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## New Technology in Library
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### Some Emerging Technologies Useful to Libraries: A Review

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ICT is used in libraries more extensively for carrying out all library functions. The new technologies are being emerged continuously and following few concepts are now emerging in libraries.

### Internet of Things (IoT) and Libraries

The Internet is now an essential part of all in day-to-day life. The Internet of Things (IoT) is more popular in recent years.The data is transferred over the Internet through IoT.The Internet of Things (IoT) is a recent shift in technology that libraries' and library staff should be familiar with it, as it may help to improve the services, resources and experience that libraries can provide."The Internet of things (IoT) is the extension of Internet connectivity into physical devices and everyday objects. Embedded with electronics, Internet connectivity, and other forms of hardware (such as sensors), these devices can communicate and interact with others over the Internet, and they can be remotely monitored and controlled." (https://en.wikipedia.org/wiki/Internet_of_things)

One of the most recent changes in technology is the shift from the 'Internet of Communication' to the 'Internet of Things' or IoT. This exciting and emerging technology makes it possible to connect everyday objects, by embedding sensors in them. The data collected from these sensors is then transferred over a network without requiring human interaction, networking capabilities make it possible to communicate with each other, access Internet services and interact with people. (Techtarget 2018). In short, the IoT are simply objects or things where the infrastructure and technology involved are sensors, processors, cloud computing, and wireless connectivity.

The IoT is already utilized in libraries are: technologies such as RFID (radio frequency identification) technology that allows for item identification and item security, machine 2 machine (M2M) communication, which are devices such as self-check kiosks or automated materials handling machines, and semantic search technologies that include metadata and discovery tools.

Possible Implementation of IoT in some areas of Libraries: Inventory control, theft management, circulation desk, user identification, fire detection and prevention, reservation of books, mobile reference, tracking movement of resources and inventory, virtual library and book tracking, etc. Providing Recommendation and Notification service, Improved access to collections and resources, Mobile Technology and Location based services, Cost Savings and Appliances Monitoring, Direct patrons to special displays, programs and events etc.

### Drones and Libraries:

It is a remotely controlled small flying equipment and is a trendsetter in science nowadays. The drone can be used to create content for the library, store data etc. The drone can be used for delivery of library services to users who visits less to the library. The paradigm shifts from traditional libraries to modern digital libraries made the way for more convenient and easy dissemination of information to the needy people on time. The drone has become a "buzzword" in the modern technological environment which finds

applications in almost all the key areas. Many of the libraries abroad like Dubai Library, Rose Memorial Library, NY Public Library and Florida Library have started to use drones as an effective tool for delivering books from library to patrons and vice versa. LIS professionals in India have the potential to absorb the emerging technologies and in days to come drones may be installed in Indian library courtyards with owing the government's novel steps to support technological developments as part of the Digital India initiative.

Library drone deliver service can be the best way to provide the circulation service to its patrons during the time of epidemic like COVID 19. For providing the drone delivery service by a library, the first and foremost requirement is library mobile app or a mobile friendly library website of that respective library. The library user will use the app or website to borrow documents from the library for which there must be the provision of user login as well as the option for sharing the user's current location or address wherever he/she wants to receive the documents. The library user will search the library collection in MOPAC via mobile apps or in web-OPAC via the library website and then they will select the documents required and set to borrow. The processes for sending request to the library by the library user via library app/ library website.

**Block Chain Technology and Libraries**:
A blockchain is a growing list of digital records, called blocks that are linked using cryptography. The applications of blockchain technology in modern day libraries are initiating. The blockchain technology can be adopted in libraries in various ways like for creating an enhanced metadata system, protecting digital first sale right, peer to peer sharing etc. The technology is the best fit for academia and to get potential pace in libraries. Block chain technology represents a decentralized database that records pseudonymous digital transactions visible to anyone in the network. This is a new way to collect and store data.Block chain technology can be used to ownership tracking, connect libraries and university networks, or even community-based lending and skills sharing.

**Augmented Reality (AR) in libraries**
Augmented Reality (AR) breaks new ground in the library field. AR has been around for more than sixty years the term was not officially coined until 1990. It has come a long way from a science-fiction concept catapulting to a science-based reality. It is a cutting-edge technology that allows smart device users for a digitally enhanced view of the real world. Augmented Reality works in sync with headsets and/or digital devices such as tablets, smart phones and even PCs. The devices themselves contain software, sensors and digital projectors that trigger digital displays onto physical objects. AR's ability to enhance what already exists is what makes it a perfect fit for libraries. Keeping in view of the modern-day expectations of users from a library, the library professionals dealing with Augmented Reality applications more effectively and efficiently. The AR capability expand into an already existing area is just right for libraries. Libraries can make use of augmented reality which is provided by the British company Solus, which provides digital solutions for libraries and transforms library services with users. The enhanced reality digital mythical maze app is used in summer reading challenges to help children improve their reading skills during the summer holidays.

**Big Data Applications in Libraries**:
Big data includes data sets with sizes beyond the ability of commonly used software tools to capture, curate, manage, and process data within a specific time period. Due to its widespread presence in recent times, librarians need to know the basics of Big Data and how it can impact academic research. The implications of big data are not only limited to research but to daily working of library professionals.Big data is being created due to digitalization of libraries and this has imposed limitations to researchers, educationists, scholars and policy maker's efforts in improving the quality and efficiency. As a result, serving the users with books and articles that are in line with their interests is a great challenge. The primary objective is to decrease the time that lapses between searching the reading material and the actual reading. With all the technological advances, people's basic actions are creating more data than ever before. Having the relevant skills and knowledge to make the best use of these large data sources can be of real benefit to archiving and analysing large datasets.

**Digital storytelling and Libraries**:
"With the use of social networking, tools such as video-sharing sites, blogs, and other online forums, stories have the ability to travel and transform as never before" (Czarnecki, 2009). Its application is useful in libraries especially public libraries.

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