



## FUTURE LIBRARIANS AND AI

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### Abstract :

The introduction to Future Librarians and Artificial Intelligence served as the basis for this essay. Future libraries will differ greatly in quality from what our current work anticipates, and their character will be very different. It highlights even further how libraries must adapt in light of the developing information economy. Regarding this subject, we would like to inform you that India needs more libraries because everyone has access to them, regardless of their educational level. The library now makes it feasible for technology to grow in today's world. In order to develop the best LIS experts to lead the 21st-century librarianship, LIS departments and instructors are expanding. The majority of library-oriented AI applications that have been created thus far or are being developed right now are simple business tools.

**Keywords:** Future of librarian, Artificial intelligence,

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### Introduction :

In terms of the social infrastructure they offer as well as notifications, sources, a variety of services, etc., libraries are experiencing a rebirth. Study materials (books, pamphlets, maps, manuscripts, phonograph records, and other readable materials) are kept and safeguarded in libraries. Since books are stored there for commercial purposes, a collection of books or a library full of books is not considered a library.

'Library and Information Science', or modern library science The term refers to the fact that it alone deals with the purchase of books, submission, classification, cataloging, attainment, resources, communication, and recovery. The panel's purview extends beyond administration and includes information search. The most recent information and communication technologies are being used to great effect in modern libraries. Qualified and skilled personnel are prepared to manage and run the libraries through library and information science education. Library science is a service-related career that falls within the technical subject group.

In the framework of the library, information technology management makes use of pedagogical ideas and methods as well as resources from other fields. Due to the constant addition of books and other necessary materials, the library is an evolving establishment. Because of this, it is important to consider this fact only at the moment of its establishment. The history of transmission units, organizations, management, diverse technologies, services, his societal responsibilities, and general activities are all extensive topics that require both theoretical and practical investigation. The subject and information world continuously change its shape, type, and extent.

### Future of Librarian :

The Future Ready Librarians program has transformed the discourse on the function of



school, college, and university librarians and how they guide, instruct, and assist students' learning over the past ten years. To far, the program has empowered and included the librarian community to develop professional competence, awareness, and visibility as leaders in schools, colleges, and universities. It has also clarified the strategic responsibilities that school librarians should play. Above all, the translation of Future Librarians is excellent. It provides librarians with straightforward and practical methods to align their practice to assist in resolving similar difficulties, as opposed to competing with other standards or professional norms.

The future requirements for university libraries and the essential skills for aspiring librarians. The library directors have highlighted five key areas of challenge, with a focus on innovative services due to evolving client needs and economic constraints.

### **1. Economical challenges :**

There is a great deal of worry that the competition amongst institutions is causing the financial resources to decrease. The expense of both library space and electronic resources is rising concurrently. Financial resource management is essential, but expenses are also influenced by outside parties beyond the library's direct control, such as publishers and national university politics.

### **2. New services :**

Research methodologies are changing, including elements of e-science and fostering a networked culture among scholars and students. Customers at the library are a part of a worldwide, networked community. This placed a focus on creating services like as research data management and bibliometrics, as well as social media platforms and open access, to facilitate scholarly communication. The importance of flexibility is emphasized, along with the need to be aware of your research environment and incorporate library resources into your learning and research procedures.

### **3. Communication and management :**

The importance of communicating the role and importance of the library within the university organization is underlined. It is about making the library visible beyond the physical library premises, integrating the library activities into the whole university and research community.

### **4. Collections development :**

As digital collections expand quickly, the importance of physical collections is waning. Maintaining the collections' relevance and modernity while striking a challenging balance between them is another challenge. In order to shift from the conventional function of collection-based services to customer-based services, a thorough awareness of the demands of the consumers is required. The actual spaces of the libraries are also impacted by the renovations.

### **5. Personnel :**

There may not be enough employees with the necessary abilities, and new areas of competence may arise. Reducing financial resources makes it more difficult to find qualified employees. Cutting edge technologies to be incorporated into the future library This article offers a variety of cutting-edge technologies that the library can adopt that are both relevant

and practical. We emphasize the technology's practicality and potential advantages for the library.

- ♣ Big data
- ♣ Artificial Intelligence
- ♣ Black chain technology
- ♣ Internet of Things
- ♣ Library book mark App
- ♣ User-focused interfaces and application
- ♣ Augmented reality
- ♣ Digital Interfaces for printed book
- ♣ Driverless Car
- ♣ Drones

### **Artificial intelligence :**

Artificial intelligence (AI) is the term used to describe the imitation of human intelligence in robots that have been taught to think and behave like people. Any machine that demonstrates characteristics of a human mind, like as learning and problem-solving, can also be referred to by this phrase. The foundation of artificial intelligence is the idea that human intelligence can be described in a way that makes it easy for a machine to emulate and perform jobs of any complexity.

One of artificial intelligence's objectives is to simulate human thought processes. When it comes to concretely defining processes like learning, reasoning, and perception, researchers and developers in the field are moving at an unexpectedly fast pace. To address the information demands of its user groups, libraries have accumulated and maintained a variety of information resources over the years.

Virtual libraries often offer other services that are customarily provided by libraries in addition to providing remote access to information resources in a variety of topics and forms, such as online databases, e-books, e-journals, e-magazines, e-newspapers, etc. through an online portal or gateway. The services provided by virtual and digital libraries are entirely automated. Additionally, automation is the practice of utilizing machinery to speed up human labor and save time. Automation of routine library operations, such as cataloging, user registration, book charging and discharging, shelf reading, and so forth, is referred to as library automation. This technology is concerned with the process and system design and development that minimizes the need for human intervention in library operations.

The imitation of human intelligence in machines that have been trained to think and act like people is known as artificial intelligence, or AI. This term can also be used to describe any machine that exhibits mental functions like learning and problem-solving. The premise that human intelligence may be characterized in a way that makes it simple for a machine to mimic and carry out tasks of any complexity is the basis of artificial intelligence.

The library management system uses a variety of artificial intelligence applications, such as robotics, expert systems, natural language processing (NLP), pattern recognition, and robotics. In a nutshell, Natural Language Processing (NLP) is the process by which computers analyze and produce natural language content. The intention is to allow natural languages, such as English, French, or Chinese, to function as the object that a computer system processes or as a medium through which humans communicate with computer systems. Natural language

processing (NLP) can be utilized in libraries to create intelligent expert reference systems or information retrieval systems that allow users to communicate with the system directly using natural language. The computer receives natural language input, interprets, and processes it before providing the appropriate information in response. NLP has been applied

Subject indexing is another useful way that artificial intelligence is being used in libraries. In order to complete this duty, the librarian or indexer must possess both technical skill and the intellectual discernment to review, evaluate, and recommend the best terms to use as keywords or index terms for a particular text. Any machine or computer system that is capable of doing this is considered intelligent. Reference services and subject indexing can be managed by an expert system.

Expert systems can also help with reference work, decision-making on management policies, applying cataloging standards, assigning vendors for the purchase of library goods, etc.

The primary goal of library automation is to free up librarians and staff members so they may more effectively contribute to the dissemination of knowledge and information. Artificial intelligence is an essential component of library automation, particularly in digital and virtual libraries that have entirely computerized resources and services.

**The following are some benefits of artificial intelligence:**

- ♣ It can perform difficult and complex tasks that people would find difficult or impossible;
- ♣ It can probably finish tasks more quickly than people could;
- ♣ To find uncharted territory. that is, space;
- ♣ Less mistakes and flaws;
- ♣ Unlimited functionality.

**The following are some drawbacks of artificial intelligence:**

- a) It lacks the "human touch"
- b) It can replace human labor in some jobs
- c) They have the potential to malfunction and act contrary to their programming
- d) They have the potential to be abused and cause widespread devastation

- Information management
- Hospitals and medical facilities
- Help desks management
- Employee performance evaluation
- Loan analysis
- Virus detection
- Useful for repair and maintenance projects
- Warehouse optimization
- Planning and scheduling
- The configuration of manufactured objects
- Financial decision making Knowledge publishing
- Process monitoring and control
- Supervise the operation of the plant and controller
- Stock market trading



- Airline scheduling & cargo schedules

### **Conclusion:**

AI-related recorded data about its technology and applications across a range of domains and topic areas. The success in the fields of expert systems, robotics, natural language processing, and pattern recognition has sparked a lot of business activity and the creation of numerous businesses. Artificial intelligence seems to be becoming more and more useful in fields like documentation, classification, collection creation, cataloging, and so forth. With the advent of capable models using AI approaches, artificial intelligence will undoubtedly become a ubiquitous presence in all fields in the near future. The creation of an effective expert system for technical services, information processing, and management will have a significant positive impact on library and information science.

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