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**ROLE OF INFORMATION TECHNOLOGY EQUIPMENTS IN THE BETTER FUNCTIONING OF LIBRARIES:  
SPECIAL REFERENCE TO U.P.**

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**Abstract**

*Data is a vital for human improvement as air is basic for the survival of every single living life form on earth, including individuals. The pace of progress achieved by new data advances keyly affects the way individuals live, work, and play around the world. The expanding pretended by data innovation in the advancement of library administrations for a dynamic response to the difficulties of the data benefits giving. The paper endeavors to talk about the quick improvement of Information Technology and its application in the library administrations. Today libraries are prepared to fulfill the recently Information Technology based administrations. Data Technology empowered administrations satisfy the data needs of the clients at the correct time in the opportune place to the perfect individual. Scholastic libraries are stood up to with the difficulties of progress. The point of the present review is to research the common situation and status of college libraries (Central and State) in Uttar Pradesh as far as accumulation, spending plan, labor, and an extraordinary reference to ICT framework. With the end goal of this review survey is utilized as the instrument to gather information from college libraries. It highlights distinctive features of libraries in the state as it were. The review uncovers that libraries don't have legitimate foundation. The review is confined to a set number of college libraries in the state.*

## 1. INTRODUCTION

The progression and accessibility of Information and Communication Technologies (ICTs) in libraries have today not quite recently extended and enlarged the impact of data resources at their doorsteps; furthermore put more accentuation on convincing and gainful organizations. Their applications in libraries, commonly known as library automation, have in reality continued encouraging and propel expedient and lucky access to and trade of data resources that are found allocated round the globe[1].

The going with are a bit of the ICT workplaces or resources that can be used for suitable library operations and organizations:

**a) Computer:** Computer can be referred to as the backbone, nucleus or hub of ICT application. In virtually all ICT applications, the computer is interfaced with other devices in order to function effectively. Computer on its own can be used to perform the following function in the library [2]:

- i. Ordering / acquisition
- ii. Circulation
- iii. Library data base
- iv. Inter library loan by two or many libraries that are connected
- v. Documentation and administration
- vi. Desktop publishing
- vii. Budgeting
- viii. Cataloguing and classification
- ix. Serial management.

## 2. REVIEW LITERATURE

**Nagalakshmi&Trivedi(2014)[3]** clarified the organization of RFID frameworks that can get many advantages library administrations. The creators inferred that clients, libraries and the concerned curators must have an attention to approach to do exertion identified with state funded instruction of RFID technology for the advantage of benefactors and conceivable loss of control over individual information.

**Hasan(2014)[4]** thought about the customary innovations, for example, scanner tag with RFID technology and electromagnetic (EM) strips and other related crossover advances. The creator additionally recorded RFID Vendors and the concerned libraries utilizing RFID. This article helps in giving a knowledge to libraries and administrators wishing to execute the RFID framework in Library condition.

**Addepalli and Addepali(2014)[5]** proposed RFID LMS for quick exchanges with extra properties of traceability and security. The writers reasoned that the technology can prompt critical changes, for example, reserve funds in labor costs, improvement of client administrations, bring down book robbery and give a consistent record refresh of new accumulations of books.

**Jain and Krishna(2014)[6]** in their book talked about the RFID applications that velocities up book getting, returning and checking, and in this way liberates staff from doing manual work with the goal that they could be utilized to upgrade client benefit errands.

**Sequeira(2014)[7]** found the critical focal points of LibRFID frameworks which are non-contact and non-observable pathway nature that could be tag encoded ID and afterward sends it to the peruser that dispensed with the catching of the label IDs and henceforth the cloning of the labels. The writer presumed that

the LibRFID despite the fact that work for low-recurrence run labels, yet range can be stretched out subsequent to actualizing a peruser with high recurrence ranges.

**Singh &Mahajan(2014)[8]** inspected and highlighted the significance of RFID framework in libraries. The creators presumed that exhaustive reviews should be directed on the status, genuine utilize and the impression of clients, and additionally curators in India about the RFID technology, in light of the fact that relatively few observational reviews were completed about the real utilization of RFID technology in libraries either in India or abroad.

## 3. ICT INFRASTRUCTURE FOR A TYPICAL DIGITAL LIBRARY PROJECT

A digital library project would typically require following equipment [9]:

1. Server Computer
2. Desktop Computer
3. Client Computer
4. Digitization Equipment
5. Network availability
6. Other hardware

## 4. COMPONENTS OF INFORMATION TECHNOLOGY

ICT applications need effective information networking evenly distributed over the country and supported by personnel skilled in ICT. Major components of information infrastructure are [10]:

1. Electronic Communication Infrastructure
2. Online data storehouses
3. Legal Framework
4. ICT gifted workforce.

## 5. ICT IN LIBRARIES IN U.P

The as a matter of first importance ICT

segment, which can be embraced in the libraries, is the PC for library computerization and to have an in-house database of library possessions in electronic frame. The same number of essential diaries and being distributed in CD frame, it winds up plainly important to prepare the libraries to improve the utilization of data. Email, online recovery systems administration, interactive media and web are the other critical innovations, which can be utilized for quicker access to data. ICT empowers one [11]:

- a. To catch, store, control, and circulate data;
- b. To present and give new administrations, renew the current administrations by giving speedier access to the assets, by defeating the space and time obstructions;
- c. To give require based, (tailor made), perusing and review look administrations to the clients;
- d. To have substantial number of databases in CDs;
- e. To use the staff for giving better data administrations;
- f. To create/update the capacities of experts;
- g. To empower systems administration and asset sharing at neighborhood level;
- h. To have admittance to various national and global diaries which are being distributed just in machine intelligible frame;
- i. To digitize the reports for conservation and for space sparing;
- j. To bolster library capacities, for example, dissemination, serials control, procurement control, stock support and other routine office works and creating in-house database;
- k. To recover and spread the data in client characterized organize;

- l. To get to library lists databases of different libraries through library systems;
- m. To enhance the proficiency of library capacities; and
- n. To enhance the cost viability of library operations.

Thus the adoption of ICT should not be considered as a luxury, but as an added tool to provide the information services, effectively to fulfill the complex needs of the users.

## 6. CLASSIFICATION OF EQUIPMENTS IN LIBRARY

The equipment and offices accessible in the library are enlightening in the accompanying headings [12].

- a. **Computer:** Computer-based advances have turned out to be predominant powers to shape and reshape the items and administrations the scholastic library brings to the table. The achievement of the IT empowered administrations in the library depends on the effectiveness of the equipment given in the library i.e. most present day technology, not on the premise of number of equipments.
- b. **OPAC:** An Online Public Access Catalog (OPAC) is an online database of materials held by a library or gathering of libraries. Clients look a library inventory essentially to find books and other material physically situated at a library.
- c. **Union Catalog:** A union inventory is a consolidated library index portraying the accumulations of various libraries. Union lists have been made in a scope of media, including book arrange, microform, cards and all the more as of late, organized electronic databases. Union lists are valuable to custodians,

- as they help with finding and asking for materials from different libraries through entomb library credit benefit.
- d. **CD ROM:** Presents a best in class survey of the utilizations of CD-ROMs in scholarly libraries, grasping all parts of library inclusion and staffing suggestions. Infers that CD-ROM is huge affecting the way scholarly libraries work and the administrations they offer to their clients.
  - e. **Scanner:** In registering, a picture scanner—regularly curtailed to simply scanner—is a gadget that optically examines pictures, printed, penmanship, or a question, and changes over it to an advanced picture. Mechanically determined scanners that move the report are commonly utilized for expansive organization archives, where a flatbed configuration would be unreasonable 17.
  - f. **RFID:** Radio recurrence recognizable proof is a term utilized for innovations utilizing radio waves for distinguishing singular things naturally. The most well-known way is putting away a serial number distinguishing an item and related information on a microchip joined to a reception apparatus. RFID is utilized fundamentally the same as standardized tags.
  - g. **Tele:** Tele is a TV information recovery benefit created in the United Kingdom in the mid 1970s. It offers a scope of based information, commonly including national, global and donning news, climate and TV plans. Tele information is communicate in the vertical blanking interim between picture outlines in a communicate TV flag.
  - h. **Copy:** A copy is a duplicate or multiplication of an old book, composition, guide, workmanship, or other thing of chronicled esteem that is as consistent with the first source as could reasonably be expected. It contrasts from different types of proliferation by endeavoring to repeat the source as precisely as conceivable as far as scale, shading, condition, and other material qualities. For books and original copies, this additionally involves an entire duplicate of all pages; subsequently a fragmented duplicate is a "fractional copy".
  - i. **Photocopy:** A printer is a machine that makes paper duplicates of reports and other visual pictures rapidly and economically. Most present scanners utilize a technology called xerography, a dry procedure utilizing heat. Photocopying is generally utilized as a part of library.
  - j. **Printing technology:** In processing, a printer is a fringe which delivers a as well as design of archives put away in electronic shape, more often than not on physical print media, for example, paper or transparencies .
  - k. **Standardized identification:** A standardized tag peruser (or scanner tag scanner) is an electronic gadget for perusing printed standardized identifications. Like a flatbed scanner, it comprises of a light source, a focal point and a light sensor making an interpretation of optical driving forces into electrical ones. Moreover, almost all standardized identification peruses contain decoder hardware dissecting the standardized identification's picture information given by the sensor and sending the standardized identification's substance to the scanner's yield port.

## 7. ADVANTAGES OF EQUIPMENTS USAGE IN LIBRARIES

All computer based systems should be user friendly and should satisfy as many of the following factors as possible [13]:

### Some of the advantages of information technology include:

1. Easy to gather different library activities.
2. Collaboration and creation of library networks
3. Avoid repetition of efforts within a library
4. Increase the range of services offered
5. Save the time of the users
6. Increases efficiency
7. Speedy and easy access of information
8. Improves the quality of library services
9. Enhance the knowledge and experience
10. Integration within the organizations.
11. Improve the status of the library
12. Improve the communication facilities
13. More stable
14. Helps to attract the users.
15. Remote access to users
16. Round the clock access to users
17. Access to unlimited information from different sources
18. More up to date information
19. Information flexibility to the users
20. Reforming and combining of data from different sources
21. Reduce the workload of the library staff

## 8. CONCLUSION AND SUGGESTIONS

### Conclusion

As eventual comments, it is reminded that libraries are working in a rapidly evolving circumstance; they ought to know about most recent advances to proceed and keep up the significance of the administration offerings. Use of Information Technology in present libraries is idealistic to increase right information at the ideal time in the ideal place and at the correct cost. Information Technology advances the rank of the library and it consolidates the work pile of the library callings. Information Technology has broken the overall limits, new mechanical assembly and strategies help to give better administrations to our customers.

### Suggestions

Based on the collected data some suggestions are put forward here for improvement.

- i. The condition of ICT application in India is at the base stage. So it is recommended that the concerned specialist ought to offer need to enhance the circumstance.
- ii. Maximum number of PCs with web office ought to be introduced in libraries keeping in mind the end goal to make mindful of the significance of ICT and significance of library in instruction.
- iii. Computerization of the considerable number of exercises of the libraries ought to be made to adapt to the new difficulties.
- iv. More ICT administrations ought to be given.
- v. There ought to be additional standard

- power supply for PC clients with a specific end goal to keep time consider so that more aim will emerge in the utilization of ICT offices in the libraries.
- vi. Lastly, sufficient reserve ought to be given from the concerned specialists to enhance ICT administrations.

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