

# APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN LIBRARY SERVICES

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**Abstract:** In the modern times, Information and Communication Technology [ICT] has brought about major improvements in the ability to serve and preserve information and in bringing it to clients, but little or no new development in storing it. The move from physical collections to virtual or online ones provided the librarians with new opportunities and new challenges. Our world is becoming more complex, interdependent, interdependent, and dynamic with each passing day. More people and organisations are involved; knowledge sharing is happening at an increasing pace, because of advances in technology and its need. Everyone needs more assistance when managing their knowledge, which translates into increased demand for technical resources, which subsequently necessitates a more advancement, which becomes critical in acquiring more resources, which also means an increase in workload. Thus, this research will discuss the significance of Information technology over the library science and also it will examine its aftermath.

**Keywords:** ICT, Technological advancement, library, virtual world,resources.

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## 1.0 Introduction

What is commonly referred to as the "the Information Age" is happening at the present has significant effects on many human areas, regions, so it is now referred to as the information age. Libraries have shifted from paper books to electronic records and file storage has altered the methods for information preservation and sharing in libraries all that is being done in the library is referred to as the trinity. We can confidently assume that this includes the operation of libraries and of all three elements: services, personnel, and users. An online presence for libraries has expanded the libraries' capacity because of the introduction of networked, intranet, video conferencing, and videoconferencing. To open its source in response to the prevalent belief that IP leads to innovation, in the traditional ways and through electronic media, we are overwhelmed with. When it comes to the most important advantages of electronic services, they can be accessed by anybody from anywhere, wherever, and the number of people involved doesn't matter, there are infinite possibilities. One of the information technology's most different meanings is the integration of computer technology, printing, and reprography. Academic libraries will have to respond to challenges related to ever increasing volume of information, decreased access to documents, growing demand, and increased user complexity. Libraries and information centres are essential for an organization's goals of making clients more prepared for life's challenges because they improve the organisations' abilities to face these challenges. This study showed that improved global telecommunications has transformed the world to a 'Global Village' in recent years. With the advancements in computing technology, plus the advent of telecommunications and visual media, libraries, plus [media], the industry is offering more information-handling capabilities.

The period following World War II saw a tremendous growth in the literature and printed media in addition to its production of information, resulting in exponential growth in informational knowledge. There is a rise in information pollution instead of information production now. It has been difficult to gather, organise, and disseminate information. So libraries are compelled to plan, organize and communicate the huge information according to the needs of users with the help of LT the information is no longer confined to books and document in the custody of individual or educational institutions, now it has embraced audio-visual, multimedia with colour motion and three dimensions features etc. These new advancements are approaching everybody. There are many services available at libraries now, which include compact disc (CDs) and the internet today. The most important element of software applications, the building of a database is the first stage of information technology. The library needs to put together an appropriate software package in order to go with the daily functions of VIZ (acquisition, circulation, search, cataloguing, etc) while additionally, to software having an integrated OPAC and archiving/serial controls for advanced administration, which in mind permits, controls, and permits speedy administration through rules, while still makes full and integrated access, while also measures for indexing, and SD expansion.

IT and Library Services IT has launched the revolution in the sphere of libraries with reference to technology, as previously mentioned, it is a proven fact that all library administrations including procuring, categorising, and disposing of information, and all manner of processes are linked to computers, communication, computer graphics, and documentation. Internal resources such as job analysis, job analysis, base level documents, bibliographic service, customised user work aids, and in-house resource dissemination are examples of resources that you can expand upon for your business. are critical to facilitating the work of academics, scholars, as well as patrons in the location's greater community in getting what they need.

This decade, the introduction of management education is significantly furthering the expansion of the growth of the private sector. However, not meeting both the country's demands for economic and business growth goals in number and efficiency, it nevertheless accommodates the large- expansion in scope. Additionally, new expansion was unable to reach the ever-growing number of students seeking to do a course in the technical stream, which offer courses to fulfil the needs of industry and education students. This is accurate, as it should be, as the construction of a professional institution needs a huge investment and recurrent expenditures on top of cash, and thus the public organisations should be allowed to use their resources for the good of the nation. human as well as economic growth.

## **2.0 Review of literature:**

Parveen (2012) stated that Gathering information on specific kinds of libraries that focused on the information economy during the study period examined does highlight a similar present-day dynamic: libraries remain firmly committed to technology and advance ahead of the information gathering position. In addition to giving consumers a broad access to online databases and facilities, information and communication-based libraries have given them library-specific assistance, including services such as promoting library technology use for internal operations. When using information and communications technology (ICT) explores the perceptions, emotions, and engagement in library resources of library users, you are examining their use patterns, as well as their attitude towards the overall concept of the library and support for the resources and services. as is where the study concluded that the largest proportion of network services were electronic resources including e-journals, e-books, e- magazines, and electronic journals Kerala (2009) stressed that the revolution of information technology had an impact on library operations, as well as people's information-seeking behaviour to some degree; information retrieval techniques to engage and heartiness needed to be intervened with it.

Mohamed and Abdul (2010) found that ICT competence exists at the Calicut University. The target audience of the study on students, lecturers, and administration and readers in Calicut University's libraries is being confined to only those who work in those two departments. ICT (Information and Communication Technology) use is seen almost exclusively among younger staff, less experienced ones, whereas senior members favour specialist or specialised IT or software applications and domains and applications. libraries are choosing to do their job the vast majority of their paperwork and administrative tasks with pen and paper and apps because they think it's faster. The majority of people within those occupations that were reliant on computers and databases had confidence in these basic ICT applications and resources, and needed either instruction or guidance to make use of them to their full potential.

They researched the use of the internet in the engineering colleges of Punjab and India in the title of Rajiv and Amritpal's 2005 paper "Internet and its Use in the College: A Study of Use in Punjab". The study presented and expounded various Internet activities such as how much students use the Internet for educational purposes, as well as the extent of the challenges faced by the Internet in that context. This survey was able to determine whether or not the Internet is better than conventional journals, but also gave an answer to the issue of whether or not it is an either/or situation. This observation was recently made: The findings demonstrate that the significant importance of the Internet in this group's daily life includes studying, teaching, researching, and the research phase of learning. [students] who have attended an engineering college Several solutions have been offered to the faculty members at all levels of the investigation for the ways to better their university and college service have been suggested.

"Studying the Internet Use and its Impacts on Different Library Practices and Services," explores in depth the question of how the effects the internet is affecting libraries (Sahoo and Sharma 2015). The internet has disrupted many traditional library practises, such as document, document processing, document management, dissemination, reference exchange, and knowledge sharing, but also include access to resources are completely changed. There is more information accessible today than there has ever been, which is now required to deal with the changing requirements of the library environment. the information age [grows] our customer base by taking us to the next level of sophistication. libraries and technology professionals have gained a lot from the use of the internet the duty of the librarians is to bring up the users to date on new and updated information on the internet. The training on the library staff at the librarian on elementary level should be provided to employees. To assist the client with

computers; leading to computers should take a major role in customer service. The world of information technology could look a lot different if libraries were providing better services to the internet. Everyone should have the right to have access to the internet, regardless of where they are located or their ability to pay for it.

### **3.0 Information and Communication Technology (ICT)**

Information and Communication Technology (ICT) has greatly impacted library services in a positive way. Below are some of the major applications of ICT in library services:

**3.1 Automated Cataloguing:** The use of ICT has made it easier to catalogue books and other materials in the library. There are several library software applications that help in the creation and maintenance of a library catalogue. These software applications make it easier to search for materials in the library.

**3.2 Digital Libraries:** With the help of ICT, libraries have been able to digitize their collections. This makes it possible for users to access materials remotely. Digital libraries also provide access to a wider range of resources beyond physical books and journals.

**3.3 Internet Access:** Most libraries now offer internet access to their users. This allows library users to access online resources, conduct research, and access other library services. Libraries also provide free Wi-Fi to enable users to connect their own devices.

**3.4 Online Services:** Libraries now offer online services such as online registration, online renewal of library materials, and online reservation of library resources. This has made it easier for library users to access library services without visiting the physical library.

**3.5 Electronic Resources:** Libraries now offer electronic resources such as e-books, e-journals, and databases. These electronic resources are accessible to library users via the internet. They provide a wider range of resources beyond physical books and journals. The vast quantity of books and other printed materials have been put out there that professors, scholars, students, and teachers often struggle to use them to fulfil their curiosity in different fields of knowledge. don't have enough and do not have the time to devote to keeping things in order as resources, and because of this they sometimes feel the absence of staff- space, there is a shortage of contact and dissemination However, in the development of new technologies, necessity is the mother. The management techniques implemented by IT have profoundly changed library organisation as a decade ago, for instance, by making housekeeping tasks less time-consuming and easier to perform. You can safely assume that if there is any mechanisation, whether it is an overall process of automation or the use of computerised tools in different locations, people will be more confident and better protected from danger, and fewer will be concerns about well be. The different kinds of libraries help determine what effects the growth of information resources will have on academic libraries, especially in the area of technology use.

### **4.0 Objective of the Study**

- In addition to the issues faced by the authorities and workers during the implementation of IT implementation, one must consider and examine numerous challenges
- This investigation of (IT applications with respect to the cost and demand) concludes that this investigation on the value of IT and qualified personnel.
- It proposed ways of solving the problem while obtaining some of the benefits of automation.
- to find out which problems are likely to arise when implementing IT and how IT factors can potentially cause these issues.
- To try to expand the definition of personal information technology implementation to include problem solving relevant to IT.

### **5.0 Methodology**

There is no methodology without order. Methodology is a necessity in scientific study, since it allows for no other purpose other than to be achieved without it being well organised and methodical. The critical features of scientific investigation include a clear methodology, the effective use of established testing tools, and sufficient sample size analysis that can be accomplished by the use of proper and reliable research tools. historical documentation, questionnaires, examination, and observation, as well as documentary were used in the study. Findings of the Study Libraries offer from 25 to 91% of the needs of students who have various interests, which are not only with books. They also satisfy the requirements of researchers and faculty. It has also been found that with

regards to today's modern devices like computers, bar code readers, and read only devices for information in libraries, that information is expanding out from off-line to locations outside their individualised locations to include CD authors. with regard to publications and total funding, it is predicted that the 4.8 to 20 Lakh budget per year is sufficient to adequately cover the books and journals Libraries have given 5.86% of their resources over to DELNET, giving it their resources to this partnership in order to do its work. Currently, six- to nine-hundred-and-forty-one percent of libraries inside the AICT Consortium have subscribed to full text articles. 81% of libraries don't feel the need to have the previous copies of their CD-ROMs on hand due to the redundancy offered by digital archives and an off-site backup, all of which contain an electronic copy of the complete set of all 7,000 books. Even though digital versions of books are much less expensive to acquire, librarians prefer to get the print version as a result of this, particularly because of the time and money saved. It ensures that everybody has the requisite knowledge to use the available resources. Library professionals believe that using computer resources makes users better at both data processing and information. such a role will serve to further the cause of the well- being of librarians in society. Customers will increase their productivity with users who visit on fortnightly bases. It is a sign of good use of libraries. It is also recorded as having been discovered, and proven, a true fact, 68.67% of users are pleased with the library's collection. They have more experience with computers than the libraries that they use at these institutions. Information retrieval is a challenge for them because they're not asking any questions. In the network, electronic resources are thought to be preferable to print resources. Accessing the library's internet facilities to buy books and services is prevalent in libraries that employ fifteen-and-a-half percent of library staff. With a suitable computer system containing 75% of user needs at 16% of the libraries have what is needed to meet the user demand for information infrastructure. More recently, it has been found that most libraries provide both traditional and modern facilities, but also more recent, resources with computer systems. The percentage of library users who are pleased with the resources the library provides who are attracted to computer related information is at 18.61%. Users have full knowledge of library resources like OPAC (or E-journals, E- Online Publications Catalogue), internet accessibility, and OPAC. Between 68 to 73% of users like using e-journals over the traditional journals because they're faster and easier to access. and it is convenient for users to use on their chosen locations

## **6.0 Conclusion**

Additionally, although the library's services and resources remain modern, it is found that users lack in both awareness and motivation; therefore, there should be ways to help users better understand the library's resources and make them aware of their importance so they use them more productively. Librarians should be aware of the latest developments so they are able to keep their libraries internationally competitive. Library workers are expected to attend training programmes at least once every two weeks to provide the most up-to-date information technology to use the libraries. Some of the library users complain that we need to expand on; libraries because half of our customers are unsatisfied with the available resources. Institute libraries should make their collections accessible to students online, thus allowing them to access them at their locations when they want. most users were concerned with increased internet access to services, in general, which included the number of computers, data transfer speeds, and a system that was capable of using online resources.

A plan ought to discuss and vote on various ICT solutions for administrative use, particularly financial ones, and if done this way, can be beneficial to ICT. The libraries should be vast and well-furnished out so that the users can spend their time in fishing rather than working. People who desire frequent searching can find themselves missing out if they don't [their books] are forced to use the above-described services because their libraries fail to provide searching and browsing tools. The libraries should serve the academic community by providing the necessary tools for better knowledge about appropriate and applicable materials and assets in the growing informational mayhem. Librarians should present some proposals to or requests to AICTE or other higher-education organizations/professional bodies such as the Confederation of Indian Textile Industry, which oversees Indian institutions of textile training, so as to aid in training and raise their competence in the information technology environment making their library management familiar with the prevalent AICTE and UGC norms an avenue in finding the new library positions following this in finding people to employ in accordance with these guidelines.

These libraries should follow the universal standards in order to allow for the easy sharing of knowledge with their associated states, regions, countries, and the general community. There should be inter-level lending agreements with other libraries to help maximise the use of the resources available resources. User input should be used when developing or improving the system, and then validated regularly. To be in the future, the library should contact various researchers and end users at regular intervals to better understand their requirements. Though content is increasing in ten orders of magnitude and business and 18. To ensure that a strong academic infrastructure, we must now also focus on rising ten-fold on micro- information approaches in the educational institution. Several other positions are to have research (laboratories) centres created for social awareness and profit, as well as for making the library and information community more welcoming for non-member researchers.

Overall, the application of ICT in library services has greatly improved access to library resources, made library services more efficient, and enabled libraries to offer a wider range of resources.

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