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# **Technological Innovation in Libraries** Narmada Bhat<sup>1</sup>, J S Vinuta<sup>2</sup>

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# 1. Introduction:

As per Dr. S. R. Ranganathan, the library is a mounting establishment. Even in today's digital age, this law holds true. The traditional library is being converted into a digital library and the new name library is being used in the library today and the name of the library has also been changed and it is called Library and Resource Centre instead of library. In the library subsequently, numerous administrations have started using computers in late 1960s. By early 1970s several indexing and conceptualizing journals were available for library submissions, Index Medicus, Chemical abstracts, Biological Summaries etc. Far from being a simple source of books and media, today's libraries serve as irreplaceable properties for everything from data analytics to 3-D printing and opening lessons in coding. Today modern library to take in the changing faces of its patrons and respond consequently. Every demographic is dissimilar, but there are countless ways that the modern library can answer to recent trends and offer data and resources that are both advanced and pertinent to its users.

Digital librarian and self-determining consultant, helps us look at how libraries are using technology to improve facilities for customers today. Advanced libraries are using digital tools like Digital maker labs offer customers the chance to learn and use some of the most cutting-edge technology. From 3D printers, Computer controlled CNC (Computer Numerical Control) routers, to hot presses for T-shirts and Laser cutter-engravers, Maker Labs are popping up in libraries all over the Abroad.

## Innovative Technologies used in Libraries: -

There are many new technologies which are used in Abroad in our state.

## 1. Digital Maker Labs:

Digital maker labs offer customers the chance to learn and use some of the most cutting edge technology around. From 3D printers, Computer controlled CNC routers, to hot presses for Tshirts and Laser cutter-engravers, Maker Labs are popping up in libraries all over the UK. While it's fair to say you won't see one in every library, chances are your nearest Maker lab won't be too far away.

## 2. RFID Technology

Modernization has become very important in the current situation in the library, in which libraries should be available 24 hours. RFIDsaves library staff time and effort, as libraries have extended their hours of availability, new form RFID of self-service solutions have emerged in the form of machines or software for different processes. RFID saves time and effort of library staff. Various needs and library work becomes easier in the library by RFID System.



# 3. Cloud Printing

The digital era has been directly affecting home printing. Cloud printing supports mobile working and travelling and means that people can work wherever there is a library rather than needing a traditional office space. It can also attract different kinds of people who might not previously have used a library. Cloud printing has become commonplace in libraries because it gives users the ability to utilize their smart phones, tablets, and laptops to print. Through cloud printing a user can print out even from a remote location

## 4. Robots

There is a number of libraries who have already successfully implemented some kind of automated technology. For example Connecticut's Westport Library, which recently acquired two robots, Vincent and Nancy, that will be used to help teach coding and computer programming skills. Yes, it is a whole new level of social interaction. Robots are useful in attracting users to the library as well as entertaining them. Library work is also made easier by these robots.

## 5. Nimble Technology:

Nimble is a Concept of an advanced library augmented reality tool. Designed by a London based interactive designer and Google engineer Suresh Kumar, Nimble dose not only offer digital enhancement of a print book, but also incorporates the idea featured earlier in the post- the turn by-turn library guide, all these features can be accessed using the smart library card, all-in-one solution to let patrons use the digital books to work with whichever content want.

## 6. Library Software:

There lot of library software are available for college libraries like SOUL, SLIM, Libsis, KOHA, LIBRARIAN and many others which helps libraries to Computerize the library.

## 7. Digital, Virtual Library:

A digital library, digital repository, or digital collection, is an online database of digital objects that can include text, still images, audio, video, digital documents, or other digital media formats. The advantages of digital libraries as a means of easily and rapidly accessing books, archives and images of various types are now widely recognized by commercial interests and public bodies alike.

Traditional libraries are limited by storage space; digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain it. As such, the cost of maintaining a digital library can be much lower than that of a traditional library. A physical library must spend large sums of money paying for staff, book maintenance, rent, and additional books. Digital libraries may reduce or, in some instances, do away with these fees.

Both types of library require cataloging input to allow users to locate and retrieve material. Digital libraries may be more willing to adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs; conventional libraries may consider that providing online access to their OP AC catalogue is sufficient. An important advantage to digital conversion is increased accessibility to users. They also increase availability to individuals who may not be traditional patrons of a library, due to geographic location or organizational affiliation



# 8. Virtual Library Tour:

A virtual library tour is a simulation of an existing location, usually composed of a sequence of videos or still images. It may also use other multimedia elements such as sound effects, music, narration, and text. It is distinguished from the use of live television to affect tele-tourism.

The virtual tours make the new type of library information products borrowed from the tourist and museum practice. Its essential components, tour types, technologies to be used. Qualitative features which allow expecting their rapid growth and implementation in many spheres, in particular, in libraries, are revealed. Library virtual tours are specified and characterized based on the study of different types of libraries. For this purpose, the www-sites of 236 libraries were reviewed. Significant divergence in interpreting the term of "virtual tour" in the museum and library spheres is revealed. Virtual tours can enhance a library's Web presence as well as provide much needed information to remote or prospective users.

#### 9. Big Data

Along with all the technological advancements, people's most basic activities are generating more data than ever. The storage and analysis of large datasets can be a real advantage for librarians as they have the relevant skills and knowledge to make the best use of these massive sources of information.Big data can improve the library's activity overall, by simply having access to more insights into the user's mind.

#### 10. Digital Storytelling App

Now libraries are working with writers and coders to create new interactive stories where the reader can become immersed and attempt to control the narrative flow. Libraries have always had a love affair with the written word, whether on paper, microfilm, CDROM or web page. Meaning of storytelling is To tell stories is fundamentally human. Storytelling emerged in popular consciousness around the turn of the 21st century. Digital storytelling is the latest iteration of a narrative tradition. It involves creating and sharing stories using digital tools, incorporating multimedia elements such as image, sound, and words in a narrative that is then disseminated via a web platform.

## 11. Mobile Apps

Mobile apps are a real trend right now, as people have access to their mobile devices constantly. A mobile app can extend the library's services outside their physical borders and facilitate the interaction with patrons. An app that offers functionalities such as a library catalogue, interactive library guides, a library virtual tour, an interactive calendar with all the library's events, the possibility to loan and read electronic books and articles, the possibility to reserve the library's resources or to pay for some services represent a real benefit for the patrons, facilitating their activities at the library.

#### 12. Baggage Carousel

A baggage carousel is a device, generally at an airport, that delivers checked luggage to the passengers at the baggage reclaims area at their final destination. Not all airports use these devices. Airports without carousels generally deliver baggage by placing it on the floor or sliding it through an opening in a wall.



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Bags are placed on some type of conveyor belt in a secure area not accessible by passengers. In a single-level system, the belt will deliver bags into the terminal from an opening in the wall. The belt generally runs along the wall for a short distance and then turns into the terminal forming a long oval that allows many passengers to access the belt. The belt continues back to the loading area through a second opening in the wall. In a multilevel system, the bags are generally loaded from above or below the carousel and then delivered onto a moving oval-shaped carousel. It is common for this type of system to have two delivery belts, increasing the speed with which bags can be delivered to the passenger level. This baggage Carousel system also use in libraries. In the Library of S.G.B. Amravati University a baggage carousel device placed and in library they use books in place of bags. They deliver books by placing it on the floor or siding it through an opening in a wall.

#### **Conclusion:**

The libraries have changed due to the innovative technology's revolution. Nowadays, Libraries are providing needed materials usually to researchers and user faster and easier. There are lot of new technologies which are using in overseas. In India libraries are using new technologies but it is less than other countries. Drowns, Robots, Artificial Intelligence etc are not used in India.

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