IMPACT OF E-RESOURCES AND SERVICES IN HIGHER EDUCATION IN 21ST CENTURY

Sanchaita Nath

M.Phil. Scholar

School of Education Central University of Haryana

sanchaitanath2@gmail.com

Abstract: This era is the era of globalization, modernization and urbanization. At present standing in the 21st century, we have come a long way in the world of technology. In the age of modernization, students are deeply involved with various types of technologies. Nowadays most of the libraries related to the higher education institutions are giving a lot of importance on electronic resources and services. The use of various e-resources and services are very common among teachers and research scholars. All most all the teachers and research scholars are very much dependent upon e-resources for getting the relevant and desired information. Huge range of information are available there in electronic resources. Timely up-to-date sources are available and value-added functionalities are there in e-resources. Electronic resources usually contain various e-books, e-magazines, e-journals, e-newspapers, e-dissertations, e-thesis, e-reference sources and citations etc., all types of resources are stored in a computer in an electronic form which is called database. It increases the ability to find use relevant literature of scholars. Most of the database provides open access journal. Open access is the name for free, digital, full-text scientific and academic materials made available online.

Key Words: E-resource, Service, Technology, Electronic form, Database, Open access

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INTRODUCTION:

In the present era Internet has dramatically changed the way people and institution's function. It has led to massive change in the way libraries function and offer services to their users. At present, the libraries actively procure, organize, display and issue e-forms of books, journals, newspapers, theses and dissertations. This is also due to change in the way of seeking information the behavior of users. The new generation of users prefer online resources as they

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want all information at the one clicks of mouse. The e-resources have certain inherent characteristic features which offer convenience to the users.

An e-resource is the material which requires computer mediation in order to access its content and make it useful. Both online and offline resources such as CD-ROMs fall within the scope of e-resources. The term e-resource refers to all the products which a library provides through a computer network. The electronic resources are also known as online information resources covering bibliographic database, electronic reference, books and digital collections of data. They include both "born digital" material which has been produced directly online. For example: e-journals, databases and print resources which have been scanned and digitalized. The electronic resources, e-journals, online databases are not owned by the libraries as they own the print material. Ownership of electronic resources lies with the providers of these resources. Access to the electronic resources may be free via internet or may be available against fee. Some of the examples of e-resources are magazines, encyclopedia, newspapers, journals or articles published in them. These may be accessed on Internet connected devices such as computers, tablets, smart phones, etc. So, electronic resources or e-resources are materials in digital format accessible electronically.

SIGNIFRICANCE OF E-RESOURCES:

I) **Instant Download:** E-resources can be downloaded instantly whenever we need these resources for studying, working, writing.

ii) **Taken Anywhere:** They can be taken anywhere on portable devices. There is no boundary of taking these resources.

iii) **Read anytime:** All users can read them anytime all over the world. Users can be used these resources according their pace and suitable languages.

iv) **Change Font size:** Font size can be changed suitably by the users and according to the devices. So, people can read easily without any stress.

v) **Facility of pages:** They provide facility to hold and turn pages easily. Users cannot feel any obstacles to read various e-resources through this facility.

vi) **User Friendly:** The physically disabled users can access information with assistive devises. They do not face any problem, stress and obstacles to read those e-resources.

vii) **Easy purchase:** In purchase, the overhead charges like shipping, postal, handling are ruled out. So, users can get these e-resources very easily from anywhere of the world.

viii) **Availability of Interaction:** Some e-resources are interactive. Uses et a chance for interaction according to their pace.

ix) **Attractive Decoration:** The e-resources can have background music and animations. So, e-resources attract easily to the users and they can give their full attention on the particular topic and understand easily.

x) **Need no repair:** They do not require bindery and repair. Through these we can save our money and don not feel any headache of carry from one place to another.

xi) **Need no rectification:** They do not need shelving and rectification. So, these e-resources are very easy to use without any pressure.

xii) **No chance to misplace:** Users cannot misplace e-resources. It is because they can keep or save or store these e-resources in their google drive, electronic devices such as laptop, mobile, CD-ROM, DVD.

xiii) **Easy Searching Process:** These resources are easy to search. WE need only the connection of Internet. Nowadays, so many educational institutions are providing free Wi-Fi connection.

xiv) **24X7X365:** We can use these e-resources 24x7x365. So, users can be free from any kind of stress, tension regarding examination, any type of research work, thesis writing, dissertation etc.

SELECT AND ACQUISION OF E-RESOURCES IN LIBRARY:

E-resources may be selected by any of the method. Such as: Serendipity which is finding by chance something which is useful and beneficial while surfing the internet, faculty recommendations, reviewing the electronic journals provided by other libraries, publisher advertisements. A library acquires print resources for ownership. But for electronic resources, the libraries simply get license for access rights. Some important activities involved in acquisition of e-resources are: determining the price, negotiation with the vendors, completing the licensing agreement, allocation of funds, placing the order.

The library has to decide if acquisition functions foe e-journals will be performed by the regular stuff or stuff with expertise in dealing with electronic format. In order to acquire and process electronic resources, the staff requires the skill of negotiating licenses, familiarity with the electronic format, etc. In other side, a license is usually a written contract or agreement between the library and the publisher. An agreement has various aspects like method of calculating payment, definition of users, restriction on use, archival rights, etc. Licensing agreements are generally written for the vendors advantage, so the library staff has to be extra careful to negotiate favorable terms for the library. Libraries usually have separate budget for procuring e-resources. E-resources are catalogued and details are entered into library's OPAC. Some libraries may decide to list them on the website and provide their links. They may not catalogue them. For e-resources, maintenance is an important issue. Library has staff to maintain e-resources. They ensure that the subscribes e-resources are accessible on Internet Protocol ranges of the university. Libraries usually to conduct user education programmes in order to teach the users how to use e-resources and thus promote and enhance the use of e-resources among the users.

Some Utilities of E-resources:

CAS-Current Awareness Service: Current awareness services is an important service provided by libraries and information centers. It fulfils current approach to information. Due to the advent of e-resources, library cantered services are shifting to publisher centered service.

SDI-Selective Dissemination of Information: It is defined as the system in which selectively and automatically compiled information about new documents is disseminated to researchers, scientists and others who need these documents or information or supplying each user or group of users with a reference of documents or abstracts relating to their predefined areas of interest. It involves notifying the material that matches the interests of the client.

DDS-Document Delivery Service: It refers to the physical or electronic delivery of a document from a library collection to the residence or place of business of a library user, upon request.

ILL-Inter Library Loan: It refers to the process by which a library requests material from, or a material supplies to another library.

OPAC-Open Public Access Catalogue: It is computer based and supported library catalogue or bibliographic database designed to be accessed via terminals so that library users may directly and effectively search for and retrieve bibliographic records without the assistance of a human intermediary such as specially trained member of the library staff.

VARIOUS TYPES OF E-RESOURCES USE IN MODERN ERA:

There are different types of e-resources available in present century. Such as:

E-JOURNALS: An e-journal has been defined as a periodical publication which is published in electronic format usually on the internet. A periodical publication means that it has some periodicity i.e., It may be published weekly, fortnightly, monthly, quarterly or annually. An electronic version of an established print journal like New Scientist, Scientific American, Cell etc. An e- only journal like D-lib magazine. An established journal could stop its print version and transfer to e- only format. An electronic journal can be free or fee based through annual subscription, licensing or pay per use.

  It is a periodical publication which is published in electronic format, usually on the Internet. Electronic journals have several advantages over traditional printed journals. Such as, it can search the contents pages and the full text of journals to find articles on a certain subject.

Scholars can read journal articles on the desktop which do not have to be in the library. There are three types of e-journals, such as:

Remote access: Here, publishers host their journals at their website. Access permission provides, when the library or individual subscribes to the e-journals. Access is controlled by a user ID and password, and IP enabled Intranet or Combined.

On Site Access: Publishers deliver the e-journals to subscribers' CD-ROM or through their website or FTP option.

Access Through Database: Here the access and use of information in electronic or digital format. Users can find articles of their interest through database.

DOAJ-Directory of Open Access Journals: It is supported by libraries, library consortia and research organizations from all over the world. This ensures that DOAJ stays in the public domain.

Library procure subscription to e-journals through consortia in order to save on money. In this consortia approach, libraries form an association or network or cooperative organization to procure and share journals. Such as DeLCON-Electronic Library Consortium.

E-BOOKS: An e-book also known as electronic or digital book is a text and image-based publication in digital form. It is produced or published to be read on computer or other digital devices. E-books are the digital equivalent of standard printed books. E-books are available in a wide variety of formats. Some may be downloaded in full to be read offline, whereas others may only be read online while connected to the internet. In order to access the e-books, the users must have some following, such as, proper Internet connectivity, up-to-date internet browser such as Internet explorer, Chrome, or Firefox. An up-to-date version of Adobe Acrobat Reader as most e-books use PDF files, this is the format in which the e-books are displayed. E-books may be read on computer or may be transfer to any other reading device like Kindle, Android, iPad, iPhone etc. The library pays of access to e-books which are hosted on a third-party website. When a user wants to access e-book, he downloads a file which automatically expires

after some days. It is just like a user visiting a physical library for getting a book issued for a week or two, after which the same has to be returned to the libraries.

Some e-books sites are: Mylibrary, E-brary, EBSCO, Springer, Safari Technical Books, CARRIE, Free books, Internet Classics Archive, Internet Public Library, Online Books Page, Project Gutenberg, UC Press e-books collection, Classic Book Shelf, Books-on-line, Bartleby.com.

E-DATABASE: It is used to refer to a collection of records which may have numeric, textual or image-based data. If it is accessible via WWW, it is known as online database were available as CD-ROM databases. A journal database is a collection of journal articles arranged in individual records which can be searched. The databases can be bibliographic or full text ones.

A bibliographic database is a database of bibliographic records; it is an organized digital collection of references to published literature. Such as, AHCD, Current Contents. On the other side a full text database provides full text of journal articles, book chapters, conference papers etc. are known as full text database. Such as, Science Direct, JSTOR, PROQUEST.

E-REPORTS: It is a document which contains information in a narrative, graphic or tabular form; it is prepared on ado, periodic or regular basis as per requirement. A report may refer to some specific period or event or subject. It may be communicated to the public orally or in written form. A report which is available in digital form is known as an e-report.

For example, the universities publish annual reports which give an account of their budget, expenditure, activities and achievements. These reports are also made accessible on internet.

E-THESES AND DISSERTATIONS: These are the documents submitted in support of candidature for an academic degree or professional qualification. It presents work or research, undertaken by a student, and its results or findings. The libraries are at present digitizing the these and dissertations held by them and making them accessible on internet. The collection of digital theses and dissertations are also known as digital repository. The screenshot given below shows the digital repository of Indian institute of science, Bangalore.

The Shodhganga @INFLIBNET: This centre provides a platform for research students to deposit their PhD thesis and make it available to the entire scholarly community in open access. The repository has the ability to capture, index, store, disseminate and preserve e-thesis and dissertations submitted by the researchers.

Vidyanidhi: Indian digital library of electronic theses by University of Mysore.

INSTITUTIONAL REPOSITORIES: It is an online database which provides access to the digital collections of theses, dissertations, e-prints for online viewing. It provided associated metadata regarding the document, i.e., name of the student, university name, year of Graduation, document title, abstract, keywords, etc. Institutional repositories are also known as digital repositories. The universities and research institutions set up these repositories to collect, organize and showcase the intellectual contribution of their faculty members and scientists.

Internet Archive: It is a non-profit library of millions of free books, movies, software, music, websites and more.

DOAB-Directory of Open Access Books: The primary aim of DOAB is to increase discoverability of open access books. The directory is open to all the publishers who publish academic, peer reviewed books in open access and should contain as many books as possible provided that these publications are in open access and meet academic standards.

SWAYAM: MOOCs based on curriculum taught in classrooms from 9th class till post-graduation.

SWAYAM Prabha: It is a group of 32 DTH channels devoted to telecasting of high-quality educational programmes on 24X7 basis using the GSAT-15 satellite. The contents are provided by NPTEL, IITs, UGC, CEC, NCERT, IGNOU, NIOS. The INFLIBNET Centre maintains the web portal.

National Digital Library: NMEICT has initiated the national digital library of India pilot project to develop a framework of virtual repository of learning resources with single window search facility.

CONCLUSIONS:

E-resources play a very important and dynamic role in higher education system in India. MHRD is responsible for the overall development of the basic infrastructure in the field of higher education, both in terms of policy and planning. Under a planned development process, the department looks after expansion of access and qualitative improvement in the higher education, through world class universities, colleges and other institutions through various digital initiatives in higher education. Online and digital resources and the advancement in technology can very well support this new way of education. People are creating 2000 websites every hour in a day of 24 hours. Due to pandemic COVID-19 pupil spend more time in online education in compare to offline education. Now the government of India also gave the recommendations in NPE2020 and promoting the online class in the way of digital India mission, skill India mission. In this way the school level education aspiring students can be provided so many facilities by means of online teaching-based education and innovative learning strategies.

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