

## Research Article

# An Analytical Study Of the Availability and Accessibility of e-Resources via Digital Library (W.r.t. Invertis University, Bareilly, Uttar Pradesh)

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## I N F O

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## A B S T R A C T

This study investigates how Invertis University, Bareilly users use the library resources and services offered there. The primary goal of this study is to understand the current state of library automation in terms of digital libraries. Every aspect of education, including library and information science, has undergone a transformation because to ICT. Activities at the library include offering a variety of programmes and using a few approaches to create new services that allow users to browse, search, and access the internet. Modern technology has made it possible for libraries to operate without a staff by opening their doors to users on a free basis. Smart people, Smart Places, Smart Services, and Smart Place are the four components that make up the role of a Digital Library. For the convenience of users, the smart library features 24 hour services and auto services. providing streamlined & efficient services is a challenge for the staff and librarians. The questionnaire is the tool utilised to collect data for this study's choice of survey research methodology.

**Keywords:** University Library, 21<sup>st</sup> Century Library, Smart Library, ICT, e-Resources, Computerization and Digitalization

## Introduction

Information holds the key of success in modernising library services which ensure not only handling new ways of information but also aims to give new ways in the lifestyle of users. The introduction of the internet and the growth of ICT in libraries have changed how people look for and utilise information. The growth of e-resources and users' increasing desire for such presented challenges for libraries and librarians. The majority of digital search and sharing technologies give users more flexibility, convenience, and pleasure while looking for information, but libraries must develop their collections and services to satisfy users. The university's library is the heart of academic endeavours, both directly and indirectly in terms of the research and teaching that both depend on one another. Therefore,

it is the sole responsibility of university libraries to offer information on libraries and library services, as well as an online catalogue, digital collection, and e-database that includes a variety of library services.

As a result of Act No. 22 of the Up Legislation Assembly in July 2010, Invertis University, which was founded in 1998 and is committed to providing quality education, has grown to become a fully fledged university with 8 institutions, 6000 students, and a variety of graduate and postgraduate programmes in management, technical, pharmacy, law, journalism, architecture, and the sciences.

Mainly Invertis University has facilitates with national and international journals, magazines and also membership of DELNET, INDEST, IEEE and EBSCO.

## Objectives of the Study

- To know the status of digitalization in library
- To know the use of library collection and services
- To assess the changing attitudes of users in using e-documents of digital library
- To unearth various library resources and services offered at the university library
- To find out the extent field use in open resources for the purpose of the digital library
- To recommend methods for implementation of ICT and modernization of the university library

## Review of Literature

To enable users quickly access the web OPAC site from anywhere in the library building using their own smartphones or other mobile devices, the library should have WI-FI internet facilities (Mohd. Dasuki, 2011). One information resource centre must exist worldwide where users may access all ICT-enabled resources online (Brundaban Nahak, 2019). ICT has transformed into a blessing for advancement in educational institutions as the mainstays of libraries, such as physical books, hard copies of journals, newspapers, and magazines, fade in favour of the new format, e-format, which does not demand vast space for storage. In order to ensure accessibility equity to all of these resources, regardless of a user's gender, region, religion, economic status, or country of origin, the library now acts as a resource centre where anybody may connect via the internet to upload and download audio, text, and video files (P.S. Aithal 2016).

## Methodology

A survey is a type of research methodology that collects data from a planned group of respondents in order to find out more and gain understanding on a range of closely linked issues.

## Impact of ICT in Digital Library

ICT enabled products and services of libraries, information changed the way the provision of information service is an integration of computer and communication technology that can be applied for storage and dissemination of information. They have changes the traditional viability of the library in distribution of services (Ahmad & Fatima, 2009).

- ICT enabled the creation of digital information
- ICT enabled file transfer and web access
- Information sharing and networking are now possible by ICT
- The availability of library services 24\*7

Academic libraries, information centres and their services have undergone tremendous alterations and transformation because to ICT. By utilising smart technology, LIS services

including OPAC, user services, reference services, bibliographic services, document delivery, and inter-library loan can be delivered more successfully and efficiently. Because they provide flexible scheduling, a convenient location, cost efficiency, the most recent dissemination, and end-user participation in the library and information services process. Changes in format, content, and methods of producing and delivering information products are indicative of smart technology's impact on information services.

## Recent Model of Libraries

In order to meet these new problems, LIS created innovative ideas for promoting academic as well as public libraries. There is a large body of research on how academic and public libraries advance to adopt new policies, including studies, surveys, case studies, etc. They are important for other reasons as well, such as the fondness of human components with the key components of the smart city.

**Information commons:** Information commons is a term that has been used to represent both specific services and tools as well such as library-based open access journals and freely accessible digital libraries, as well as the underlying core value and organising principles, such as openness, unrestricted access, non-profit, etc.

Since over 15 years ago, information commons have been and continue to be a significant concept for marketing and promotion of academic and public libraries. Public libraries in the UK have been transformed into new idea stores providing a variety of educational, amusing, and cultural options.

**Learning centres:** These approaches substitute modular learning, smart technologies, and "great good space" elements, which keep students at the centre of the library, for the holding and silent reading that was previously the focus of the library.

Pedagogy has become a major tool for library design that facilitates autonomy, self-monitoring & learning processes focused on individual knowledge management.

**Green library:** The green library model provides a framework for large amount of work to be done in favour of reducing waste, recycling, saving, energy and so on. The green library paradigm can be used in any type of library and is not just restricted to academic ones.

**Global library:** The library's goods and services ought to be universally available to both small and large libraries worldwide. Therefore, a holistic strategy to library management and marketing should be devised (a "global library").

## e-Resources in Digital Library

e-Resources plays a major role in digital library. It gives

awareness to the users, research scholars, faculty and staff etc. These online resources are simple to use, affordable to access, and quickly accessible from anywhere by numerous users at once. Internet access is a quick and effective way to access and update the documentation and catalogue interface for all libraries. Due to their built-in capabilities for manipulation and searching, electronic resources are more useful and often the only option. Providing information access is also less expensive than purchasing information resources.

### RFID in Digital Library

RFID is really useful for academic library to share the information among them (ILL) through integrated library system. With the help of self check borrow and return of books can be automatically. Special software installation is required for this system in and out. An option is displayed on a computer screen to the user utilising this method to borrow books. The person must use a code to identify themselves, preferably a personal identification code. The surveillance bit is activated when a book is returned via the check-in/ check-out mechanism. The RFID reader is a portable or permanently fixed network-connected device. The signals that turn on the tag are sent via radio waves. When a tag is activated, it transmits a wave back to the antenna, where it is converted into information. The RFID tag itself contains the transponder. There are fixed readers and mobile readers. For tracking goods as they move from one place to another and acting something like a checkpoint, fixed readers are mounted in certain places. By automatically recording tag movements without human intervention, fixed readers provide simplicity and uniformity. The majority of mobile readers allow you to scan individual items and are hand-held.

### Features of Digital Library

- To improve user and staff knowledge and abilities. The digital divide in the internet world is being closed down thanks to smart technology
- The enlargement of a tested model for the current situation is the digital library
- To offer online resources for books and other items (URLs, PDFs, PPTs, DOCs. Etc)
- Quick link for smart access
- Digital libraries offer skills, resources, and positive aspects of online success so that you can confidently handle cyber issues
- Some of the most effective software that has a desegregated automotive system and updates information by simply scanning the ISBN is found in cloud-based and online library management systems
- To improve information retrieval, access, and advanced search
- For instructional reasons, based access to a variety of digitally available resources

- App and e-book usage exceeds expectations
- Downloadable audio, video, and a library blog
- Websites for mobile access and simple remote access
- MARC records for electronic journals are available in the library's catalogue

### Scope and Limitation

This paper cover UG & PG student as well as library professional and staff of Invertis university, Bareilly.

### Sample Size

The total no. of 60 questionnaires were circulated among UG and PG students and Library staff. 48 filled up questionnaire were returned back.

### Exploration and Analysis of Data

#### Frequency visit of Library users

This table reveals the majority of users in which 39.58% (19 users out of 48 users) visit the library daily. 31.25% (15 users out of 48 users) users visit the library several times a week. 10.41% (5 users out of 48 users) users visit the library monthly, 12.5% (6 users out of 48 users) use the library less than once a month and least no of users 6.25% (3 users out of 48) never visit library.

#### Visit Purpose of Library

This table reveals the majority of students 87.5% of users visit library to borrow books.

Table I

S.No.	Frequency	Response	Percentage
1	Daily	19	39.58%
2	Weekly	15	31.25%
3	Monthly	5	10.41%
4	Less than a month	6	12.5%
5	Never	3	6.25%

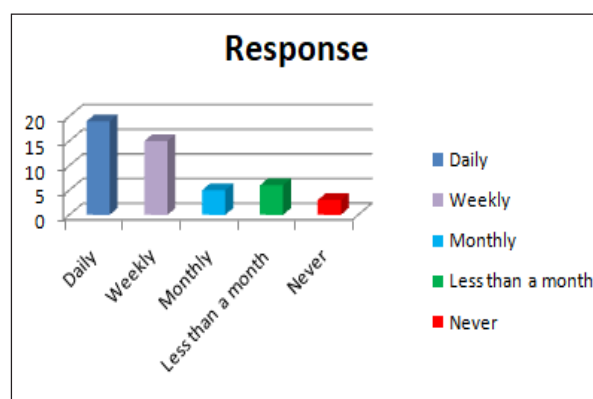


Figure I

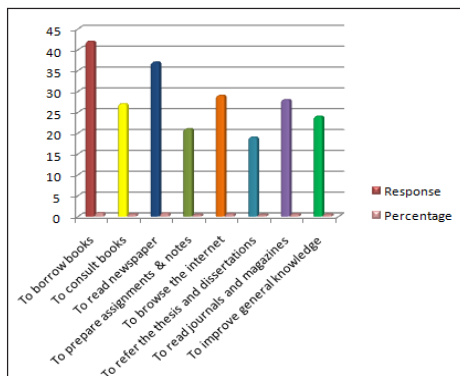
### Access of computers and electronics

It shows the availability of computers and electronics.

Which reveals that 33 (68.75%) respondents out of 48 were agreed and 15 (31.25%) respondents out of 48 were disagreed in this regard.

**Table 2**

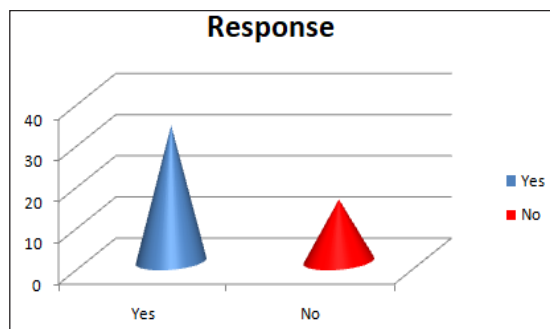
S.No.	Purpose	Response	Percentage
1	To borrow books	42	87.5%
2	To consult books	27	56.25%
3	To read newspaper	37	77.08%
4	To prepare assignments & notes	21	43.75%
5	To browse the internet	29	60.41%
6	To refer the thesis and dissertations	19	39.58%
7	To read journals and magazines	28	58.33%
8	To improve general knowledge	24	50%



**Figure 2**

**Table 3**

S.No.	Status	Response	Percentage
1	Yes	33	68.75%
2	No	15	31.25%
3	Total	48	100%



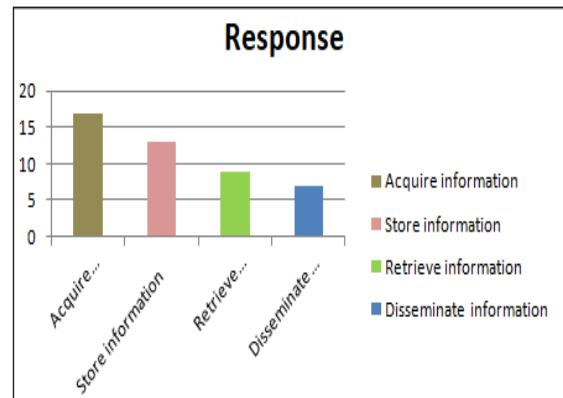
**Figure 3**

### Purpose of used ICT in the library

This table shows ICT is used for the purpose of acquire information with the response of 35.41% (17) from respondent, 27.08% (13) respondents responses for store for the information, 18.75% (9) respondents response for retrieve information and 14.58% (7) respondents response for disseminate the information out of 46 respondents.

**Table 4**

S.No.	Purpose	Response	Percentage
1	Acquire information	17	35.41%
2	Store information	13	27.08%
3	Retrieve information	9	18.75%
4	Disseminate information	7	14.58%



**Figure 4**

### Digital Facilities of Library

This analysis shows the view of users on each digital services of library that the 35.41% (17 users out of 48 users) users retaliation to library reference service by the email & 14.585 (7 users out of 48 users) users appear deny with this facility. 18.75% (9 out of 48 users) users retaliation to documents digitized by staff & 12.5% (6 out of 48 users) users appear deny with this facility. 22.91% (11 out of 48 users) users retaliation to electronic thesis & dissertation & 27.08% (13 out of 48 users) users appear deny with this facility.

**Table 5**

S.No.	Services	Response			
		Yes	Percentage	No	Percentage
1	Library reference service by email or the web	17	35.41%	7	14.58%

2	Documents digitized by the library staff	9	18.75%	6	12.5%
3	Electronic thesis & dissertation	11	22.91%	13	27.08%

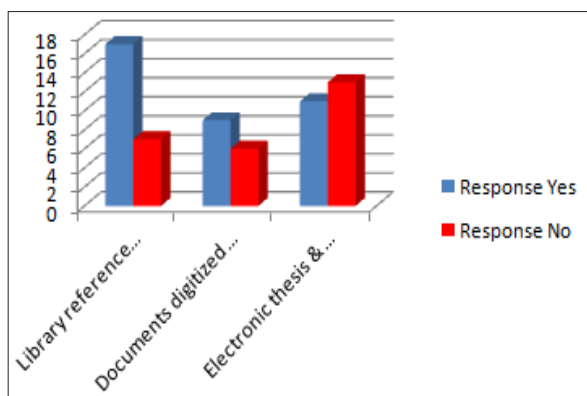


Figure 5

### Users Perception to access Real Location in Library via Smart Devices

64.58% of users were strongly agree to download an application for the real and quick access in library, 22.91% of users were agree, 12.5% of users were neither agree nor disagree out of 48 users.

Table 6

S.No.	Answers	Response	Percentage
1	Strongly agree	31	64.58%
2	Agree	11	22.91%
3	Neither agree nor disagree	6	12.5%
4	Disagree	0	0
5	Strongly disagree	0	0

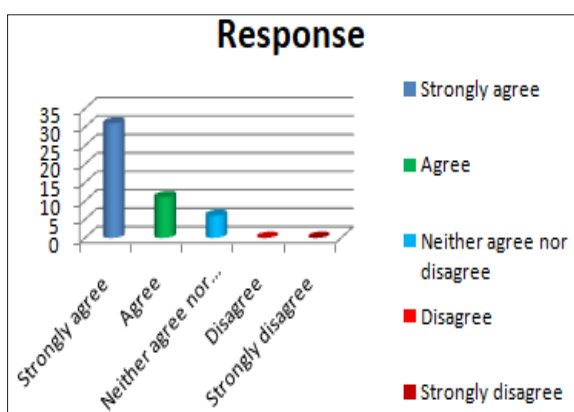


Figure 6

### Findings and Suggestion

- Due to a shortage of competent employees and a lack of ICT implementation, the majority of library functions are still performed in the traditional manner in the age of ICT
- The university should host an orientation programme on general awareness regarding library, all faculties, staffs and users must attend
- In order to maintain library websites current and up to pace with user expectations, it is suggested that such evaluation studies be conducted on a regular basis.
- It is also recommended that library staff members become familiar with user needs in order to tailor their services
- The library must create a mobile application for its patrons because it enables quick access to the catalogue, library materials, and library services right from their palm

### Conclusion

The current study indicates evolving ICT stages in terms of automation and digital library infrastructure, which completely altered the library environment. Due to the ICT's quick adoption in libraries, there have been substantial changes in library operations, management, and services. Users and libraries are required to use social media in accordance with their needs due to the Internet's widespread use. Social media aids libraries in user engagement, service promotion, resource marketing, and product marketing. As we are all aware, the world is moving forward towards a smart phone era and an online environment, thus libraries are developing apps that will make their collections more intelligent and useful for users. The librarian was obliged to transform the traditional service into automated and online access services due to the evolution of digital library e-resources and automation, among other factors.

### References

1. Danchak AP. 21<sup>st</sup> century librarians for 21<sup>st</sup> century libraries. Proceeding of the IATUL conferences, 2012. University of Oxford. <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1091&context=iatul>
2. Devi SA, Sheerja NK. Impact of ICT on Library & Information science: major shifts and practice in CUSAT central Library. *International CALBER* 2008.
3. Bansal A, Arora, D, Suri A. Internet of Things: Beginning of New Era for Libraries. *Library Philosophy and practice* 2018. <http://digitalcommons.unl.edu/libphilprac/2081>
4. Bello S, Akande SA, Ezeri CN. Globalisation of Library and Information services: An Assessment of the Level of ICT Deployment in Academic Libraries in Oyo State, Nigeria. *Library Philosophy and Practice* 2020. <https://digitalcommons.unl.edu/libphilprac/3881>

5. Googlefan. social network user statistics as of july 2011. <http://google-plus.com/598/social-network-user-statistics-as-of-july-2011/>
6. Sun J, Yuan BZ. Development and characteristics of digital library as a library branch. International conference on future computer supported education. Huazhong Agricultural University, Wuhan, Hubei 2012. [www.sciencedirect.com](http://www.sciencedirect.com)
7. Mishra A. Smart technology for libraries: An emerging & innovative technological Habitat of this century. *International Journal of Library & Information studies* 2020; 10(2).
8. shak MD, Sharif M. A survey on the use of library resources, services and facilities. A case study at their faculty of medicine and health sciences. University Putra Malaysia 2011; 127-139.
9. Nahak B, Padhi S. The role of smart library and smart librarians for e-library services. 2019; 89-97.
10. Aithal PS. Smart Library models for future generations in *International Journal of Engineering Research and Modern Education (IJERME)* ISSN (Online): 2455 – 4200, June. Srinivas Institute of Management studies, Pandeshwar, Mangalore, Karnataka 2016.
11. Sahoo S, Panda KC. Library technology solutions for smart libraries: A comparative study of IIT Delhi & IIT Bombay Library system. 12<sup>th</sup> *international CALBER* 2019.
12. Singh H. University libraries in North Analysis. *A journal of Library & Information Science* 2017.
13. Singh MP. Library Behaviour of Social Networks Linked to Web 2.0. *Future of Libraries in Digital Age*, KBD, New Delhi 2012.
14. Aithal S. Smart library models for future generations. Srinivas Institute of management studies, Pandeshwar, Mangalore, Karnataka. 693-701.
15. Jange S, Angadi M. Digital Libraries : An overview. Gulbarga University, Gulbarga – 585106. Information scientist, Tata Institute of Social Sciences, Deonar, Mumbai – 400088 2001.
16. Tait E, Martzoukou K, Reid P. Libraries for the future: the role of IT utilities in the transformation of academic libraries 2016. [www.palgrave-journals.com/palcomms](http://www.palgrave-journals.com/palcomms)
17. Trivedi M. Digital Libraries: Functionality, Usability, and Accessibility. *Library Philosophy and Practice (e- Journal)* 2016; 381. <http://digitalcommons.unl/libphilprac/381>
18. <http://sarjiwanpublications.blogspot.com/2011/02/concept-of-digital-libraries-and.html?m=1>
19. <http://www.redalyc.org/journal/4768/476854589005/html/>
20. <http://www.researchgate.net/publication/337006351>
21. <https://ir.inflibnet.ac.in/bitstream/1944/2338/1/10.pdf>
22. <https://www.nature.com/articles/palcomms201670>
23. <https://www.researchgate.net/publication/301215310>
24. [https://www.researchgate.net/publication/328037691\\_Smart\\_Libraries](https://www.researchgate.net/publication/328037691_Smart_Libraries)
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