, CUSB
Microblogging (Twitter)	No	No
Web application (Google Docs, Flickr)	Yes	No
Wikis(mediawiki)/ Blogs (WordPress)	No	No
Social networking sites (Facebook, Twitter)	Yes	No
Social tagging	No	No
Instant messaging	No	Yes
RSS	Yes	No
video sharing sites (you Tube)	Yes	No
Social bookmarking	Yes	Yes

Table 10 shows application of web 2.0 tools for library services, where it was observed that social bookmarking is done by both of the libraries. some of the web 2.0 tools used by CLVB are

video sharing sites, RSS, web application (Google Docs, Flickr), social networking sites (Facebook, Twitter). Instant messaging is adopted by CLSB as compared to CLVB.

Table 11: Application of web 3.0 tools for library services

Web 3.0 tools	Central Library, Visva-Bharati	Central Library, CUSB
Mobile Library catalogues	Yes	Yes
Quick response code	Yes	Yes
Web OPAC	Yes	Yes
Geo-tagging	No	No
Virtual reference services	Yes	Yes
Cloud computing	Yes	Yes
Semantic web	No	Yes

Table 11 shows application of web 3.0 tools for library services, where it was noted that mobile Library catalogues, quick response code, Web OPAC, virtual reference service, cloud computing was used to provide better library services. Semantic web was used by CLSB as compared to CLVB. Geo tagging was not adopted in any of the libraries.

CONCLUSION

Information technology highly impacts on work culture of library and its activities which has changed fully from conventional methods to introduction of digital tools and technologies by breaking the worldwide boundaries with new apparatus and methods that help to provide better services to our clients. The libraries are now much more competent to provide enhanced services with the help of ICT by fulfilling users demand at right time at right place without any hinderance. The libraries under study are adopting various new tools

for proper functioning and are also trying for better user services by being digitally competent so as to deal with reliance. In this changing scenario the awareness of latest trends and technologies allows to maintain the value of enhance services where digital literacy and competency of various tools helps to headway the position of any institution and helps to precipitate multiple chores of library staffs. Adoption of digital tools allows to break the worldwide frontier by providing amplified services to users and also aid to intensify skills and competency at various stages.

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